I) Rotation Goals
   A) To gain the skills necessary for basic assessment and interpretation of clinical pathology using bedside ultrasound and echocardiography
   B) Application of this knowledge in clinical practice to guide medical decision making

II) Education Objectives

   A) Patient Care
      1) Gathers and synthesizes essential and accurate information to define each patient’s clinical problem(s). (PC1)
      2) Develops and achieves comprehensive management plan for each patient. (PC2)
      3) Manages patients with progressive responsibility and independence. (PC3)
      4) Skill in performing and interpreting invasive procedures. (PC4a)
      5) Skill in performing and interpreting non-invasive procedures and/or testing. (PC4b)
      6) Requests and provides consultative care. (PC5)

   B) Medical Knowledge
      1) Clinical knowledge (MK1)
         (a) Demonstrate an investigatory and analytic thinking approach to clinical situations by applying an evidence-based medicine principles
      2) Knowledge of diagnostic testing and procedures. (MK2)
         (a) Demonstrate a fundamental knowledge of the indications for bedside ultrasound/echocardiography and recognize its limitations
      3) Scholarship
         (a) Demonstrate teaching of students and other health care professionals

   C) System-based Practice
      1) Works effectively within an interprofessional team (e.g. peers, consultants, nursing, ancillary professionals and other support personnel). (SBP1)
         (a) Understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society
      2) Recognizes system error and advocates for system improvement. (SPB2)
         (a) Advocate for quality patient care and assist patients in dealing with system complexities
      3) Identifies forces that impact the cost of health care, and advocates for, and practices cost-effective care. (SBP3)
         (a) Practice cost-effective health care and resource allocation that does not compromise quality of care
      4) Transitions patients effectively within and across health delivery systems. (SBP4)

   D) Practice-based Learning and Improvement
      1) Monitors practice with a goal for improvement. (PBLI1)
      2) Learns and improves via performance audit. (PBLI2)
3) Learns and improves via feedback. (PBL13)
4) Learns and improves at the point of care. (PBL14)
   (a) Apply knowledge of study designs and statistical methods to the appraisal of
       clinical studies and other information on diagnostic and therapeutic effectiveness
   (b) Use information technology to manage information, access on-line medical
       information and support their own education

E) Professionalism
1) Has professional and respectful interactions with patients, caregivers and members
   of the interprofessional team (e.g. peers, consultants, nursing, ancillary professionals
   and support personnel). (PROF1)
   (a) Demonstrate respect, compassion, and integrity
   (b)
2) Accepts responsibility and follows through on tasks. (PROF2)
   (a) Demonstrates accountability to patients, society and the profession
   (b)
3) Responds to each patient's unique characteristics and needs. (PROF3)
4) Exhibits integrity and ethical behavior in professional conduct. (PROF4)
   (a) Demonstrate a responsiveness to the needs of patients and society that
       supercedes self-interest
   (b) Demonstrates a commitment to excellence and on-going professional
       development
   (c) Demonstrate a commitment to ethical principles pertaining to provision or
       withholding of clinical care, confidentiality of patient information, informed
       consent
   (d) Demonstrate sensitivity and responsiveness to patients' culture, age gender and
       disabilities
   (e) Create and sustain a therapeutic and ethically sound relationship with patients

F) Interpersonal & Communication Skills
1) Communicates effectively with patients and caregivers. (ICS1)
   (a) Demonstrate effective listening skills
   (b) Elicit and provide information using effective nonverbal, explanatory, questioning
       and writing skills
2) Communicates effectively in interprofessional teams (e.g. peers, consultants,
   nursing, ancillary professionals and other support personnel). (ICS2)
   (a) Demonstrate effective listening skills
   (b) Elicit and provide information using effective nonverbal, explanatory, questioning
       and writing skills
3) Appropriate utilization and completion of health records. (ICS3)
4)

III) Teaching Methods

A) Clinical experience
1) Observation of and assist with ultrasound performance and basic interpretation
2) Evaluate and manage patients, when necessary, based on the
   ultrasound/echocardiography findings
3) Provide documentation of findings and communicate those findings to the physician
   primarily involved in the care of the patient
4) Perform ICU procedures based on ultrasound findings when clinically indicated
B) Clinical Teaching
1) Present clinical findings to the supervising physician daily
2) Review patient management daily when applicable

C) Performance Feedback
1) Fellow and supervising staff physician will review these goals and objectives at the beginning of the rotation
2) Staff physician will provide ad hoc feedback on a regular basis
3) Fellow and supervising staff physician will meet and provide written and verbal feedback at the completion of the rotation.

D) Didactic Sessions
1) Attend all daily noon conferences of the PCCM fellowship program.
2) The fellow will present didactic sessions covering pertinent critical care medicine topics as desired by students and residents who may be on the service.

E) Self-Learning
1) The fellow is expected to read the primary literature in regards to current ultrasound and echocardiography techniques
2) The fellow is expected to complete any readings assigned by the supervising staff physician

IV) Responsibilities

A) Fellow
1) First Year
   (a) There are no first year fellows (PGY5 or less) assigned to this rotation
2) Senior Fellow (second or third year fellow)
   (a) A weekly schedule of clinical responsibilities is appended to this document.
      (i) The schedule may be altered by mutual agreement by all parties involved (fellow, supervising physician)
   (b) See selected patients on the service daily, when applicable, and document the evaluation in the electronic data storage system.
      (i) It is the responsibility of the fellow to communicate results and coordinate exams with the team attending
   (c) Be available during regular hours to respond to requests for bedside ultrasound for intensive care unit patients
   (d) Coordinate with Dr. Johnson to be available for any ultrasound or echocardiography exams or review of interpretation.
   (e) Provide informal didactic session(s) to students, residents and other fellows on the service when appropriate.
   (f) Complete all reading and online modules designated by rotation director.
   (g) Complete an evaluation of the attending physician at the end of the rotation.

B) Attending physician
1) Review these goals and objectives with the fellow at the start of the rotation along with any other expectations
2) Provide adequate supervision for procedures performed by the fellow
3) Provide instruction in performance of ultrasound and/or echocardiography exams and their interpretation
4) Complete a written evaluation and provide verbal feedback at the completion of the rotation

C) Service
1) On Call Responsibility
   (a) Be available, in house, to take calls on patients during regular duty hours, 7am to 4pm. The fellow will be expected to attend all PCCM conferences (M-F at Noon or 1pm)
   (b) Take after hours call as assigned by the Rotation Director (Dr. Mathers/Johnson). Call may be altered by mutual agreement with the rotation director
   (c) Call should not conflict with the PCCM call or occur more frequently than once in 3 days. The fellow must inform the attending of the PCCM call schedule

2) Continuity Clinic
   (a) The fellow will be expected to attend his or her continuity clinic each week. The fellow will be expected to inform the attending physician which afternoon they will be in clinic (Tues or Thurs).

3) Vacation
   (a) Vacation time may be taken during this elective but the attending physician should be notified in advance of the start of the rotation. Any more than 5 work days of vacation during this block will result in a reduction in credit for the rotation.
   (b) Emergency leave may be requested after discussion with the Program Director or surrogate (Supervising attending)

V) Method of Evaluation

A) Formative
   1) The attending physician should give feedback throughout the rotation and a formal verbal evaluation should be given at the end of the rotation

B) Summative
   1) The responsible attending physician must prepare a written evaluation of the fellow at the conclusion of the rotation (New Innovations, contact Sheryl Latenser slatense@unmc.edu if login is needed).
      1. The fellow, in the presence of the attending physician, should review the assessment personally.
      2. At the conclusion of the fellow’s service period, he/she should complete an evaluation form assessing the quality of the rotation; he/she should also address the teaching undertaken by the attending physician(s).
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<td>8am-Noon</td>
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<td>Noon-1pm</td>
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<td>PCCM Board Review</td>
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<td>PCCM didactic lecture</td>
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