

Description of DHMC multi-disciplinary Critical Care Service:

The ICU at DHMC is a multi-disciplinary 26 bed unit, and an 8 bed “step-down” facility. There are currently 3 Critical Care Fellowship Programs (Internal Medicine/CCM; Pulmonary/CCM; and Anesthesiology/CCM) that share these ICU resources. There is an institutional policy that directs the allocation of these resources for educational purposes, and clearly describes our leadership structure (including an Oversight Committee comprised of the Executive Medical Director of the Dartmouth-Hitchcock Clinic and 3 Department Chairs), to enable appropriate oversight of patient care, educational programs, and faculty assignments, particularly involving matters which impact all three Departmental stakeholders.

There is a multidisciplinary faculty from all three training backgrounds, and all are board-certified in Critical Care Medicine by their respective parent organization (ABIM, ABA, or ABS). While working on any one of the CCS services, faculty members are dedicated to this service, and may not cover other activities. These faculty, as well as CCM fellows, interact with residents rotating on CCS from a variety of disciplines (medicine, obstetrics, neurology, orthopedics, general surgery, and anesthesiology).

Structure of ICU Care- Three differentiated services:

- A “thoracic” focused team cares for patients with complex thoracic or medical issues (e.g., complex respiratory issues, inflammatory and fibrotic lung diseases, complex pulmonary or pleural infectious problems, and immune compromised hosts). The majority of faculty rotations on this team will be covered by pulmonologists, but other CCM faculty with interest and dedication to excellence in these areas will also participate.
- A trauma focused team, which meets Level I trauma criteria (as DHMC is designated) is staffed by trauma surgeons and anesthesiologists.
- A broadly multi-disciplinary team, which provides cares for a variety of medical, surgical, and neuroscience patients, and is staffed by a variety of faculty from Medicine, Surgery, and Anesthesiology. This team not only serves to preserve the important tradition of cross-disciplinary care, longstanding at this institution, it provides the additional function of balancing the patients loads among the teams which may fluctuate considerably over short periods of time.

Management of critically ill patients at DHMC is patient and family centered. Based upon the primary admitting diagnosis, some patients are expected to be placed on a particular service (e.g., severe hemoptysis to the thoracic team or a gun shot wound to the trauma team). Other patients are preferentially targeted to a certain team as the team census allows (e.g., pneumonia or COPD exacerbation to thoracic team). Finally there are other patients for whom specialty focused care may add little value, and these patients may be admitted to any of the teams, depending to a large extent on the patient loads and overall acuity of the services (e.g. acute renal failure, pancreatitis, GI bleed, or generalized sepsis).

The DH Clinic has a long history of providing training in multi-disciplinary intensive care, resulting in versatile and capable intensivists trained for essentially any setting. Although the concentration of particular types of medical problems and issues on specialized services adds an important dimension, as well as the opportunity to take fullest advantage of the value added by highly specialized supervision, all fellows in all training programs rotate on all services (though the distribution of time on each may vary slightly depending upon their training background and the requirements of their parent boards)

During ICU rounds (8AM – 1:30 PM), fellows and residents are not distracted from their team rounds (work and teaching) by newly arrived admissions or bed management issues. During this time period a dedicated admission team (consisting of a CCM faculty and 3 ARNPs) manages new patients. At 1:30 PM, the on-call fellow, residents, and CCM faculty complete a sign-out of the entire CCS service. From 1:30 PM until 8 AM the following day, this “on-call” team manages all patient issues as well as all new admissions. During this time period, the CCS fellow carries the admitting pager and provides these trainees experience with triage, communication with referring attending physicians, management of limited resources (e.g., beds), and collaboration with other members of the patient care team.