Heparin is a parenterally administered anticoagulant commonly used when patients are admitted to the hospital.

It may be administered intravenously for therapeutic treatment of deep vein thrombosis (DVT) or pulmonary embolism (PE) with close monitoring of PTT or subcutaneously two to three times a day for DVT prophylaxis in patients who may be at risk for developing a clot due to their immobility.

When heparin is administered subcutaneously there are a few important points to consider:

**Location**
Subcutaneous injections of heparin can be administered in the abdomen, upper arm, thigh or lower back (See images below). It is important to assess the anatomy of each site to determine the most appropriate location for a patient. You should be able to grasp 1 to 2 inches of skin at the site to ensure that the medication is injected into the subcutaneous fatty tissue just under the skin, but not into the muscle. Some patients may have preference of location based on pain associated with the injection as well.

**Rotation of Site**
It is important also to rotate the site of subcutaneous injection for each administration. The site should be at least 1 inch away from a previous injection to prevent scarring, bruising, skin changes or discomfort from administration.

**Monitoring**
Because heparin is an anticoagulant, it is important to monitor a patient for signs and symptoms of bleeding or bruising, especially near the sites of injection.
New DAG- IV Ketamine for Pain Management

The P&T committee has recently approved a new DAG and indication for use of ketamine at BWFH.

Ketamine (Ketalar) is a rapid acting general anesthetic that antagonizes NMDA receptors to produce an analgesic and anesthetic effect. When used in low doses the medication can produce effective analgesia, while minimizing the dissociative effects of the drug.

At BWFH, Ketamine IV bolus can be used in sub-anesthetic doses in critical care areas (ER, ICU, Anesthesia) for pain management or analgesia in patients who have high tolerance to opioid pain medications or for whom opioid medications are not preferred.

Use of this medication requires approval by Anesthesia, Critical Care, or Emergency Medicine attending physicians and should be administered in the presence of a physician. Additional monitoring information is outlined in the DAG.

Ketamine is a controlled substance and should be handled accordingly. An RN Safety Double-Check is required for this medication. It may be further diluted in Normal Saline (NS) to facilitate administration of dose. See DAG for additional details.

IV Push Hydrocortisone

The Brigham and Women’s Faulkner Hospital Drug Administration Guideline for IV Hydrocortisone (Solu-Cortef) has been updated to allow for higher doses administered as IV Push.

Adopting the practice from BWH, doses up to 250 mg may be administered as IV Push over 1 to 3 minutes. The intermittent infusion has been removed from the DAG and smart pump libraries.

Partners hospitals are looking for opportunities to adopt best practices and standardize administration practices across each institution. Look for additional updates on medications administered as IV Push throughout the year.