Discovering M.A.R.S.
Developing Competency for High Risk – Low Volume Procedures

*Audrey Troke, BSN, RN, Mayo Clinic, Eyota, MN*
*Wayne Christenson, RN, Mayo Clinic, Rochester, MN*

**Background / Rationale:** The inpatient dialysis unit started a M.A.R.S. (molecular absorptive recirculation system) therapy program to help meet the needs of patients that are suffering from the complications of liver failure. The introduction of M.A.R.S. to our work area presented new challenges to our staff due to the length of time required in preparation and the infrequent use of this therapy. The literature suggests that competency is essential yet often difficult to maintain in procedures that are high risk - low volume. In order to maintain patient safety we became vigilant guardians in developing a teaching method to solve this problem.

**Objectives:** To keep staff competent in the set up and delivery of a therapy that is infrequently used.

**Methods / Strategies:** First, a core group of staff interested in the use of this therapy was established and two “super users” were determined. A detailed step by step set up procedure was developed to cover the over hour and a half required to prepare the equipment. Videos of key portions of the set up procedure were recorded and made available on line to assist in the step by step procedure. A practice set has been established to keep staff competent in this procedure and every three months each member goes through the set up of the system. Whenever we have a patient receiving treatment we have an inexperienced team member shadow an experienced member.

**Results:** Over a year went by before we treated our first patient and even though there was a long delay the procedure went without any problems. We did discover that critical thinking skills are enhanced when there is greater fidelity in the simulation.

**Conclusion:** The need for detailed instructions and practice equipment in treatments that are done on an infrequent basis are needed in order to achieve and maintain competency in our staff. Simulation exercises, fidelity and shadowing play an important role in achieving competency in low volume - high risk procedures.

*Abstract selected for presentation at ANNA's 45th National Symposium, Anaheim, CA, 2014*