Use of Ultrasound Guidance During Cannulation: 5 Years Later

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Appropriate cannulation techniques are an essential element in access preservation and in the prevention of access-related complications. Missed cannulations can result in damage to AVFs and AVGs. Ultrasound guided cannulation is an effective technique for the insertion of peripheral IVs and for hemodialysis specific CVCs. The initial purpose of this scholarly project was to determine if ultrasound guidance decreased the number of missed cannulation, and initiate a QIP for the implementation of an evidence based policy and procedure, training program and competency evaluation within a small hospital based dialysis unit. The original data was obtained starting in 2013 with the last phase of data collection ending in 2017. The implementation of US guided cannulation resulted in a decrease in failure rate (missed cannulation) from 16/1000 to 5/1000.

This presentation would explore the lessons learned and provide additional insight into the practice of utilizing ultrasound guidance during cannulation. These insights could be used to provide a foundation for implementing the practice of ultrasound guided cannulation within other dialysis settings. Ultrasound guided cannulation may be a cannulation best practice but additional research is needed.