

Abstract**Striving Toward Fistula First – A Multi-Disciplinary Team Approach**

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Objective:

According to Kidney Disease Outcomes Quality Initiative (K/DOQI) and Fistula First Breakthrough Initiative (FFBI), arteriovenous fistula (AVF) is the most desirable vascular access for haemodialysis (HD) patients due to its superior outcomes and longevity. A multidisciplinary re-engineering team was developed in January 2011 at Princess Margaret Hospital (PMH) in Hong Kong for the promotion of AVF use, better preparation for HD patients to achieve high quality vascular access at the initiation of HD, and to improve vascular access outcomes of newly created AVF.

Method:

An integrated vascular access team consisting of nephrologists, surgeons and renal nurses was established in PMH. Program objectives and improvement initiatives were delivered through re-engineering modifications on current workflow and practice. The team worked collaboratively to improve vascular access outcomes through early access referral, careful planning and vascular mapping for access selection, enhanced patient education on vein preservation and access care, perioperative tracking and prompt complication management, and intensive nurse training on vascular care and cannulation. Data on primary non-function rate and early complications (including bleeding, infection and thrombosis) for newly created AVF, together with prevalent rate of AVF use were collected over 24 months from January 2010 to December 2011.

Result:

The number of AVF creation increased by 11.1% from 36 in the year of 2010 to 40 in the year of 2011. Primary non-functioning of AVF decreased from 16/36 (44.4%) to 2/40 (5%). The early complications decreased from 20% to 13%. The overall prevalent AVF use in HD patients increased from 51% in 2010 to 61% in 2011. For newly recruited HD patients, the prevalent rate of AVF use upon HD treatment initiation also increased from 33.3% to 61.7%. This resulted in a decrease of dialysis catheter use from 25% to 15%, which reduced catheter related complications and pertaining medical expenses.

Conclusion:

Team collaboration is critical to boost up AVF use and to reduce catheter use and its related complications. This program is workable towards 'Fistula First' international benchmark and to strive to enhance patient's vascular access outcomes.