



FoNS Improvement Insights

Fistula First in Belfast

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Project background

Patients with end-stage renal disease who require maintenance haemodialysis (HD) therapy require vascular access. This allows blood to be filtered and the waste products of metabolism to be removed. Vascular access can take the form of a central venous catheter, or a surgically constructed arteriovenous fistula (AVF) or arteriovenous graft. Best practice recommends HD is accessed via an AVF as it enhances the quality of dialysis, reduces the risk of infection and is linked to improved patient outcomes.

The Department of Health and Social Services NI (DHSSPSNI) set out quality improvement standards to increase the numbers of patients who receive dialysis through a permanent AVF to 60% by 2010. Audit data for 2009/10 involving HD patients within the Belfast City Hospital site, identified 46% of patients received HD via an AVF, culminating in the Fistula First project.

Aim and objectives of the project

The aim of the Fistula First project was to enhance the patient experience by increasing and maintaining the number of patients who have HD via an AVF. To achieve this aim the objectives of the project were to:

- Articulate a shared vision for the use of AVF in the HD unit in the context of person-centred care
- Establish current practice and the user experience of haemodialysis treatment via an AVF
- Identify areas for improvement and develop action plans
- Re-evaluate the effectiveness of the change in practice and user experience when receiving HD via an AVF

Key activities and outcomes from the project

A multi-professional Fistula Implementation Team was formed. The project was informed by the principles of practice development with a particular focus on working in ways that enabled participation, collaborative and inclusion of both staff and patients. A range of facilitated activities focusing on four themes derived from the objectives of the project.

Theme 1: *Raising awareness of current practice and developing a shared vision for vascular access.* This included clarifying staff values and beliefs about AVF in a number of café style facilitated workshops. A total of 80% of the HD unit nursing staff and four

medical staff attended. Key themes and actions included; documenting the patient journey, patient information, improving communication, staff learning and development, and the development of a fistula care pathway.

Theme 2: *Determining current practice from a patient's perspective.* A questionnaire was developed to collect patient's experiences of their HD journey. These were completed either at home or during HD, with the support of nursing staff or a family member if required. 230 questionnaires were hand delivered to patients, 72 were returned. Analysis of the responses identified a number of themes from which practice could be improved e.g. body image issues, fear related to AVF integrity and clotting, needle pain/phobias and the need for further information about AVF prior to HD.

Theme 3: *Identifying key areas for improvement.* Five priority workstreams for action were created from the information collected from staff and patients. These were improving the patient experience of HD via AVF, rescheduling of patients receiving HD using LEAN methodology and process mapping, staff learning and development, AVF problem solving and surveillance, improving communication and information.

Theme 4: *Evaluating changes in practice.* A systematic approach to evaluation was adopted and is ongoing with a number of workstreams still to report. Interim findings reveal; a steady increase in patients receiving HD via AVF; the development of a standardised protocol for buttonhole fistula cannulation; all nursing staff have attended updates on AVF; the development of a draft AVF care pathway to pilot in the summer of 2011; publication of a newsletter for staff and patients; significant reductions in the use of fistula clamps post HD; and a new system for scheduling patients onto dialysis is currently being evaluated by staff and patients.

Implications for practice:

- Working collaboratively with stakeholders enabled a number of workstreams to be identified, but it was not anticipated that they would be so diverse and complex
- Enabling patients to identify concerns about their experiences of bleeding post dialysis and the discomfort/inconvenience of using fistula clamps post HD, led to a change in unit policy and an elimination of this practice
- Using a systematic process of practice development has informed the development of the service at an organisational level

A full project report including references can be accessed from: <http://www.fons.org/library/report-details.aspx?nstd=14877>

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