

Midlines, COVID and Fife

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At SIVAN 2020, Emily provided an insight into the challenges and experiences of her role at NHS Fife in relation to developing Vascular Access (VA) skills for inserting midline catheters both prior to and during COVID-19.

Background to upskilling in VA

Emily started in her current role in 2015. At that time, five staff were trained to insert midlines, developing their VA skills and to drive forward VA within the organisation. In 2018 Emily started her upskilling and training to gain enough supervised practice to complete the required competencies. Once sign off was completed, she noted there were still some refinement of processes to ensure that patients get the right line at the right time. The availability of funding to purchase a wireless Ultrasound probe and iPad helped to address some of these change to process, but training was required to use the Ultrasound guidance for line insertion.

Moving into 2020

NHS Fife had big plans for 2020. A one day Symposium was planned in March focusing on bringing together colleagues from Fluids, Nutrition and VA. There were a number of different speakers from different specialities including three Fluid nurses from around Scotland who were involved in the National Fluid Programme. The aim was to bring everyone together to share and best practice. A further study day was planned for Healthcare Support workers and Assistants.

“But then COVID-19 arrived and the symposium was cancelled with less than 24 hours notice.”

So what did happen in 2020?

In March and April, NHS Fife had started a new trial of volumetric pumps. COVID-19 arrived and the pumps stayed. Emily was tasked with training and preparing nurses on infusion pumps for working in an acute critical care unit.

As part of NHS Fife's response to the global COVID-19 pandemic, developing Vascular Access (VA) skills for inserting midline catheters was reprioritised as requests for midline insertion requests reduced.

It was assumed this was due to patients being either critically ill and needing central access, patients not being ill enough to require IV access or they were at end of life. Out of the COVID wards, the hospital became quieter and demand overall was much less.

After the initial few busy weeks of COVID, the Anaesthetist who was Emily's clinical lead now had time to provide supervised support for Ultrasound guidance insertion of the Lifecath Midline (Emily had previously inserted the Leaderflex catheter under Ultrasound guidance). Emily completed her competency and has now inserted over 20 Lifecath midlines using Ultrasound guidance.

Benefits of VA upskilling

NHS Fife encourages its staff to upskill in VA insertion of midlines to deliver the treatment to patients without the need for having to wait for an available spot at Interventional Radiology (IR) or with the Anaesthetist for placement of lines.

Progress to date

In NHS Fife, more difficult or complex central VA insertions are carried out by IR, Theatre or ICU. The IR department runs 2-3 days per week and have a full list so line insertions are fitted in based on availability on the list.

The initial intention by NHS Fife was to develop the IR Nursing Team to insert lines but this has not happened to date for a number of reasons. However, the plan is to continue taking this option forward to further develop the VA offering.

There is a VA Focus Group which is led by the Head of Nursing with the first meeting held a few weeks previous.

“There are a number of different practitioners who can insert so it is important to ensure that the same procedures and processes are carried out by all.”

To support this, Emily is leading an Improvement Project (collated in PDSA) to review assessment processes including:

- Baseline assessment of types of venous lines to ensure most appropriate line is inserted
- Assessing if patients are getting the right type of device at the right time
- Referral process – linking with staff who insert lines to discuss their processes for assessment and documentation
- Review what is being documented in the patient’s health record re consent process.

Every patient who has a midline inserted receives an information booklet that is provided by Vygon. NHS Fife have also developed a Midline Passport and the Improvement Project will be looking to test this also.

Next steps

1. Additional support request from Quality Improvement: VA is one part of Emily’s role and she is only one person so resource is limited
2. Review findings from the PDSA
3. Agree a more robust referral process so there is consistency across NHS Fife
4. Training and Education: This has been on hold during COVID with no face to face sessions. Teaching will now be online along with simulated training on a 1:1 or 1:2 ratio in a separate room.

As there are more lines being inserted, there is a need to ensure that practitioners within the clinical areas are able to also provide appropriate care and maintenance for the lines – facilitating best practice at all times.

Emily will look to start small with the project and focus on one area initially to ensure success of any future plans. NHS Fife is fortunate to have a database of all midlines and PICCs that are inserted, but there is a need to also look at improving the recording of the removal of the line and reasons for removal.

“The database provides an opportunity to review the lines that have been inserted and any issues associated with the line.”

The Clinical Effectiveness department runs an annual report regarding activity. Findings for this year show an increase of 30 insertions year on year. The main areas of growth are within renal, cardiology, ortho/trauma and surgical. NHS Fife also now has an OPAT department so growth of lines will continue to rise.

Learnings to date:

- To use what we have learned to shape and deliver our service with the resources we have available
- The development of a service is a marathon and not a sprint
- In facing obstacles – these can be overcome, we can make improvements and a service can be developed.

“We are all in this together, finding the best way forward for Vascular Access”