

MAGIC Managing Access Generating Improvement in Cannulation

Annabelle Magdael St Georges NHS Foundation Trust



Started January 2022 - present



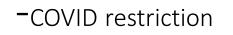
Who are the in team?

- Link nurses
- Champion needler
- Dialysis Nurses
- Unit managers
- Nephrologists/Surgeons
- Education Practitioner
- Other CNS



The Struggle





-Patient perception

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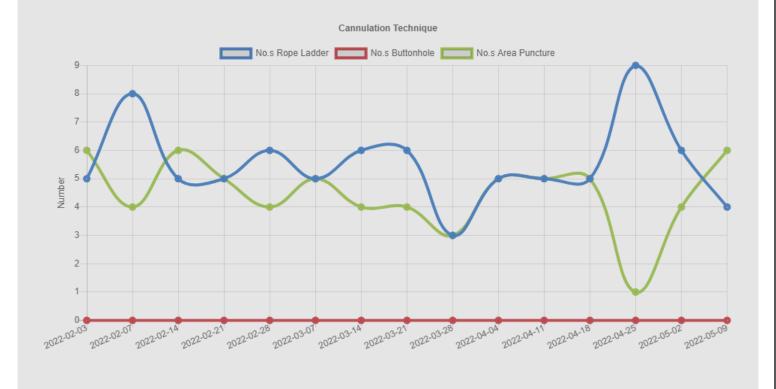
- -Changing practice
- -Time
- -Resistance
- -Accuracy of the data

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What was done?

- Visit satellite unit
- Speak to patient/family
- Virtual Teaching
- Face to face teaching
- Creation of Poster
- 10 Observations weekly
- Identify the link nurse and champion needler
- Work with the link nurses
- Needling competency revised to include the e-learning
- Ultrasound Needling Competency- Expert and Advance

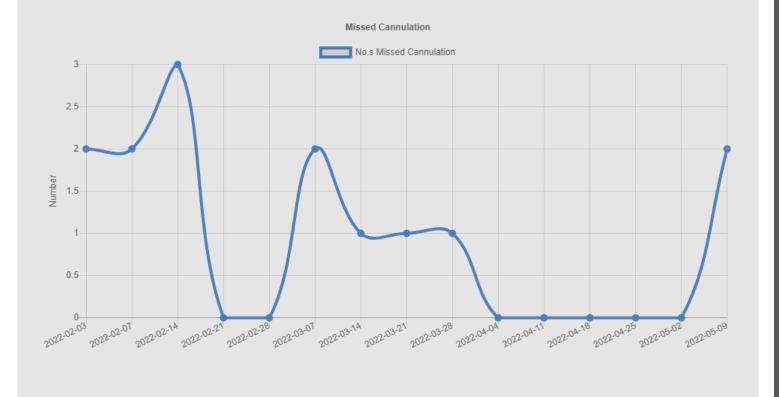
Cannulation Technique



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- Data depend on the unit and who collected the data
- Not fully aware the difference between AC and RL

Missed Cannulation



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- New fistula
- New site (from area cannulation)
- Skills mix
- Support
- Aid for cannulation e.g. US

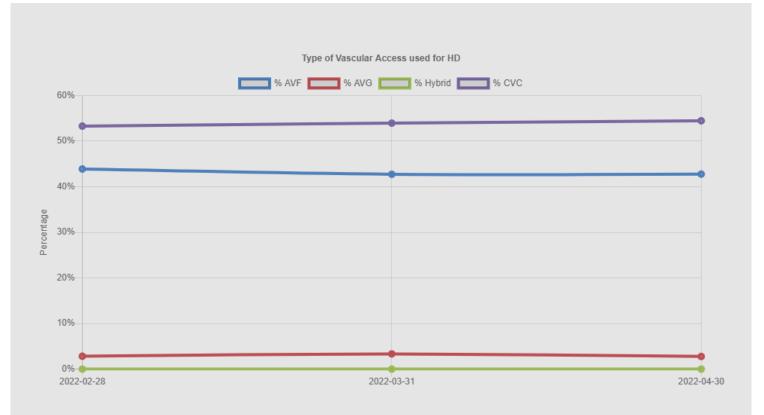
Patient Satisfaction



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- Stress
- Attitude
- Unsuccessful needling
- More attempt
- Support system
- Reassurance

Type of vascular access use for Dialysis



Factor not achieving required

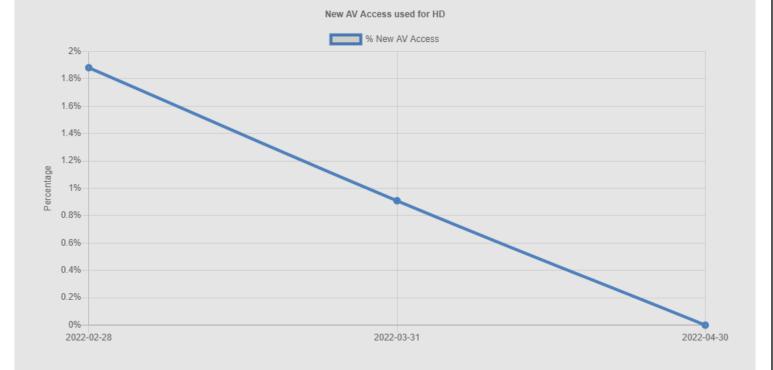
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- High number of unfit both surgical and medical decision
- Patient choice
- Institutional capacity

• Skills

New Access Used for HD



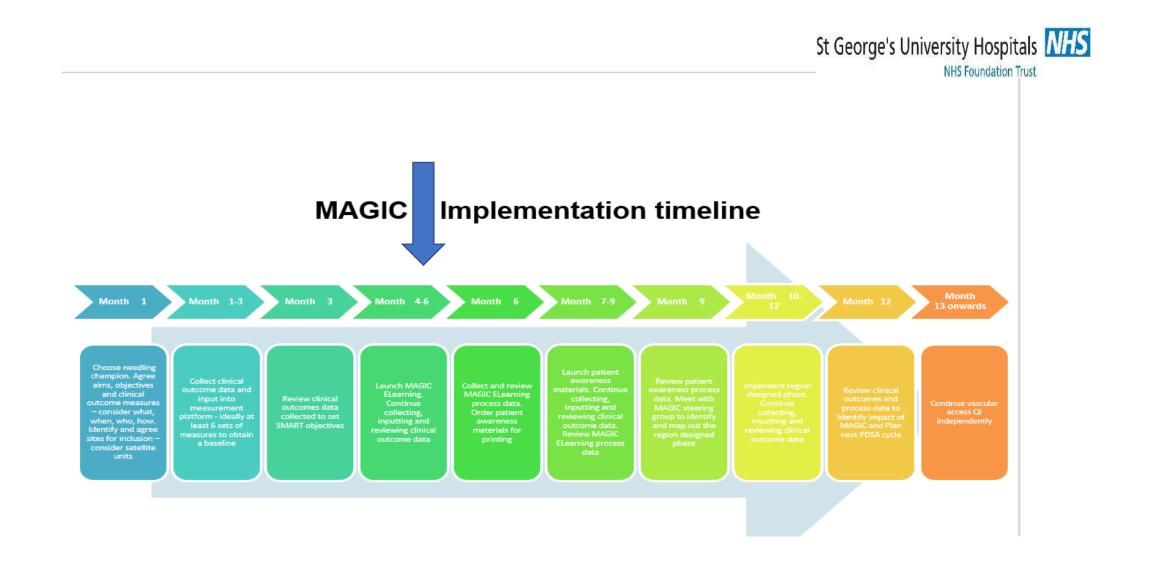
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Need to correct this data



Other graph

- Lost AV Access
- Infection- no data collected
- AVF use for HD



What is next?

- Continue data collection
- Correct some of the data
- Staff Education
- Posters



TYPE OF CANNULATIONS FOR FISTULA AND GRAFT



Ropeladder Needling

• A cannulation that progress up in a systematic manner OR a cannulation needles marks covers more than 5cm for each needling segment • This is recommended needling due to less complications



Previous needle site ✤ Sign of infection

Look for

- 🔸 Swelling of fistula arm
- Scab or unhealed needle site
- New aneurysm or aneurysm
- becoming bigger ↓ Steal syndrome common for diabetic people (pins & needle, necrosis on fingers)



Listen for bruit **4** Normal 🔸 Faint **4** High pitch + Any uninterrupted bruit along the entire length of fistula?



🔸 Thrill + Fistula palpable (depth, length, and size) + Pulses + Temperature



Arteriovenous Fistula/Graft Pre- Needling Assessment Tool

Patient Name and MRN:

Please complete before each needle Insertion. Document any abnormal finding with action taken.

Date	Aneurysm Present Y/N	Bruit Normal (N) Abnormal (A) Absent (NIL)	Thrill Normal (N) Abnormal (A) Absent (NIL)	Feel Soft (S) Hard (H)	Safe to use Y/N	Score	Needling Technique Ropeladder (RL) Area Cannulation (AC) Missed Cannulation(MC)	Initials

Button-hole

• Cannulation of same site in the same manner each time. Involves removing the scab of the previous cannulation prior to needling. Includes cannulation with sharp needles at the start to create a track/tunnel then a blunt needles • Can be offer for for self-needling or homehaemodialysis patient

Area Needling

8cm diameter

• Cannulation that does not progress in a sytematic manner. Needling site less than 5cm in each segment or needling around the same area within • Not recommended needling technique due to

long term complication

The journey



- Meeting with MAGIC lead
- Discussed with the consultant
- Presented in Academic meeting
- Organised link nurse
- Teachings (virtual and face to face)
- Meetings with managers
- Emails/Telephone
- Visual aids and Posters
- Revisited objectives