Gloucestershire Safety & Quality Improvement Academy

Gloucestershire Hospitals NHS
NHS Foundation Trust

Improving patient safety in enteral feed and fluid prescription and administration in community care settings

Lyndsey Tomlinson & Michelle Barry (Daniel Clarke & Sarah Williams have since left the Trust)
Home Enteral Feed Dietitians

THE PROBLEM

- Within the Home Enteral Feeding Team (Nutrition and Dietetics Department) we found that many community care settings are transcribing and incorrectly implementing tube feeding regimens. Our project focused on trying to reduce regimen transcribing in community care settings and thereby improving patient safety.
- Our feeding regimens are prescriptions of ACBS approved products but these are often rewritten due to staff finding our versions unclear.
- These transcribed regimens often contain multiple errors resulting in inappropriate products or volumes of feed or water being given to tube-fed patients.

AIM - To have 80% of five community care settings with tube- fed patients not transcribing feed regimens by August 2019, thereby reducing prescription and administration errors.

METHOD

- Five care settings were identified to take part in the project.
- Baseline data on transcribing and confidence of using their current regimens were collected.
- After discussing the project and reasons behind implementing it, we provided each care setting with a new version of their patients' feeding regimens (1st PDSA cycle).
- Telephonic contact was made with each of the care settings on a monthly basis to determine:
  - ⇒ whether they were still using the new version of the feeding regimen or had they transcribed it.
  - ⇒ how confident they felt with using the new feeding regimen (on a scale of 1 - 4 where 1 = not confident, 2 = neutral, 3 = confident and 4 = very confident).

OUR MEASURES

- Percentage of care settings transcribing (outcome measure) - to see if the feed regimen template change has reduced transcribing of feed regimens.
- Confidence of two randomly-selected staff members at each chosen community care setting in using the old and new feed regimen (process measure) - to assess if the new feed regimen is easy to use / interpret.

Driver Diagram

Gloucestershire Hospitals NHS
NHS Foundation Trust

Aim	Primary Drivers	Secondary Drivers	Change Ideas
To have 80% of five community care settings with enterally fed patients not transcribing feed regimens by August 2019, thereby reducing prescription and administration errors.	1. Care Setting	Staff skills	
		Staff knowledge and understanding	Making a Standard Operating Procedure document to provide with regimen (1, 3)
		Staff turnover	
	2. Documentation	Feed regimen layout	Separate acute and community regimens (2, 3)
			Landscape to Portrait format (2, 3)
			?include flushes with medication (2, 3)
		Accountability	Include sign boxes
			Include footer to include patient identifiable details (NHS number and Initials)
			Change word "regimen" to "prescription" (1, 2 and 3)
	3. Communication & Education	Feed regimen Layout	Eliminate irrelevant information (2, 3)
		Simplification	Take out "water content" from the feed total (1, 2 and 3)
			Total up feed & fluid (1, 2 and 3)
			Chronological order (1, 2 and 3)

OLD REGIMEN

NHS
Gloucestershire Hospitals
NHS Foundation Trust
Department of Nutrition and Dietetics

Enteral Feeding Prescription

Home Enteral Feeding Team (Community Dietitian):0300 422 5645 Enteral Nutrition Nurse:0300 422 6338 Regimen written by: Date regimen written:	Feeding Route:	Patient details

1. Elevate patient's head and shoulders to angle minimum of 30º during feeding and 60 minutes after to reduce risk of aspiration
2. Flush tube with a minimum of 30mls of water, as per policy, before and after feed/medications and 10ml water between each medication.
3. Change giving sets every 24 hours. Syringes are single use in acute and community hospitals. In community homes or patients own home change syringes every 7 days.
4. For further details please refer to The Nasogastric and Gastrostomy feeding policies on the intranet

Day/Date	Feed	Rate (ml/hour)	Duration (hrs)	Rest (hrs)	Fluid Requirements	Total Volume in 24 hrs

NEW REGIMEN

- Changed "regimen" to "prescription"
- Changed landscape to portrait to facilitate easier reading when stored in patient folders
- Signature boxes added to sign for each dose of feed / fluid
- Chronological order of feeds and fluid
- Options to choose refused feeds / missed feeds / tube blocked
- Total page numbers shown to prevent separate sheets from going missing

NHS
Gloucestershire Hospitals
NHS Foundation Trust
Nutrition and Dietetics

Enteral Feeding Prescription

Name:
Date of Birth: DD / MM / YYYY
MRN Number:
NHS Number:

Home Enteral Feeding Team (Community Dietitian): 0300 422 5645 Enteral Nutrition Nurse: 0300 422 6338 Regimen written by Date regimen written DD / MM / YYYY	Route of administration Gastric/Jejunal

- Elevate patient's head and shoulders to minimum of 30 degree angle during feeding and 60min after feeding to reduce risk of aspiration.
- Flush tube with a minimum of 30mls water, before and after feed/medications and 10ml water between each medication.
- Change giving sets every 24 hours. Syringes are reusable, change every 7 days.

Advised times (flexible)	Feed and Fluids	Date						
Start AM								
e.g. 08h00	50ml flush before feed e.g. 1L Nutrison Energy Multi Fibre @ 100ml/hr x 10hrs 50ml flush after feed							
e.g.15h00	e.g. 200ml water flush with medication							
Total Feed	ml							
Total Flushes	ml (May need extra fluid during hot weather)							

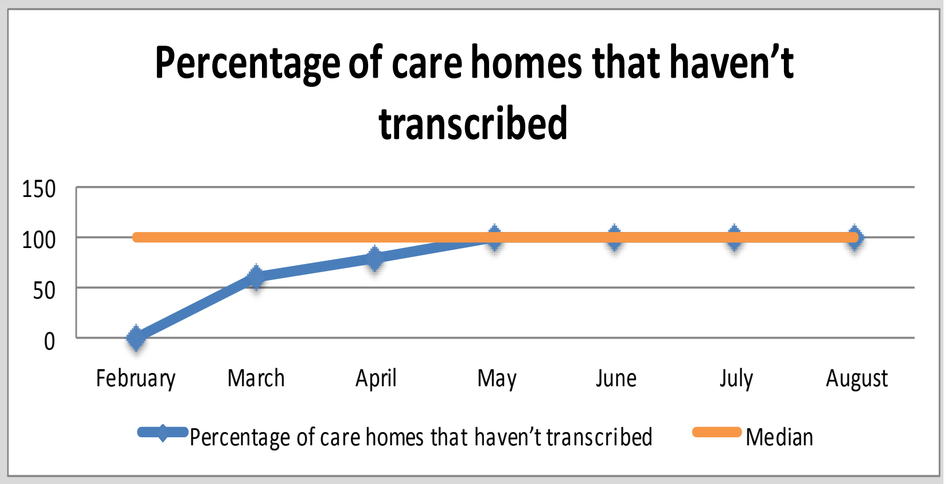
R = Refused U = Missed due to being unwell T = Tube blocked/broken
If feeds are refused/missed more than twice in one week please contact the Home Enteral Feed Dietitian

Additional information
Weight frequency

TO BE FILED IN PATIENT'S HEALTH RECORD Page 1 of 2

IMPROVEMENTS

- 100% of the selected care settings were transcribing at the start of our project.
- After the new regimen was implemented we found it was easier for staff to understand and they felt more confident in using it.
- After six months of monitoring, 100% of the care settings no longer transcribe these regimens.



BARRIERS

- Documentation group delays due to our request to have a format that we can edit based on each patients' individual regimens (Word document rather than PDF)
- Delay in care settings implementing the new feeding plan due to their turnover of staff and reluctance in changing from their own versions

SUMMARY AND NEXT STEPS

We found that a better structured regimen left staff feeling more confident and eliminated the need to transcribe. This has helped to ensure patients are receiving the prescribed type and volume of feed and fluid. We acknowledge that it was important to explain to the care settings why we are changing the regimens in order for them to agree to participate in our project and were open to taking their feedback on board. We also believe the updated version of this document ensures consistency between dietitians when writing regimens. We would like to put together a Standard Operating Procedure alongside the regimen (to guide colleagues and new starters on how to complete the template). We want to roll out the new regimen to all care settings who care for tube-fed patients and are also considering amending the template to use with patients in their own homes. Ongoing monitoring would be useful to ensure overall transcribing remains minimal.