BAPEN COVID-19 Service Improvement & Innovation Awards Entry Form

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Summary of the Service Improvement & Innovation:

People classified as 'clinically extremely vulnerable' to COVID-19 were advised to take extra precautions or to 'shield' in the peak of the pandemic (Public Health England, 2020). This includes many patients on Home Enteral Feeding (HEF), such as those over 70 years old, patients undergoing chemo/radiotherapy treatment, patients with respiratory illness such as asthma, Chronic Obstructive Pulmonary Disease (COPD) among many other long term health conditions.

Hospital demand increased significantly during the initial months of the COVID-19 pandemic, increasing the pressure on the NHS. The Sheffield HEF team recognised very early that they would need to focus efforts on preventing hospital admissions, to reduce the burden on acute and emergency services, and support people on HEF to avoid contracting COVID-19. This involved rapid service expansion to respond to enteral feeding tube complications.

The following developments were introduced:

1. **A Dietetic on-call service**
2. **A stoma saving device protocol and training plan**
3. **NG placement training**

From April 1st 2020, the HEF Dietitians introduced an on-call service for HEF patients. Written communications were circulated to District nurses, ambulance services, evening and night nursing, out-of-hours GP, care homes and care agency staff, about the new hours of service. Patients on HEF received a letter reminding them how to self-manage common tube related complications and about the extended hours of service. In addition to the normal HEF team working hours (7am-5pm), a HEF Dietitian was available from 5-8pm Monday to Friday and 8am-6pm on weekends and bank holidays to respond to any urgent complications.

Early in the pandemic, the HEF team proactively identified and replaced balloon retained devices for patients who were due a routine replacement to reduce the likelihood of any avoidable emergency admissions during lockdown.

An ENPLUG stoma saving device care pathway was developed. This silicone device can be inserted through a gastrostomy stoma tract following displacement to maintain stoma patency until a new gastrostomy can be placed by a trained professional. Standard operating procedures (SOP), a risk assessment, patient and Health Care Professional (HCP) information leaflets were developed. This was urgently sign off by the Trust clinical governance team within 4 weeks. Funds were secured to provide ENPLUG devices to patients with a balloon retained gastrostomy or a gastrostomy over 3 years old. Virtual training was delivered to patients, carers and care home nurses by the HEF Dietitians and Nutricia nurses.

It was predicted that there may be a greater need to support people on nasogastric (NG) tube feeding at home, due to hospitals discharging people faster and reduction in gastrostomy placements. To prepare for this, the HEF Dietitians attended a theory training session on NG tube placement delivered by the nutrition nurse at Calderdale and Huddersfield NHS Foundation Trust. This involved the Dietitians placing NG tubes on each other under supervision. A SOP and risk assessment was developed and submitted to the clinical governance to support the HEF Dietitians placing tubes in the community setting.

Challenges faced and how they were overcome:

COVID-19 presented challenges for community HCPs who were required to work from home to comply with social distancing. Daily Microsoft Teams team meetings during the first 3 months of the COVID-19 pandemic formed a pivotal part of our work to facilitate the service development presented. This promoted effective team working, staff engagement and stress management at a challenging time.

The team adapted to working from home, limiting home visits significantly and only visiting patients requiring direct intervention to resolve a tube complication that would have otherwise resulted in a hospital admission while wearing the appropriate Patient Protective Equipment (PPE). Innovative remote training of ENPLUG using video consultation or telephone review supported by a training video, facilitated rapid training delivery. Patients who were unable to access virtual training due to lack of access to technology were offered training outside their property at a social distance.

Evaluation and Outcomes:

25 home visits during the on-call hours between April 1st and 26th June 2020 prevented patients on HEF from being admitted to hospital. This included replacing displaced/ damaged balloon gastrostomies, unblocking gastrostomy tubes, responding to complications such as an inflated balloon in a patient's stoma site and replacing Y connectors on permanent gastrostomies. An example of the service provided included the HEF Dietitian responding to a call from a paramedic to replace a balloon gastrostomy in an ambulance outside the hospital, preventing the patient entering the emergency department.

Following clinical governance approval, ENPLUG training was delivered to 97 patients, including patients within 21 care homes and up to 40 care home staff. The ENPLUG have been used effectively on 12 occasions to prevent an admission to hospital in vulnerable patients.

The HEF Dietitians completed theoretical training on NG tube placement and developed a SOP and risk assessment. The increased need for community NG feeding did not materialise, so this service development was put on hold.

Future Plans:

The on-call service was effective in reducing admissions. For sustainability, further Dietetic staffing would be required to operate this service. Development of the ENPLUG care pathway has meant that stoma patency can be maintained if tubes are displaced out of normal working hours and will continue to support admission avoidance, in the absence of the on-call service. The HEF team aim that all patients with a gastrostomy tube, particularly those with a balloon retained device with higher displacement risk, will be trained and have a set of ENPLUG.

There remains a need for face-to-face patient contact. This includes providing support with decision making about gastrostomy placement, to review those with communication difficulties and where the complexity of a case necessitates discussion that is difficult over the telephone. The team is now assessing the risks

of home visits while continuing to offer patient choice about their method of accessing Dietetic support.

NG competency training remains on hold but the team will explore gaining competency should the demand arise for this in the service.

Virtual team meetings continue to form a central part of the service, complimenting effective team working, clinical supervision and time management.