BAPEN COVID-19 Service Improvement & Innovation Awards Entry Form

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Author(s):
Martyn Dibb
Ashley Bond
Phil Smith
Alison Young
James Baker
Clare Soulsby
Angela White
Anna Moody
Helen Shields
Helen Campbell
Sophia Curran

And particular thanks to the members of the R Homecare Nursing team

Institution:
Liverpool University Hospitals Foundation Trust (LUFHT)

Summary of the Service Improvement & Innovation:

The LUFHT Nutrition Support Team based at the Royal has always believed in working across traditional boundaries and innovating. LUFHT has the first NHS-run HPN homecare service, providing PN and nursing support to Intestinal Failure outpatients in the Mersey region.

The LUFHT NST recognized that the scale and impact of the COVID19 outbreak was likely to require widespread system change to maintain a first class service. The whole MDT worked together to rapidly implement innovations to ensure business continuity, access to specialist MDT advice and to reduce risk to patients.

The following innovations were instituted: -

1) Electronic prescribing of inpatient parenteral nutrition
2) Transition of all MDT meetings to Virtual online meetings, backed up by bespoke electronic MDT forms on the trust EPR
3) Electronic "Virtual Review" System for review of blood results and patient's follow-up
4) Supplementary Parenteral nutrition prescribing by Senior Dietician
5) Community blood sampling by trust homecare nurses during COVID19
6) Single email address for nutrition support queries that could be accessed by all nutrition support team core members.
7) Training of community dietetic team to perform routine balloon gastrostomy changes

Challenges faced and how they were overcome:

1) Business continuity in the face of 40% of core NST staff unavailable for F2F work because of redeployment, shielding, or sickness.
    a. Roll-out of single email address for nutrition support patient and staff queries
    b. Virtual Controller. A shielding consultant was given responsibility to manage Virtual reviews, Patient queries and significant results, freeing up other team members for F2F work. An in-house electronic system (known as Dashboard) designed for allowing the tracking of virtual patients was used to flag patients requiring review of results or telephone review.
    c. Transition of both our nutrition support MDT and Feeding Issues MDT to virtual meetings (Microsoft Teams), with developed electronic documentation of outcomes (to allow rapid dissemination of outcomes across our inpatient sites). The virtual meetings have allowed weekly contributions from colleagues in Community dietetics, Palliative care, Clinical ethics, and SALT.
    d. NST members who were able to do F2F work had staggered rotas to minimise risk of COVID19 affecting the whole NST
    e. The Virtual Feeding Issues MDT used to screen patients for enteral feeding procedures so appropriate patients continued to get tube placements during COVID19 outbreak and suggest alternative nutrition support procedures where necessary.
    f. 8 hospital inpatients discharged on HPS at the height of the pandemic, including 1 out of area patient and carer trained by nutrition nurses to avoid additional nursing visits.
    g. Nutrition Nurse trained community dieticians to perform routine balloon gastrostomy changes on community patients, freeing nursing time for more complex clinical procedures.

2) Limited availability of TPN prescribers / formulators due to redeployment / shielding / staff retirement
    a. Senior pharmacist responsible for HPN formulations asked to work remotely to minimise the risk of contracting COVID19 (and interrupting service) until new appointment was fully trained
    b. Inpatient prescriptions for PN moved from hand-written prescriptions to electronically prescribed, with Full visibility of the TPN regimes at ward level and electronic administration signatures / Batch recording. This was supported by education and stickers on the fluid charts to prompt staff to check the electronic prescribing system prior to prescribing fluids
    c. Inpatients consented to allow supplementary prescribing by our prescribing dietician.

3) Supporting HPN patients without increasing risk of COVID19 infection
    a. R Homecare nursing team obtained urgent blood sampling at home visits for connection/disconnection during initial phase of COVID19 (prior to the roll-out of patient blood sampling).
    b. Nutrition Nurses trained self-caring patients to take their own blood from line on zoom, which was then collected by R Homecare drivers when they delivered PN / Ancillaries.
    c. R Homecare nurses supported several patients with administration of disease modifying medications to prevent hospital attendances.
    d. Patients with catheter or feeding tube problems that mandated OP attendance were also had their dietetic or medical needs addressed at same appointment to prevent recurrent unnecessary attendances

e. Telephone clinics where possible to prevent hospital attendances.

Evaluation and Outcomes:

Electronic Parenteral Nutrition Prescribing – This change has been well received, with no significant issues encountered to date. We plan to continue this innovation.

Virtual MDT's – Aside from some initial technical issues, these have been well received and have not reduced interaction or discussion. In some cases, the virtual nature of meetings has allowed colleagues who would not normally be free or available to bring valuable contributions.

Community blood sampling by homecare nurses has been well-received. We have supplemented this by training our self-caring patients to perform blood sampling when needed and will continue this.

Single point of contact – This has been well-received by patients and staff and we plan to continue this.

HPN outcomes – No R Homecare patients contracted COVID19. No patient had admission due to missed feeds or delayed deliveries. No patients transferred to 24hr visits due to staff pressures.

Future Plans:

Virtual MDTs – We have already discussed some patients from regional hospitals in our Feeding Issues MDT. We would like widen access to this to include our sister hospital and all hospitals in the Mersey Region who would like support on difficult feeding issues.

Virtual Reviews and Tracking – Whilst during COVID19, patients were largely contacted by telephone, we are exploring the use of Attend anywhere for virtual consultations for remote HPN patients.