BAPEN COVID-19 Service Improvement & Innovation Awards Entry Form

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Summary of the Service Improvement & Innovation:

The Covid-19 pandemic started to reach our Adult Intensive Unit (AICU) in March 2020. The scale of the pandemic was unknown but was anticipated to be very high with cases doubling on a daily basis.
UHL Trust gave a clear message that having access to Personal Protective Equipment (PPE) was going to be limited and so Dietitians and other Allied Health Professionals needed to avoid entering the AICU unit to protect staff and preserve PPE.
Critical Care Dietitians are front line staff who are highly expert in assessing and diagnosing nutritional issues in the critical care population, and are used to attending wards rounds and multidisciplinary meetings and having face to face contact and assessments with patients. This paper summarises how this worked on a practical level during this challenging phase and introduced new ways of working.

Challenges faced and how they were overcome:

Could Dietitians in UHL rise to the challenge of unknown numbers of patients having COVID -19?

- Senior Specialist Dietitians provided training based on resources already available and developed a Standard Operating Procedure for other dietitians not familiar with critical care so there was a step by step approach and consistency of practice.
- An electronic template of a medical note entry was devised as a prompt for Dietitians to use and document their medical note entry on.
- Resources were produced such as calculators for energy content for common sources of non-nutritional energy and enteral feed formula composition.
- Standard operating procedures for nursing staff were developed to ensure they had a plan to follow in the event of high numbers of Covid-19 patients and delay to individualised Dietitian assessment.

Could Dietitians in UHL work remotely and provide a good level of care to patients on AICU

- Dietitians accessed Nerve Centre© for details of patients, used images of AICU observation and drug charts and medical note entries, and photographs of

patients and bed space

- Biochemistry results were accessed from ICE©
- Nerve centre© was used for brief immediate communication between staff in hot zone and dietitians
- Medical note entries and enteral feeding regimens were delivered safely at the end of the day to the hot zone with full communication

Evaluation and Outcomes:

1. There are 44 dietitians in the UHL service
2. There are 12 Dietitians working in Critical Care (27%), a further 28 dietitians (63%) received training on how to remotely work on intensive care under the supervision of a senior Dietitian.

The Staffing ratio increased due to movement of staff from non Covid-19 areas due to a shift in Trust Priorities.

- 52 patients were seen in LRI and 70 at GH – from first COVID +ve admission to first easing of lockdown restrictions on 8th May.
- 90% were fed via NG at LRI and 100% at GH

100% of these reviews were completed remotely

- On average it took 45 minutes to 60 minutes to complete a new patient assessment
- On average it took 30-45 minutes to complete a follow up review
- Quality of reviews depended on information available
- Quality of information improved with prompting and depending on the nurse in charge/Doctor on the unit
- Quality of information improved with practice and time
- Dietetic produced electronic templates and resources helped aid consistent and safe practice
- Nerve Centre provided an instant way of communicating with the nurses and doctors e.g. to change enteral feed, prescribe a protein supplement etc. while awaiting the full dietitians medical note entry at the end of the day.
- Medical staff, nursing staff and other allied health professionals commented that they found our assessments informative, clear and contained the information they required and did not feel that we needed use valuable PPE to work in the hot zone

Although initially it felt alien to work remotely, Dietitians at UHL felt that with the electronic images available and using the Nerve Centre© system, this was successful and didn't hugely impact the quality of assessments and reviews.
During this time, face to face reviews with full PPE can also have its limitations.

1. Dietitians in UHL rose to the challenge of preparing non critical care Dietitians to be able to cover the UHL AICU successfully and without incident. This worked as

other areas of the hospital reduced in patient numbers. This would be difficult to sustain if the hospital was fully functioning with all surgery beds open and routine treatments open.

2. When images of patient and surrounding area, AICU chart, drug chart and daily medical note entry were made available then it is possible to do a full review of the patient remotely when a patient is sedated on an enteral feed.
   The Medical note template was a very helpful prompt and helped save time with the reviews. The fact that the entry was printed and clear and followed the same format, made the Dietetic reviews very well received on critical care.
   Although Dietitians felt a little out of touch with the medical and nursing plans, it is acknowledged that communication is difficult even in person in a Covid-19 area due to staff wearing respirator hoods and different masks and visors. The PPE is hot and uncomfortable and other members of the MDT have reported that they tended to review the patients more quickly than normal to minimise duration in the Covid-19 areas.
   It is noted that the majority of these patients in this time period required enteral feeding. It is yet to be assessed that if the patient required parenteral nutrition, if the remote reviews would be as successful. However, so far numbers of patients requiring parenteral nutrition in this group are small.

3. **Future Plans:**
   Overall we felt the information provided by Nerve Centre© enabled us to successfully review patients, while preserving PPE and keeping staff members safe. We would propose to work in the same way if a second wave hits the UK.
   A Standard Operating Procedure to detail what information is required on the AICU photographs would help to ensure all the information required is present.