- A homecare registration (if required) and prescription form are completed.
- A telephone consultation with the parent/patients is provided by the pharmacist explaining the homecare process and answering any clinical questions.
- The specialist nurse completes output documentation for GP and arranges next follow up.
- A real–time biologics database records core quality data for auditing purposes.
- VBC list is sent to the service manager for reimbursement.
- Patients who do not meet national guidance are referred to the weekly MDT.

Results The service has 120 patients being treated on biologics. Since November 2018, 112 patients of these patients have been reviewed. 1.7% have been non-compliant with national guidance and 5% did not have Blueteq numbers.

The VBC has enabled the MDT to assess response to biologic therapies by ensuring core set criteria is being recorded. A snapshot audit showed that documentation had increased from 25% to 50%.

Prescription turnaround time has reduced from 7 days to 3 days preventing treatment delay.

Discussion VBC has enabled the majority of patients to be reviewed, whilst showing we are compliant with national guidance. Routine and pre-biologic bloods had been requested for all patients and the recording of core set criteria had shown some improvement. Although not achieving the required level of documentation. Telephone consults have been perceived well by patients/parents. Having a pharmacist prescriber has had a positive outcome within the MDT and both the workflow and workload has improved.

Conclusion The VBC has been pivotal in improving patient care within the service. The MDT have collaboratively been able to ensure cost-effective prescribing, improve data collection, and reduce treatment delay whilst enhancing the pharmacist's role. The process has highlighted the documentation of core set criteria is still low and requires further improvement. Ensuring compliance with NHS England commissioning criteria, Blueteq forms should be completed prior to prescriptions being written.

P36 NUMETA G13% PRETERM NEONATAL PARENTERAL NUTRITION SOLUTION – A LICENSED ALL-IN-ONE TRIPLE CHAMBER, READY TO USE AND TERMINALLY STERILISED PARENTERAL NUTRITION FOR PRETERM NEWBORN INFANTS

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Aims We aim to evaluate the efficacy and safety of Numeta G13%E preterm neonatal parenteral nutrition (PN) in our neonatal population.

In September 2017 a National Patient Safety Alert (NPSA) highlighted the risk of harm to babies when lipid was mistakenly run at the rate intended for the aqueous component resulting in significant lipid overdose.

Although we have worked to implement many of the alert's recommendations, we feel we can avoid this risk further by using an all-in-one PN solution.[1]

Numeta meets current nutritional guidelines as per British Association of Perinatal Medicine (BAPM) but this project allows comparison of outcomes important to both patient and service between those achieved with our current regimen and those with the all-in-one regimen.[2]

Methods We carried out a quality improvement project from April 2018 to April 2019. We collected data from 330 babies in our neonatal unit during six months before (154 babies) and after (176 babies) the adoption of the all-in-one solution.

Our previous PN regimen consisted of a 'menu' of aqueous bags (starter, maintenance, 'light' and bespoke) and a separate lipid solution. All of them were suitable for peripheral or central administration. Numeta came with similar choices: starter, maintenance -for central administration only- and 'lite' and Numeta peripheral, suitable for peripheral administration. Bespoke bags were also available if clinically indicated. We set out our desired outcomes and measured parameters accordingly:

Patient outcomes

i. Metabolic stability: electrolyte, glucose, bilirubin and lipid measurements summarised by the need to change from standard PN regimen and/or requirement for insulin.
ii. Fluid balance summarised by the lowest weight during the first two weeks of life and time taken to regain birth weight.
iii. Growth summarised by change of standard deviation score of weight and head circumference between birth and discharge or transfer back to local hospital.
iv. Liver tolerance of lipid solutions summarised by incidence of cholestasis (>25 µmol/l conjugated fraction of serum bilirubin)
v. Days and type of PN
vi. Sepsis

Service outcomes

i. Nursing time taken to prepare PN
ii. Cost
iii. Wastage
iv. Access to product

Results Although we finished collecting the data in April 2019, we are still in the process of analysing it and evaluating the final results. There have been no cases of lipid overdose and our neonates (including the preterm ones) have so far tolerated well the new parenteral nutrition solution. Average nursing time preparing Numeta went down from 18.5 minutes to 8 minutes and comparison of cost came in favour of Numeta. PN wastage was higher with Numeta (4.7% Maintenance, 10% 'light', peripheral 50%) especially in the first month during the transition phase. There was no significant increase of bespoke bags when Numeta was introduced.

Conclusions In summary, so far we have not identified significant clinical differences between the first six months of the project -using our old standardised nutrition regimen- and the last months -on the new all-in-one solution. We have continued with Numeta preterm solution on the basis of assumed safety.

REFERENCES

1. Risk of severe harm and death from infusing total parenteral nutrition too rapidly in babies. NHS improvement patient safety alert September 2017.
2. The Provision of Parenteral Nutrition within Neonatal Services – A Framework for Practice. British Association of Perinatal Medicine (BAPM) April 2016 www.bapm.org