British Association of Perinatal Medicine

BAPM Awards 2019

Celebrating Excellence, Making a Difference

Shortlisted Entries and Winners

BAPM Awards 2019 – Celebrating Excellence, Making a Difference

Welcome

This year we announced the first ever winners for the BAPM awards. We are so pleased that we are getting a chance to highlight and celebrate examples of those making a difference in neonatal care in both big and small ways. The entries for this year's awards were truly inspiring and we are thrilled to share these so we can all learn from these areas of good practice.

Sarah Bates, LNU/SCU Representative, BAPM Executive Committee

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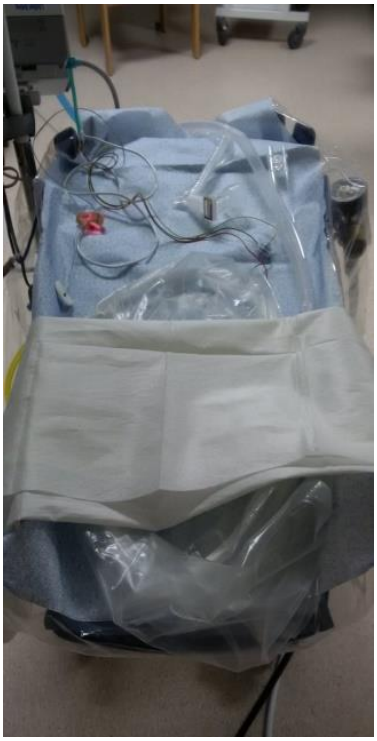
Improving Quality in Perinatal Care Award

Winner: Get SET Team, Neonatal Unit, Royal Hospital for Children, Glasgow
(Dr Anne Marie Heuchan, Dr Maria Duggan, Dr Joyce O'Shea, Dr Colin Peters, Catherine Nicholl, Margaret Brownell)

In 2016 30.4% of infants <32 weeks were admitted to our NICU with a temperature in the hypothermic range (<36.5°C). Although in keeping with the national average, Dr Heuchan was confident we could improve. Together with Dr O'Shea she formed the Get SET (**S**aturation, **E**cG, **T**emperature)multi disciplinary team, consisting neonatal and midwifery staff passionate about improving neonatal care.

Get SET was a quality improvement project with a bundle of evidence-based measures, including; delivery room temperature of >25°C, availability of prewarmed equipment, a standardised approach to early thermal care with plastic wrap and warm humidified gases for early CPAP and respiratory support, use of a Lifestart trolley to support stabilisation during delayed cord clamping (DCC) and real time temperature, saturation and ECG monitoring during stabilisation. The Get SET team led by Dr Heuchan created a package of education to introduce the bundle to labour ward collaborating with obstetric, midwifery and anaesthetic staff. Data was recorded monthly and run charts developed with outcome and bundle compliance. The first 12 months of the project improved admission temperatures but there was scope for further improvement. Analysis of the element compliance also revealed that DCC rates were suboptimal for use of the Lifestart trolley. Dr Heuchan introduced Get SET 2 with a protocolised approach to use of the Lifestart trolley, a switch to physiological based DCC and an extensive labour ward and neonatal education programme.



Over 24 months there has been a 19.5% increase in preterm infants admitted with a temperature in the normothermic range and abolition of all moderate or severe hypothermia. NNAP data for 2018 demonstrates excellence in admission temperatures with 80.3% of preterm infants in the target range and our run charts demonstrate sustained improvement in 2019. Over 80% of infants are now receiving > 60 seconds DCC, whilst having their temperature maintained and optimal respiratory support delivered. Infants have multiparameter monitoring throughout and once stable are wrapped and given to their mother for a cuddle prior to transfer to NICU, which has far reaching benefits for mother and child, without compromise on admission temperatures or care.

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Improving Quality in Perinatal Care Award

Shortlisted: PReCePT Team

PReCePT (Prevention of Cerebral Palsy in PreTerm Labour) is the first perinatal Quality Improvement (QI) intervention delivered at scale across England, utilising a novel network delivery model.

NICE recommends administration of magnesium sulphate (MgSO4) in very preterm births to reduce the risk of cerebral palsy (CP). For every 37 mothers, below 30 weeks gestation, who receive MgSO4, one case of CP is prevented.

Uptake of MgSO4 in the UK is relatively low, with high variation across regions. The National Neonatal Audit Programme reported 60% uptake for eligible mothers (2017). The aim of PReCePT is for every unit to achieve 85% uptake by 2020.

PReCePT was piloted in the West of England; all five participating units achieved the 85% target within six months.3 The national PReCePT programme, was commissioned by NHS England, led by the West of England Academic Health Science Network (AHSN), with clinical leadership provided by Dr Karen Luyt. Babies and their families are at the core of PReCePT, which was co-produced with mothers who had experienced preterm birth and perinatal staff. A novel network QI delivery model was developed:

- delivery by 15 AHSNs
- aligned to Neonatal ODNs, in all 152 maternity/neonatal units in England
- regional QI and clinical leads, working with unit-level midwife champions
- a PReCePT obstetric and neonatal lead in each unit, enabling a perinatal team approach
- standardised QI resources (toolkit, implementation guide, dashboards, training presentations and promotional collateral)

Challenges faced:
- obtaining funding
- readiness of AHSNs and units to adopt and spread the intervention
- variability of QI capability across the perinatal community
- clinical buy-in

Parent advisers on the PReCePT programme board have strongly advised that MgSO4 be offered to all eligible mothers to help improve the life chances of preterm babies. MgSO4 for neuroprotection was recently adopted into health policy by inclusion in the NHS Long Term Plan and the “Saving Babies’ Lives Care Bundle”. The programme is on track with 131/152 units engaged (Figure 1), reporting 87% average uptake (May 2019).

The impact of PReCePT is:
- prevention of several hundred cases of avoidable CP per year
- enablement of a national perinatal QI network

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Improving Quality in Perinatal Care Award

Shortlisted: Infection Prevention Team, Leeds Centre for Newborn Care

The infection prevention (IPC) team is a multidisciplinary team of nurses, doctors (neonatal and microbiology), pharmacists. We work in a tertiary neonatal intensive care unit with extreme preterm, surgical and cardiac patients. The team holds fortnightly meetings to review current infections, weekly audit results, antimicrobial stewardship and quality improvement.

The group was formed in 2009 following 9 meticillin resistant staphylococcus aureus (MRSA) bacteraemias in one year. It is well documented that staphylococcal sepsis is nosocomial and carries a significant burden. It is estimated that late onset sepsis prolongs hospital stay by three weeks and has a deleterious effect on neurodevelopmental outcome.

In order to improve staphylococcal infection rates a series of quality improvement (QI) cycles have been run. In the first cycle hand hygiene, asepsis and skin preparation were improved with education and assessment. Daily skin decolonisation of all babies over 28 weeks was also introduced and weekly screening for MRSA. There have been no MRSA bacteraemias subsequently.

However, MRSA colonisation outbreaks continued. Compulsory 6 monthly hand hygiene assessments were introduced. Weekly audits were shared widely with staff. These include antimicrobial prescribing, hand hygiene, asepsis and decontamination of equipment. There has been no MRSA colonisation outbreak for four years.

Despite these measures meticillin sensitive staphylococcus aureus (MSSA) bacteraemias did not decrease (approximately 1.4/1000 central line days). Root cause analysis of each MSSA bacteraemia was done, and continues. An additional QI cycle introduced MSSA weekly screening to babies less than 28 weeks gestation. The concept of the “Baby’s Bubble” was introduced which recognises the importance of the “5 moments of hand hygiene” in the baby’s immediate environment. Subsequently bacteraemias have fallen (0.6/1000 line days).

The multidisciplinary infection prevention team have worked collaboratively to significantly reduce staphylococcal infections in the neonatal unit and improve quality of care. We have also seen an improvement in late onset sepsis rates overall as a result of heightened awareness, education and infection prevention practices.

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Improving Quality in Perinatal Care Award

Shortlisted: Girish Gowda, Great Western Hospital

Girish has been an inspiring QI leader and with no allocated time for QI, has developed, implemented and led not just one, but 4 major projects. These have not only generated significant change and improvement in care for many babies and their families in the last year but also have demonstrated excellent collaborative working with the whole perinatal team:

1. ATAIN, Keeping Mothers and Babies Together – this has led to GWH neonatal unit having the lowest ATAIN rates across the SW Neonatal Network for the last 6 quarters (NSQI 12). Girish has shared our work in this area regionally, to inspire others on their improvement journeys.

2. BAPM Hypoglycaemia Framework implementation. Successfully ensured this new framework brought in smoothly and working well. (NSQI1 Care Pathways)

3. Perinatal Neuroprotection/HIE Care Bundle – working across obstetrics, antenatal care, delivery care and neonatal care to reduce rates of HIE and improve care for babies being assessed for therapeutic hypothermia. Provides excellent guide for anyone involved in looking after infants at risk if HIE. (NSQI1 Care Pathways)

4. Introduction of a Transitional Care Service – working within the BAPM TC framework to map staffing & training requirements and implementation of a TC service. Liaison with postnatal ward midwifery leads. NSQI 2&3 – Team communication and staff safety culture

He inspires and engages the multidisciplinary team across neonates and maternity, and utilises QI techniques such as fishbone analysis, driver diagrams, run charts, and process mapping to great effect (NSQI 15).

In addition, Girish is also the Neonatal Safety Champion, and is very engaged in the Maternity and Neonatal Safety Collaborative and MatNeoQI (NSQI 18). He is particularly good at taking inspiration from these national collaboratives and implementing change locally. He has also led a business case to increase junior doctor cover of the Neonatal Unit at night – with the result that the Neonatal Unit now has a dedicated doctor at all times.

Girish deserves recognition for all the work he has put in the last year, over and above his contracted hours, for being inspirational and delivering huge improvements in care pathways and patient outcomes.

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Supporting the Perinatal Team Award

Winner: Kelly Harvey, Alder Hey Children's Hospital

Kelly recognised that neonatal teams are instrumental in supporting good mental health in families as they journey through neonatal care and that there was a need to support them in this to ensure it was done effectively considering all elements e.g. developing rapport, peer support, environment, signposting to specialist services when appropriate etc.

Kelly took a network wide approach to this which had not previously been done pulling together a team of parents from across the north west and Perinatal and Infant Mental Health professionals who worked together to develop a study day that was offered to the neonatal MDT across the Northwest. This was often in her own time to fit in with the needs/availability of the parents.
Kelly facilitates the day which has sessions delivered by the Perinatal and Infant Mental Health teams, parent talks and videos and afternoon workshops. See additional paper for content of day.

To date all NW NNUs have benefited from these days/workshops and the evaluations describe how they will change practice as a result of the day with comments such as:

- Definitely will affect my practice.
- Excellent day
- Very useful, quite a few ideas already cascaded to other staff
- Aim to ensure we look more carefully for signs of problems developing in the early admission stages
- I aim to discuss and disseminate lessons learned from the study day with the staff and formulate a plan.

As you have read above Kelly has demonstrated great leadership skills in bringing together these groups of people adapting to the changing team and programme and obstacles around funding resource and in engaging the wider MDT around attendance (80 attendees from 22 NNUs) with individual ownership within NNUs and now has links for PNMH in all NNUs.

As a neonatal network we have benefited from this as we now have good working relationships with NW PNMH teams ensuring that neonatal care is part of their work/consideration as they develop pathways. Kelly is building on this by working towards a national study around neonatal perinatal and infant mental health.

"With the support of those parents and my neonatal network colleagues I was able to engage maternity teams via the SCN and was put in touch with a fantastic Clinical Psychologist who was passionate about this under represented group within the PNMH networks – neonatal families seemed to have been overlooked as an at risk group. I knew as a neonatal nurse PNMH was not something I was trained in and I feel really passionately that this is an area neonatal teams could work with the perinatal team to improve family experiences on the neonatal unit"

Kelly

Supporting the Perinatal Team Award

Shortlisted: Princess Royal Maternity staff in Partnership with Child Bereavement UK Support Team in Glasgow.

(Lorna McKerracher, Gayle Taylor, Kristin O'Neill, Kirsten McKillop, Rachel Kearns, Adam Archibald)

Since May 2018 a group of colleagues at Glasgow's Princess Royal Maternity Hospital have collaborated with members of the regional 'Child Bereavement UK' Bereavement Support Team to develop regular 'Multidisciplinary Reflective Practice' sessions. As a result they have created a much-needed space for reflection and peer support for staff dealing with bereavement in their work. Open to all specialities, the hour-long, monthly sessions provide a relaxed, supportive environment for group discussion, ideally with shared cakes!

Conversations are facilitated around generative themes such as '*When the unthinkable happens*' and '*I'm so sorry to have to tell you…*' Around 80 staff from different backgrounds have now attended eight such sessions with a further 50 Neonatal Medical and Nursing staff participating in four supportive debriefs following specific cases of neonatal death. Many attendees are familiar with clinical debriefs, but most have not previously had the opportunity to intentionally reflect with colleagues on the emotional impact of their work.

Feedback has been overwhelmingly positive:

- "Extremely powerful and helpful. Don't realise you need this until you attend." *Consultant Anaesthetist*
- "I think reflecting as a team is helpful. It gives insight into others' roles and feelings. Makes you feel less alone." *Staff Midwife*
- "Supportive environment to talk and listen. Makes me think about how I can support my colleagues" *Consultant Obstetrician*

An ongoing challenge continues to be staff being unable to attend due to clinical responsibilities, however, increasing awareness of the sessions plus support from senior staff are contributing to ongoing healthy attendance. A partnership with Perinatal Psychology has recently been established and individuals who feel that they would benefit from further one-to-one support from either the Bereavement Team or Psychology are able to self-refer.

In its first year the 'Multidisciplinary Reflective Practice' sessions have been a source of comfort, learning and development leading to increased awareness amongst staff of the emotional impact of clinical work. It is hoped that regular engagement in these types of discussions will help reduce burnout and compassion fatigue; improve working relationships; and as a result positively impact the care provided to mothers, babies and families.

BAPM Awards 2019 – Celebrating Excellence, Making a Difference

Excellence in Research or Innovation Award

Winner: South West Neonatal Network Team
(Also **Shortlisted** for the Making a Difference for Families Award.)

In April 2019, The South West Neonatal Network launched the first of its kind Neonatal Animation to support parents of infants in Neonatal Units. They recognised the need to deliver consistent information to all families impacted by neonatal care across region in an easy to digest way at a time of worry and high stress. Current information is often only available in spoken word and not everyone finds it easy to access or understand.

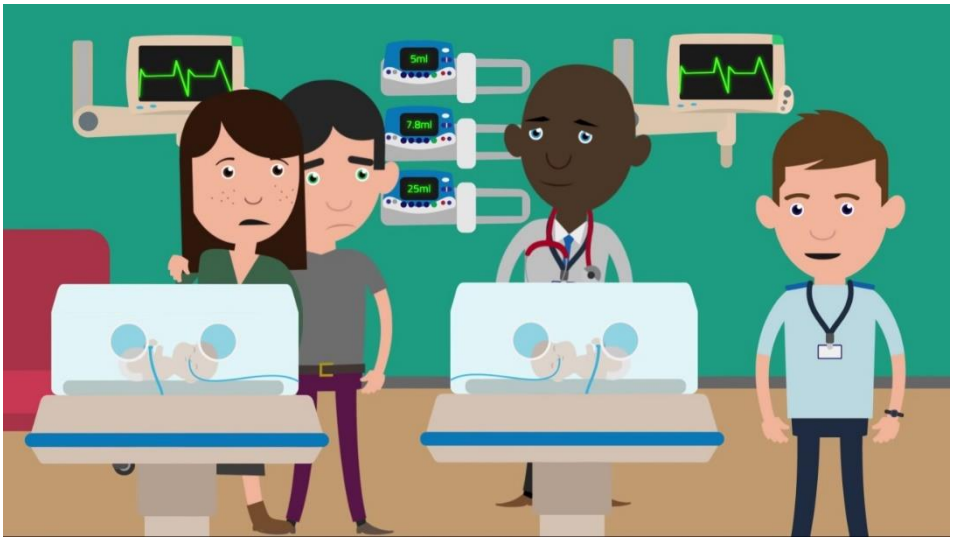
In developing the script for the animation, the Network team engaged with parents and neonatal staff from across the region. The purpose of the animation is twofold;

- To help alleviate some of the worries that parents may have about being in an unfamiliar Neonatal unit with their new baby by providing information about the equipment and environment , such as what staff you might encounter and what noises you might hear.
- To education and empower parents by delivering an animation that strongly promotes the central role of the parent through both the language it uses and the messages it gives. By doing so it aims to ensure that all new families in the SW are clear about how central and important our units see their role in the care and outcome of their infant. For example, it promotes kangaroo care and positive interactions to build memories and to bond with their child whilst on a unit.

The animation was funded by the NICU Foundation, a charity that the SW Network have partnered with to support the delivery of Neonatal Care in the SW

In order to ensure that parents are aware of the animation, the Network have done the following;

- Embedded on VCreate - Parents in 50 units in UK and worldwide have immediate access on admission
- Offered the animation free of charge to units/ charities worldwide
- Produced posters and cards for parents rooms and distributed to all UK Neonatal Units
- Promoted widely on social media.



In only two weeks the animation was shared over 3,000 times on social media, watched over 1,000 on Youtube and the file has been requested by over 70 organisations worldwide.

Excellence in Research or Innovation

Shortlisted: Neil Gokani, County Hospital, Hereford

Neil has made a different through innovative practice through developing and implementing the idea of a physiotherapy based follow-up developmental clinic for preterm babies and their families.

In the local Trust, physiotherapists were not involved in the early management of premature babies. A change in the local service was implemented; a community based physiotherapy follow-up clinic for premature babies. The new service ensured that all high-risk premature babies were directly referred from SCBU for a developmental assessment in a physiotherapy clinic. This new service was evaluated.

After the initial pilot clinic, individual interviews were carried out with parents of babies who attended the physiotherapy service. Responses highlighted many positive aspects of the service. The participants reported that physiotherapy offered a form of guidance and reassurance for them. There were sub themes that emerged which suggested that attending the service increased compliance and engagement as well as reducing worry and anxiety. Further themes were that the physiotherapy service offered support post discharge from SCBU. The service provided a seamless transition process from SCBU to community. Through attending the service the parents reported that they increased their understanding about premature baby development and physiotherapy provided knowledge and increased their confidence with their baby.

An all-encompassing theme that emerged was that the physiotherapist acted as a facilitator for engagement with physiotherapy advice and guidance. One outcome was that it raised the profile of the longer term follow-up needs of premature babies once discharged in the community. It also raised the profile of AHPs such as physiotherapist and onward referrals post discharge and it provided support to babies and their families. This also ensured introducing a new and creative initiative which improves outcomes or experiences for babies and their families or perinatal colleagues.

The entrant demonstrated an ability to use their initiative and leadership skills to bring about change through negotiating with senior management and consultant paediatricians which ensured a pilot study was agreed. The entrant planned**,** implemented and evaluated this service by networking with key stakeholders, gathered parents feedback and then presented the evaluation findings to senior management, consultant paediatricians and paediatric physiotherapy colleagues to ensure a further outcome; securing sustainable funding for the development and ongoing delivery of this service to provide equitable care to patients and their families.

The entrant had to overcome many obstacles, including change in workplace culture, lack of support from physiotherapy, AHP and SCBU staffing initially, as there was a reluctance to change culture. The entrant had to ensure resilience to ensure the best outcomes for babies and their families. Further obstacles included a lack in funding during pilot stage and a lack in clinical space in the hospital, and no admin support, therefore had to manage juggling community clinic spaces with community staff out of the hospital, book in and contact patients and assess, treat and refer babies as well as signpost families for additional support such as portage, speech and language and community paediatricians without support and working autonomously.

Excellence in Research or Innovation Award

Shortlisted: Fauzia Paize and Jenna Deeming, Liverpool Women's Hospital

Reducing prescribing errors with the use of noise-cancelling headphones in a tertiary neonatal unit

AIM: A high level of reported prescribing errors was noted on the neonatal intensive care unit in 2018. In an attempt to decrease errors noise-cancelling headphones whilst prescribing were introduced

METHODS: A prescriber focus group highlighted interruptions during prescribing as a great concern. This led to a discussion about the use of noise-cancelling headphones and the decision was made to trial their use. For one month prescribers wore headphones when prescribing. Nursing staff were encouraged to remind prescribers to wear the headphones and not to interrupt prescribers when the headphones were in use. The trial period was supported by a promotional campaign. Following the trial feedback from prescribers and nursing staff was obtained and the number of reported prescribing errors reviewed.

RESULTS: Errors fell by 62%, from 16 in the month prior to 6 during the trial month. Online surveys amongst prescribers and nurses who participated in the trial showed the majority agreed with the focus group; that distractions/interruptions were the leading cause of prescribing errors. During the trial 80% of prescribers stated they 'usually' or 'always' wore headphones when prescribing. For times they were not used, comfort and not thinking they were effective were the common reasons reported. When worn, 86% of prescribers agreed that interruptions were decreased. Concerns regarding prescriber's ability to respond to emergencies while wearing headphones was not felt to be an issue by 93% of prescribers and 77% of nurses.

CONCLUSION: The introduction of noise-cancelling headphones use for prescribing was evaluated on the neonatal intensive care unit and showed a vast reduction in prescribing errors leading to higher levels of patient safety. The use of headphones was seen as a positive intervention and the majority of staff reported fewer interruptions during prescribing with no impact on responding to emergencies. As a result, the use of noise-cancelling headphones when prescribing has continued in our unit.

Making a Difference for Families Award

Joint Winner: Family Integrated Care Team, Leeds Teaching Hospitals

The Leeds Family Integrated Care (FIC) team were the first in the UK to introduce the model of care in May 2015: The philosophy runs strongly through the whole service.

Enabling, encouraging and sustaining this has been achieved through a combination of continuing staff education, appointing a lead nurse and continuous two-way communication with staff and parents.
Outcomes include

- Decreased length of stay (7 days babies <30week),
- Better breastfeeding rates (33% to 69% first year, sustained 59%)
- Less primary care visits in 3 months post-discharge (13 vs 3, p=0.016).

FIC delivery adapts in response to 360 degree feedback e.g. car-parking, yoga sessions, parent education at all times of day/week with all family welcome. Specific sessions for fathers, supervised sibling play times and veteran-parent led sessions were innovative and very popular.

Environmental changes are popular with parents - beds next to infants, meal service, improved family suites.

FIC has made a significant difference to parents. Regular audits show improved parents satisfaction e.g. feeling involved in care 75% to 100% and early skin-to-skin 42-80% over 1 year of FIC in ICU.
Parents have said

> *"You go from feeling like a spectator, not able to take her temperature, to 'I'll just crack on'! It was fantastic. We finally felt like parents"*
> *"I am so happy to have integrated care. We know his needs so well. We feel so confident!"*
> *Staff feedback*
> *"It is very rewarding to see a parent gain confidence and know that I have had a part in that"*

The team fully believes that FIC significantly improves quality of care for families and champion this speaking at network (20+), national and international meetings. The lead consultant and nurse are members of the Bliss FIC Group and international steering group. Many units visit to see FIC "in action" and we receive very positive feedback - particularly around the atmosphere and relationship between staff and parents.

The team were awarded "Team of the Year" at the Bliss Excellence Awards (2018) and we host the third International FIC Conference in October 2019.

Making a Difference for Families Award

Joint Winner: Shalabh Garg, James Cook University Hospital

I have led and facilitated the development of a dedicated bereavement suite for the families dealing with the death of a newborn baby. It started with a routine bereavement counselling appointment where pertinent points were raised about the existent bereavement room which was not ideal. The parents planned to raise funds (£4k-5k) and wanted my support in spending the money appropriately. After a few meetings, we agreed to work towards establishing a dedicated area (fully furnished room with kitchen and bathroom separate but close to obstetric and neonatal units) for the bereaved families which meant raising funds ten times the original target. For the next two years, I supported the family (including continued bereavement support) and the relevant professionals in several departments to finally achieve the establishment of a dedicated bereavement facility where families can stay as long as they wish (and with their baby in the room). The family have raised £35000 so far and with my continued interest in improving the services beyond just the provision of infrastructure (appropriate written information, post-discharge support, staff training and development in bereavement support) are committed to continuing fundraising. I also helped to raise funds by involving in various local charitable drives.

I overcame multiple challenges throughout this project especially the organisational hurdles within the NHS. Finding the space within the existent infrastructure (the Trust didn't allow new building) was a challenge due to inter-departmental reservations. It was a difficult task to bring various professionals on board (Clinical Directors, Matrons, Operational and Estates Teams and ultimately escalating to the CEO) to work towards a common objective. I continued to be the bridge through some of the difficult discussions amongst the professionals as well as between the family and the managers achieving common ground decision making. We were able to bring down the cost of the overall project significantly through liaison with PFI planning team. As I always kept the parental perspective paramount in designing this facility, undoubtedly it will be immensely beneficial and effective for the bereaved families in coming years as highlighted in the fundraising page.

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Making a Difference for Families Award

Shortlisted: Minesh Khashu, Poole Hospital

Development of DadPad Neonatal: a specific resource for dads whose babies have been admitted to neonatal units. Dr. Khashu developed this in view of unmet needs of dads. This is the only resource of its kind in the country and is very well appreciated by dads, parents, charities and neonatal professionals.
https://thedadpad.co.uk/neonatal/

Development of SIGNEC website for parents and professionals: Dr. Khashu continues to lead SIGNEC (special interest group for NEC) and has developed a website for parents and professionals with a parent who lost one of her twin sons to NEC. The website has been commended internationally for its quality and usefulness.
https://signec.org/

Leadership of the Neonatal Service locally: He led the neonatal service at Poole from 2007-2017, through a successful Quality Improvement (QI) journey. His leadership focussed on Quality Improvement, Safety and reducing harm:
a) He personally trained the neonatal team in basics of Quality Improvement Methodology.
b) He initiated quality and safety huddles for the service which have helped generate an open and safety culture.
c) He spearheaded a campaign to focus on breast milk and colostrum and we increased our breast milk feeding rates from about 38% to 78% which is much above the national average.
d) The focus on safety and QI has ensured that we had no catheter associated blood stream infections in the last 3 years of his tenure.
e) We had no formal complaints or SUIs in the last 3 years of his tenure.

While all of this has been a great team effort, the importance of excellent leadership has been highlighted by visiting teams like CQC and RCPCH.

We were joint winners along with the Liver Transplant team at Kings College Hospital in the Team of the Year Category in the Zenith Awards 2017, for the QI work.

Perinatal Safety: Neonatologist appointed to the National Maternity Safety Steering Group in 2016; one of the national experts/reviewers for the Each Baby Counts Initiative. As Clinical Director for Maternity for NHS Wessex SCN, he has led the establishment of a regional Still Birth Review Panel and standardisation of 19 regional antenatal pathways.