Expansion of P-OPAT service without a dedicated children's community nursing team

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P-OPAT

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OPAT has become a standard treatment modality for patients with stable infections requiring IV antibiotics. P-OPAT is now established in 6 UK centres.

We report the development of P- OPAT within Sheffield Children's Hospital (SCH) without the facility of a children's community nursing team.

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- One of only 4 children's hospital trusts
- 160 beds
- Covers South Yorkshire & Humber, Population ~600, 000
- Specialities include: Gastro, resp, ID, dermatology, ENT, neurology, neurosurgery, orthopaedics, general paediatrics
- Currently no Generic community nursing team within sheffield

The OPAT team

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- Launched in June 2016
  - 2.5 PAs general paediatric consultant time (+1PA ID cover)
  - 1 PA microbiologist
  - 1wte Band 7 CNS, 3 band 5 OPAT nurses (2.6wte), 0.5wte pharmacist, 0.6 wte admin support

Hybrid model

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P-OPAT at SCH is delivered according to a hybrid model comprising:

1. Nurse administration in infusion lounge
2. Nurse administration in a community setting (home or school)
3. Parent/carer administration

Infusion lounge

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- We began with infusion lounge only.
- Patients would be discharged from hospital and then attend daily in the lounge for their treatment.

- Picture of OPAT infusion lounge

Community visits

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- In November 2016 we started community visits.
- With no paediatric community nursing team in the city, our solution was to use the OPAT nurses to administer the IV antibiotics in either homes or schools.

Process

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The OPAT nursing team is made up of:	
Band	WTE
Band 7 – Clinical nurse specialist	1
Band 5 nurses	2.6

Process

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A risk assessment was undertaken to consider the safety of both the nursing staff and patients, including:	
Potential problem	Solution
Safe administration of IV antibiotics by a lone worker (single – checking)	New single checker protocol introduced
Adverse events within the home were considered including the risk of anaphylaxis	Nurses carry an anaphylaxis kit with them at all times
Risks of lone working	Reliance lone worker device Buddy system Nurses carry a fully charged mobile phone

Our Strategy:

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- 7 days a week cover 10am til 6pm
- Aim to have 2 nurses on per shift
- One nurse stays in the lounge for reviews and referrals
- The other nurse will do the community visits

Lounge V's Community

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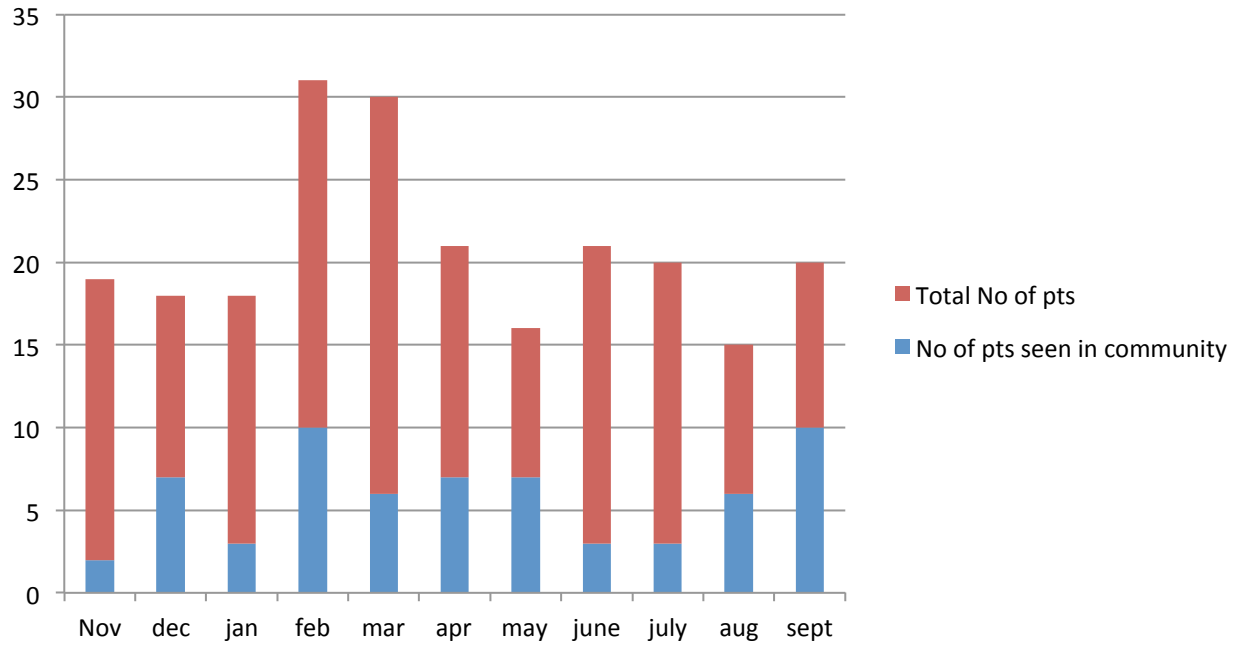
Fig 1 – Number of patients visited in the community per month



Advantages

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- Staff are familiar with the OPAT process and patient needs
- Allows regular assessment of the patient
- Patient and family remain at home

Challenges

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- Travel times can sometimes have an impact on the efficiency of the service
- The size of the nursing team means that on occasions it is difficult to run both community and lounge
- The nurses are often asked to take on other tasks due to lack of community team

Case study

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- 3yr old boy ventilated via tracheostomy
- Required pip taz for resp infection
- Has a sister who is also ventilated via tracheostomy
- Would normally have needed an inpatient stay on HDU
- Admitted into OPAT. The nurses did two visits daily to administer 2 doses and also trained mum using an elastomeric device to give the bedtime dose
- Allowed for daily assessments and support for mum.

Case study

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- 4yr old boy, respiratory patient
- Has 3 monthly IV ceftriaxone
- Was comfortable having them on medical daycare (MDC) – didn't like change
- Wasn't keen to move to OPAT
- OPAT nurses visited him everyday on MDC to administer his IVAB on his first occasion since OPAT launched
- Second occasion – he reluctantly came to the lounge but had his port accessed by MDC staff first
- Third occasion – let OPAT nurse access his port, came to the lounge everyday for his IVAB's
- Fourth occasion – had home visits. He was able to stay in school and have a visit after school – less disruption to both him and his family.

Patient/parent/staff feedback

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- Sheffield Children's Hospital Star award!
  - "*Best delivery of patient care*"

- Feedback from parents is very positive
  - "OPAT is an ideal environment for a child and parent"
  - "Great support service, allowed us to go home and get back to normal life. Staff were friendly and kept us informed throughout"
  - "OPAT is brilliant"

Future steps

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- Extending the nursing team to work 12 hours to allow for multiple daily dosing
- Introduction of elastomeric 24 hour infusions to broaden the range of antibiotics available