Improving the Paediatric Epilepsy Pathway
One Seizure at a Time

RCPCH EQIP
Epilepsy quality improvement programme

Royal United Hospitals Bath NHS Foundation Trust

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Aim/purpose:

To develop and implement the first afebrile seizure pathway to provide a high standard, uniform service to all

Background:

The nature of epilepsy means it can be difficult to diagnose accurately. Currently there are almost 300 paediatric patients with a diagnosis of epilepsy managed by the RUH. Of these, almost 25% are *not* managed via epilepsy clinic. The route into the epilepsy service is complex leading to disparity in the quality of care provided. Through evaluation of service demand together with implementation of a pathway for first afebrile seizures, we hope to change the service to introduce consistent, high quality care.

Idea — Nov/Dec 2019
- Completion of E12 cohort 1 identified clear service disparity
- Agreement that new pathway was necessary
- Confirm buy-in from colleagues

Evaluate & Design — Dec 19/Jan 20 – Jan/Feb 2020
- Interrogate data to inform service design and capacity needs
- Process map existing pathway and design new pathway
- Attempt initial implementation of new pathway with further clarification and testing

Testing & Consolidation — Mar/Apr 2020
- Testing and refining steps in pathway
- Pathway implementation and feedback
- Data interrogation post implementation to ensure aims have been achieved

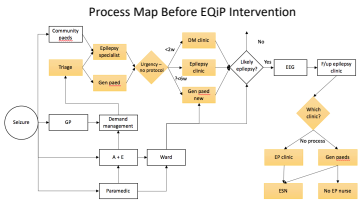
Extras & Future plans — Apr/May 2020 – May/Jun 2020
- Virtual clinic consultations (Covid-19)
- Additional new in-house referral proforma
- Trust epilepsy webpage development with pooling of resources
- Development of feedback tool

Our new webpage

How did you diagnose the issue

- Used RCPCH standard for epilepsy care and assessed E12 cohort 1 against these
- Informal conversation with colleagues identified need to win "by-in"
- Evaluation of available data to guide anticipated service demand
- Review of existing pathway for patients through service (see process map on right)
- Regular small tests of change to tweak new pathway and produce new process map (below)
- Re-evaluated data to inform future service development/sustainability

Process Map Before EQiP Intervention

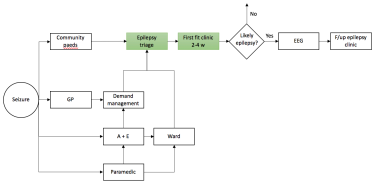


Qualitative Feedback from Families/Colleagues

Tests of change

1. Will the use of a "patient story" win "buy-in" for proposed changes
2. Data capture complex! Estimation 8-12 clinic slots/month required for new epilepsy
3. Development of new process map
   a. Proforma design to aid in-house referrals
   b. Epilepsy email creation to facilitate triage by specialist
   c. Improved data capture
4. ESN contact with family bridging gap between referral and clinic
   a. Agenda for first ESN call to family evaluated and optimized
5. Peer review of referrals and SOP for First Fit Pathway developed to build in consistency
6. Virtual clinics up and running

New Process Map After EQiP Intervention



Challenges

Data Capture – no process in place to capture data through coding so we had to be inventive!

Time – tricky to carve out time especially in winter and during Covid – virtual meetings have revolutionised this so a great learning point.

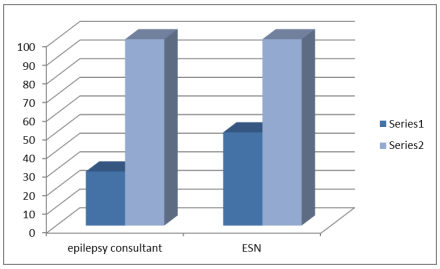
Capacity – both in terms of time capacity for individuals to expand role (ESN clinics for example), and room capacity – OPD space at a premium

Geography - hospital catchment large with system of "patch consultants" to enable patients to be seen closer to home

Extracting data from **Epilepsy 12** – complex and time consuming unfortunately

Complexity of the referral routes for patients – luckily small tests of change helped us streamline a new pathway that hopefully works

Outcome Data



Before – E12 Cohort 1
- 24 patients
- 4 seen from the start by epilepsy specialist, 7 seen subsequently
- 12 has been referred to ENS
- 4 had delay of >4 months from referral to clinic review
- 2 had delay of 2-4 months from referral to clinic review
- Longest wait for clinic following GTC 4 months

After EQiP Pathway Implementation
- 53 patients
- All seen by epilepsy specialist, all had ESN input
- Majority seen within 6 weeks of referral
- 11 seen within 2 weeks of referral
- Longest wait for clinic following GTC 3 weeks with ESN contact within 2 weeks

Work still to be done
- 269 patients with diagnosis of epilepsy
- 209 seen in epilepsy service
- 60 seen by non-epilepsy specialist

Team personal learning/next steps

Future Plans
- Review of pathway for internal referrals
- Colleague feedback on new process and new webpage
- Formal patient/family feedback via telephone on new webpage to inform future development
- Integrate feedback tool into service to allow feedback and further improve
- ESN & Virtual Clinic Development
- Use E12 to interrogate data to ensure positive impact of EQiP is maintained long term
- Showcase EQiP achievement to local network (when Covid allows)

Personal Learning
- Useful to have links with other EQiP teams to borrow ideas and resources
- EQiP programme acted as a catalyst for change bringing the team together. The monthly calls created a deadline and prompted project to move along
- EQiP provided and opportunity for joint working and building relationships
- Opportunity to look at the small details of a service and critically assess and subsequently improve the process. The EQiP tools such as process mapping etc were of real benefit
- An opportunity to recognise good practice as well as obtain peer review from other teams