Tackling malnutrition and obesity in paediatric kidney disease: Improving communication between children, families and their kidney team

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1. Background and importance

Kidney disease is a lifelong high cost problem with no cure. Increasing prevalence, complexity, outdated technology and expanding teams resulted in a overstretched services firefight. This leads to variation in practice and inadequate access to the team, which increases the risk of malnutrition, stunting and obesity, worsening of disease and the need for earlier dialysis or transplantation.

Improving nutritional management through safe, effective and efficient communication can delay the progression of disease and the healthcare costs but need to be delivered in a simple, consistent and time bound way. Service evaluations have identified gaps in communication that require a systematic approach to improving the delivery of better clinical care. Addressing these issues also aligns with the Trust and national renal priorities regarding patient centred, collaborative and technologically capable care.

2. Project aim

The project team had 3 aims:

i) to reduce variation in communication for children and their families in advanced (stage 4 to 5) disease, attending the regional paediatric nephrology service at University Hospital Southampton;

ii) to develop a quality improvement team and programme for the regional paediatric nephrology team;

iii) (III) help improve QI support and project involvement for the MDT.

3. Project Design/Strategy

A QI group was formed consisting of dietitians, nurses, consultants, IT specialists, and service users (young people and parents).

A questionnaire was given to children, families and the team to identify key issues in communication nutritional management.

This was followed by focus groups to produce themes and discuss key issues in detail. Process maps, and cause and effect diagrams were used to understand variability in the process and the patient journey and pathway.

The driver diagram development below, and the word cloud summaries show the project and wider plan and service comments (word cloud figure 2).

4. What do service users think of communication

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<th>What we do well</th>
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Figure 2 ‘word cloud’ show the comments made by children and their families about nutritional communication.

5. Changes made

• A patient facing multicomponent communication model was developed and introduced to improve accessibility and patient choice, consisting of a dietetic renal team email and mobile for texting and direct patient contact calling.

• My Medical Record messaging has also been set up and patients are being registered and a small group have started trialling this.

• A renal dietitians contact information business card with a communication pathway and signposting to key resources.

• Health care nutritional management electronic documentation pathway and proforma has also been re-designed. Streamlining the process and key information needed for assessment, advice and patient information. This will then be electronically linked to My Medical Record to improve patient access to advice and supporting information.

6. Outcomes

Figure 3 Pareto charts and Run charts

7. Next steps and sustainability

• Expand communication improvement for all paediatric nephrology.

• Local, National and International paediatric renal dietetic collaboration is also being explored.

• Finding have been disseminated at National, International and Regional conferences.

• Team applications development to embed the quality improvement ethos in paediatric nephrology working and upskill the workforce.

• Trust, Regional National paediatric renal dietetics/AHP lead roles on KQuIP (Kidney Quality Improvement Partnership), at University Hospital Southampton and PIER (Paediatric Innovation, Education and Research network), which are helping to embed QI into clinical care locally and regionally.

• Q community member (NHS improvement and the health foundation).

8. Learning

• Thorough ground work is essential and takes time to do well.

• QI allows flexibility to enable changes to becomes measured improvements.

• Teams engage better with quality improvement and see the relevance and benefit better than research, but both have clear complimentary roles.

• Patients and team members value being listened to and asked to help.

• This is only the beginning and as expected a whole programme of improvement across the wider teams is being explored.

• Allied health professionals are under used and often lack the awareness of QI opportunities extended to others, and awareness needs to be raised through multiple channels.

• Child health at University Hospital Southampton and PIER have a fantastic network for QI support and development and need to be better utilised for AHP’s.