

**In Practice report**

# ‘How to help your unwell child’- A Sequential Simulation™ project

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Word count: 977

## **INTRODUCTION**

During 2016-2017, NHS England recorded 5.8 million attendances at Accident and Emergency departments (A&E) out of which 24% were deemed 'avoidable',<sup>(1)</sup>. Avoidable attendances are defined as an attendance at A&E resulting in care which could have been provided by a GP or managed through self-care at home. 'How to help your unwell child' was a collaboration between Connecting Care for Children (CC4C), and Imperial College Centre for Engagement and Simulation Science (ICCESS). The aim of the collaboration was to identify issues related to avoidable attendances at A&E in children under five years old in North West London. The overarching objective of the collaboration was to engage with local families to facilitate an understanding of their experiences of looking after unwell children suffering from minor illnesses.

A Sequential Simulation (SqS Simulation™) event was organised at a community centre to engage with local families. It was used as a tool to engage healthcare professionals and families in acknowledging parental journeys and to recognise their concerns in seeking healthcare for minor childhood illnesses.

SqS Simulation™ is an innovative technique involving the simulation of key points from patients' healthcare journeys<sup>(2-4)</sup> that takes a longitudinal view of healthcare scenario design. Various key components in the simulation are designed to meet defined objectives drawing on an empirically and theoretically driven model developed to aid the process. It can be used beyond traditional simulation-based education approaches to include patients/publics, healthcare professionals and other stakeholders to consider issues related to care pathways. Contrary to traditional forms of simulation, this

approach requires participants to watch real healthcare professionals and a simulated patient (SP) simulate a specified care pathway based on real patient stories and experiences. Watching the representation of real patients' stories enables the recall of personal experiences and emotional linking with the scenario, and hence facilitates audiences reflecting on their own experiences. After the performance, professionals and publics participate in a facilitated discussion of the salient points from the simulation, setting up a platform for engagement and dialogue that enables conversations of complex healthcare scenarios(2). SqS Simulation™ has been successfully used as a tool for training and educating healthcare professionals, public and stakeholder engagement, and quality improvement(2-4).

## **METHODS**

The residential areas of interest comprised mixed ethnic communities. To understand their approaches in looking after unwell children (under five years old) and to design the SqS Simulation™, semi-structured interviews were conducted at a children's centre. Additionally, a meeting was organised with an ethnic minority women's group to elicit their issues in relation to accessing paediatric healthcare services locally.

Following the identification of common experiences, an SqS Simulation™ was designed (Figure 1) incorporating stories from the interviews and discussion. It portrayed the story of a mother and her seven-month-old son suffering from a fever. The simulation lasted for 20 minutes, comprised of four scenes representing the mother and child's journey starting at home, visiting an urgent care centre, followed by a scene at the local GP surgery and finally seeing a pharmacist at a nearby pharmacy. A paediatric doctor narrated the transitions throughout the simulation. Healthcare professionals played the

role of doctors and pharmacists, and a professional actress trained as an SP played the role of the mother.

Families residing in the neighbourhood, healthcare professionals from the local hospitals, GPs and pharmacists were invited to attend the event.

The discussion after the simulation was focused on the following prompts:

- (i) How did the Simulation make you feel?
- (ii) How did the Simulation compare to your own experience?
- (iii) Thinking about your own experiences, how can we improve the healthcare journey?

## **RESULTS**

18 families participated in the initial interviews to inform the design of the SqS Simulation™ scenario. The SqS Simulation™ event was attended by 21 local families and 18 professionals. All attendees participated in facilitated small group discussions following the simulation.

The attendees found the SqS Simulation™ real, immersive, engaging and empathetic. Some of them felt exceptionally connected to the scenario describing their feelings of empathy as the mum was experiencing helplessness moving back and forth from one service to another. The parents from minority groups shared their feelings of helplessness due to language barriers. The families found the event extremely useful and stated it had improved their confidence in looking after their children. They appreciated the event serving as a platform where they could voice their concerns and felt reassured of being heard by healthcare professionals. The healthcare professionals

found it equally engaging and acknowledged it raised their insights relating to challenges parents face when looking after their unwell children. Overall, the attendees found this event beneficial and parents appreciated their inclusion in trying to identify solutions to issues raised during the small group discussion.

## **DISCUSSION**

Engagement of patients as active participants in the designing of healthcare pathways has been shown to have positive health outcomes(5). This approach requires opportunities for active listening and analysing the patients' perspective to design integrated care pathways. The SqS Simulation™ event created an opportunity of bringing together service providers and service users. It facilitated dialogue and enabled conversations in order to improve caring for children with minor illnesses in the local area. The simulated scenario encouraged critical thinking by enabling participants to reflect deeper and motivated participants to contribute to improving the patients' experience of care. The post simulation discussion highlighted pertinent issues faced by the local communities such as language barrier; repeated storytelling and their reasons for frequent attendances at A&E. Families understood the value of looking after their children with minor illnesses by utilising other easily accessible resources in the community to reduce the current burden of avoidable attendances at A&E.

Based upon the findings from this event, we would recommend further SqS Simulation™ events to improve engagement with families including parents from minority communities in North West London. Future events would benefit from a parallel qualitative research arm to further refine the SqS Simulation™ engagement model.

## **ACKNOWLEDGMENT**

The project was supported by the St Mary's Patient Experience Hub which is funded by the Imperial Health Charity. We are grateful to the Clinical and administrative team at CC4C for their help and assistance during the project.

## **REFERENCES**

1. Reducing emergency admissions. NHS England DoHSC; 2018 2nd Marsh 2018.
2. Kneebone R, Weldon SM, Bello F. Engaging patients and clinicians through simulation: rebalancing the dynamics of care. *Advances in simulation* (London, England). 2016;1:19.
3. Weldon SM, Ralhan S, Paice E, Kneebone R, Bello F. Sequential Simulation (SqS): an innovative approach to educating GP receptionists about integrated care via a patient journey--a mixed methods approach. *BMC family practice*. 2015;16:109.
4. Weldon SM, Ralhan S, Paice L, Kneebone R, Bello F. Sequential simulation of a patient journey. *The clinical teacher*. 2017;14(2):90-4.
5. Robert G, Cornwell J, Locock L, Purushotham A, Sturmey G, Gager M. Patients and staff as codesigners of healthcare services. *Bmj*. 2015;350:g7714.