<u>DIY HEALTH: A co-produced health education delivery model to empower parents in</u> managing children's health

The DIY Health model was co- created by Bromley by Bow Health Partnership (BBBHP, Tower Hamlets, London) in partnership with the community it serves in response to a need identifiable across most general practices across the country. Parents of Children under the age of 5 were frequently re-attending St Andrew's Health Centre (one of three surgeries run by BBBHP) for support with managing self-limiting childhood problems. These repeat visits led to a recognition that health care professionals needed to work better with parents and carers to identify how to provide knowledge and skills that ensure they were more confident to manage their children's health at home and when to seek further help. The model which this article goes on to describe was inspired by Dr Khyati Bakhai's work during her Darzi Fellowship in Clinical Leadership and was co-produced in partnership with local parents.

After the first cohort of this programme, we began to see outstanding results. Shy and reserved parents began to open up and share their own experiences; parents weaning on packet food began introducing fresh vegetables and home-cooked meals; parents attending for coughs and colds were apt with going to the pharmacy and getting advice there. We have seen a significant increase in access to the Pharmacy First scheme. In terms of appointment reductions, in the three month period we looked at, parents who had attended the most sessions had a reduced attendance not only for GP, but for Out of Hours GP and A&E as well. We have now come to the end of the six month pilot scheme and are in the process of up scaling and evaluating the model.

Broadly used in market research and increasingly in socially innovative public sector reform settings, co-production describes a situation in which service users are involved in the design, delivery and evaluation of a service - a method that has been evidenced to improve patient outcomes and intervention effectiveness. This differs from the practice of consulting with patients to inform development of a service and places patients much more in partnership with professionals.

Co-production was the chosen methodology as it gave patients the opportunity to work in partnership with professionals to build resilience in the community through empowerment and education. We aimed to place health promotion in a learning environment using participatory action learning techniques as the method of delivery to ensure the effective transfer of knowledge, skills and capabilities that surround key child health messages. Group sessions also provided an opportunity to practice skills in a safe, peer led environment. Co-production also enabled the development of a shared curriculum that met the needs of both patients and health professionals. The facilitation team of a Health Visitor, Carol Irish and Adult Learning Specialist , Sue Agyakwa were able to ensure that the curriculum was evidence based and quality assured.

The Bromley by Bow Centre, who are close partners with BBBHP, has developed many strategies which integrate health and well-being into learning environments. Previous collaborations between the Bromley by Bow centre and various community and statutory organisations form a rich bank of expertise and resources which the DIY Health project was able to draw from. Support from Marner Children's Centre also ensured that parents were able to attend the sessions in the absence of childcare arrangements for children under 5. The Play and Learning staff were also able to provide additional support, and demonstrated the benefits of integrated community working.

The initial phase of the project involved asking local parents of children under the age of 5 about difficulties encountered when managing children's health at home. This phase was led by Emma Cassells, who holds a unique role as a 'Patient First Manager' within BBBHP. The role was consciously created to place patient experience and co-production at the heart of practice. Parents were visited at forums at local children's centres and discovery interviews with parent representatives were undertaken to find out how needs could be better met. The main themes related to knowledge and skills gaps between professionals and parents, and a lack of confidence particularly for first time parents. Information from interviews was collected and integrated to inform the design of the DIY Health model.

Outreach and initial sessions were crucial to the co-produced DIY Health model as they enabled relationship building between parents and facilitators, and allowed a comfortable learning environment to be established. These sessions were also where the 12 week curriculum was discussed, and considered both the needs of parents and areas identified by GPs. Based on this, the core curriculum consisted of fever management, diarrhoea, vomiting, coughs, cold and flu. However, content and activities were continuously negotiated. Other topics that identified by parents included behaviour management, breast-feeding, weaning, oral health and fussy eating. The multidisciplinary team (which of course includes a parent in the interest of co-production) allowed each of these topics to be covered, with the help of existing community resources for example The Breastfeeding Network, pharmacies and Children's Centres.

Initial discussions established the parents' starting points, past experiences and specific needs. Expectations were also shared which formed the basis of the group goals, giving everyone something to work towards. Identifying skills and interests from the outset informed the distribution of responsibility. An example of the benefits of this exercise was demonstrated by a parent who identified herself as an oral health nurse and facilitated subsequent sessions on this topic. Quizzes, games, discussions and peer learning were utilised to demonstrate how parents can manage common childhood ailments at home, and the flexible curriculum enabled new resources to be coproduced when necessary.

The curriculum was based on quality assured and evidence based teaching which also demonstrates good-practice for other health professionals. The model placed strong emphasis on parents' experiences and the importance of understanding these in order to support and direct self-care for the future. Co-producing solutions to health problems empowered patients to have a stake in managing their health and encourage an investment in improving their own health, and that of their families. This is a delicate skill, but one that could continue to have major benefits for parents and other high use groups frequently seen in primary care. The Health Visiting component of the project became increasingly topical as the programme covered the Prevention and Positive Parenting element of health visiting. This came at a time when the government had released 'Call to Action' papers around increasing health visitors in the country by 4200. We believe that a programme like this is a great starting place for Health Visitors to refocus on community development and the framework informs how they might engage with their client groups. The unique partnership with an Adult Learning Specialist meant that the group really understood the information, and were able to implement the skills that were learned.

This model was originally funded as a 6 month pilot as part of the Tower Hamlets CCG Innovation

Bursary Fund. The purpose of a multi-disciplinary team approach was partly to facilitate the journey of DIY Health being shared across a wide range of external organisations to generate interest around different ways of delivering health education, one of which was with the Children and Young People Programme Board at UCL Partners (UCLP). The innovative method of delivery led to a collaboration between the participating organisations to upscale and evaluate the original DIY Health model pilot, with a rigorous academic steer from UCLP led by Professor Monica Lakhanpaul, underpinned by funding from the North East London Foundation trust. This gives the group a real opportunity to contribute to the evidence base of delivering co-produced projects in primary care, and the underlying aim of empowering parents to manage children's health appropriately, remains key. This partnership has enabled the project to run from an additional general practice for 12 months, and provides the chance for more evaluation materials to be gathered.

Coming to the end of the 6 month pilot, the changes have been seen not only in individual parents but from the group as a whole have been outstanding. Not only can parents eloquently describe how and when to take a temperature using digital thermometers, they are able to read and interpret the results and decide on appropriate plans of action thereafter - whether it be A&E for a febrile convulsion or the pharmacy for some liquid paracetamol. The social value of the group is immeasurable. We were not surprised to see these local parents exchanging numbers and arranging to attend 'Capital Talent' Open Days for those getting back to work, International Women's Days and of course, organising and attending our own celebratory party. All of these factors contribute to the evaluation of the project as we aim to demonstrate increased confidence in parents, a feasible model for delivering health education and an increase in appropriate access to health care.

The challenges that we face as a group are largely positive. The strong impact of word of mouth means that because the project is currently restricted to only inviting registered patients of the host surgery, we often have to turn interested parents away...while we work on being able to run the project for all surgeries in Tower Hamlets! We will continue to work towards demonstrating cost effectiveness and improved patient outcomes so that it becomes a reality for parents across the country to be engaged and involved with projects like this.



Parent leading a trip to the pharmacy as part of her Oral Health session.



Everyone involved in Paediatric First Aid!