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Transformation of health visiting services in England using an Online Community of Practice

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Abstract

At the heart of health visiting practice has been the emphasis on ensuring that healthcare services transferred to and commissioned by local authorities, deliver successfully on the Healthy Child programme. And while part of that focus has been on increasing numbers in the health visiting workforce, there has also been a renewed strategy in health policy to enhance continued professional development (CPD) of the workforce through innovative tools that will transform, improve and deliver services in response to the six high impact areas. This paper describes the use and evaluation of such a tool that was developed in the form of an Online Community of Practice to enhance and support practitioners to share issues, resolve recurring problems and collaborate to share best practices and robust evidence around the six high impact areas. The posts of 250 health visitors who shared, managed and co-produced knowledge online over a 2-year period were explored using realist evaluation techniques. Results showed that the success of online CoPs as interventions to improve and transform healthcare practice around the six high impact areas is promising. Participating in online discussion saved time and strengthened and improved support from peers that would otherwise be unavailable to geographically distributed practitioners. The advantage of a secure virtual environment allowed health visitors to discuss key issues arising from everyday practice as a coherent professional group, which in turn produced peer reviewed knowledge that prioritised clients' needs in relation to local community needs.
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Introduction

Health Visitors are qualified nurses who have taken on additional qualifications to become community public health nurses working with children and families in the UK [1]. The scope of their public health role in assessing community health needs including preventing and detecting development problems in early childhood, identifying vulnerable families and supporting parents, improving breast-feeding and immunisation rates, safeguarding children among others allows them to play a strategic role in achieving high quality standards for maternal and child

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health promotion [1,2]. Increasing evidence however suggests that the evidence-base for health visiting practice is masked and rendered partially invisible due to its highly gendered nature and as a work predominantly done by women and mediated through mothers [3]. Bunn and Kendall (2011) have found little evidence in the literature for health visiting interventions based on 'gold standard' Randomised Controlled Trials.

At the heart of health visiting practice has been the emphasis on ensuring that healthcare services transferred to and commissioned by local authorities deliver successfully on the Healthy Child Programme.[1] Whilst the focus has been on increasing numbers in the health visiting workforce, there has also been a renewed strategy in health policy to enhance continued professional development (CPD) through innovative tools that will transform, improve and deliver services in response to developing a knowledge base around the six high impact areas. The six high impact areas were introduced during the Health Visiting Implementation Plan period as a way of evidencing not only an increase in the numbers of health visitors but what they actually achieve. The areas are: Transition to Parenthood and the Early Weeks Maternal Mental Health (Perinatal Depression), Breastfeeding (Initiation and Duration), Healthy Weight, Healthy Nutrition (to include Physical Activity), Managing Minor Illness and Reducing Accidents (Reducing Hospital Attendance/ Admissions), Health, Wellbeing and Development of the Child Age 2 – Two-year-old review (integrated review) and support to be 'ready for school'.

The high impact areas are evidence based and central to delivering on public health outcomes for children. However, as research evidence shifts and changes so does professional knowledge and practice and the need to continually update and share experiences.

The challenge however is that much of health visiting knowledge is encountered, performed and promoted in multiple spatial dimensions; including homes, health centres, community settings, GP surgeries and other types of spaces that are sometimes obscured from public view (e.g. traveller communities, prisons, virtual spaces with the growing use of mobile devices to support agile and paperless working etc.) [4]. The aforementioned factors negate opportunities for practitioners to share and exchange stories of local, personal and practical experiences about best practice (not clinical expertise and policies) as collective *mindlines* (which refer to collectively reinforced, internalised and tacit guidelines) in Communities of Practice [5].

Communities of Practice (CoPs) are groups who share a concern and passion about an issue and deepen their knowledge and expertise about their profession by interacting regularly [6]. Effective CoPs would allow health visitors think, assess and act upon collective knowledge holistically and possibly enable clients to share concerns and draw on information. Without effective CoPs for sharing, articulating and evidencing the diverse professional expertise at the heart of practice, assimilating and supporting novice health visitors to embed health policy, research and evidence-based normative practice with the

knowledge, skills, attributes and judgement acquired in daily practice into the existing workforce will remain challenging [7].

In the health context, CoPs that allow health practitioners share best practices virtually have become an important mechanism for supporting practice among those who may be geographically dispersed in nursing, community health nursing, psychiatry, among others [8-12]. Advances in internet and intranet based applications have facilitated the conversion of tacit-explicit knowledge by allowing practitioners to express their own everyday experiences, key issues, ideas and reflections of practice through online forums, blogs and discussion forums [13]. Members participate in these online CoPs by reading or posting, sharing and adapting, applying and improving, reflecting and sharing their reflection, collaborating and assisting others [14]. And it has been proposed that online CoPs support professional development by facilitating the dissemination and translation of evidence-based practice and improve public health care delivery [15].

But despite the proliferation of evidence that CoPs may improve professional health practice, there is little evidence to support how they improve the translation of best practices to real life everyday practice [16]. Health visitors for instance suggest that examples of possible outcomes of evaluating participation in online CoPs could be successfully implementing evidence based guidelines in practice, developing a new system or approach to improve services and decreased time to problem-solving [17]. Yet many frameworks that propose to evaluate online CoPs for healthcare professionals struggle to define what the tangible nature of knowledge produced to measure to reflect these outcome is in the first place. This is largely because there are several complex technological, human, semantic and organisational factors to consider [18]. As an attempt to address this gap in the literature, the paper undertakes a realist evaluation of an online CoP developed for health visitors to collaborate and develop best practice. A realist evaluation is employed because it has been suggested as suited for exploring how complex interventions like CoPs that are influenced by various social, professional and technical and cultural norms can change healthcare practice [19].

About the platform

The development of an online CoP to empower the health visiting profession was an initial 2-year funded project to encourage practitioners collate and share the wealth of tacit, professional and experiential evidence at their disposal. Launched in 2012, the community is hosted on a virtual collective intelligence tool known as the HV Community of Practice Evidence Hub [20]. The platform's homepage (https://cophv.evidence-hub.net/) gives a brief introduction to the purpose of the platform, suggests a three step procedure for contributing to the community, and features a help video showing how a health visitor would use the platform in practice and finally, displays news updates about recent contributions to the platform by other users on the home page. The platform is accessible via standard laptops and desktops and can be accessed on the go through tablet computers (Figure 1).

Health visitors wishing to join the community must register to do so by providing an email address, names, Nursing and Midwifery Council pin number, employer details and their reason

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[1]The Healthy Child Programme was introduced by the Department of Health in 2009 as an evidence based programme of health promotion and prevention for 0-5 years that is universally offered to all families by health visitors.

Figure 1 : Health Visitors evidence hub goes here.

for wanting to join the community of practice. Registrations are validated separately by the community's facilitator to prevent fraudulent use and once successfully validated; the health visitor receives a welcome email. The health visitor can go on to create a user profile through which they can contribute to the community's discussion by adding an issue from practice, good practices, evidence from research, personal experience or toolkits as well as online resources and publications. Health visitors can also undertake a collective project with other health visitors around a common challenge, with childhood obesity and developing antenatal contacts, as two examples of such projects.

All posts in the community are organised around the six high impact areas [21] which are around

1. Transition to Parenthood and the Early Weeks.
2. Maternal Mental Health (Perinatal Depression).
3. Breastfeeding (Initiation and Duration).
4. Healthy Weight, Healthy Nutrition (to include Physical Activity).
5. Managing Minor Illness and Reducing Accidents (Reducing Hospital Attendance/Admissions).
6. Health, Wellbeing and Development of the Child Age 2 – Two year old review (integrated review) and support to be 'ready for school.
   and two other general topics focusing on.
7. The Healthy Child Programme. and
8. Professional issues.

to allow for a much broader set of discussions in the community.
Posts by health visitors to the platform were monitored and moderated by a University Research Fellow who worked full time on the pilot study and was not a health visitor by background. The Research fellow doubled as the community facilitator. And took part in the discussions on the platform,

uploaded new resources and answered users' queries about membership and navigation. The facilitator also supported the community through regular brief updates to disseminate emerging ideas and learning from the CoP via newsletters and digests and organised occasional face to face workshops. It has been discussed elsewhere that a facilitator is crucial to the development of a CoP for the purpose of maintaining momentum and to prevent participants from withdrawing from the community [22].

While the main activity on the platform are posts about key issues health visitors face in practice, other activities such as reading, viewing and liking posts are also common, with the platform recording a total of 26,446 page views in the 2 years up to July 2014. At the end of two years, 90 of the 259 health visitors registered as users of the platform had posted a total 475 issues, evidence pieces, good practice points and resources on the platform. 125 posts had been exchanged in the Breastfeeding, 113 in the general forum, 22 in Health Weight, health nutrition, 46 in the Health, wellbeing and development of the child forum, 39 posts in the Healthy Child Programme, 15 in the managing minor illness and reducing accidents forum and 45 in the Maternal (perinatal Mental Health) and 55 posts in the Transition and the early weeks forum. By July 2014, the platform had over 1000 visits with over 259 health visitors registered as users. Users included health visitors, Community Practice mentors/teachers, lecturers, and team leads across the UK.

Methods

A realist evaluation is a qualitative approach for testing and refining programme theories by exploring the complex and dynamic interaction between a given context, mechanism and outcome [23]. It is a theory-driven evaluation suited for

evaluating complex social interventions where outcomes are dependent on stakeholder interaction [24]. According to Pawson, Greenhalgh [25] RETs aim to provide and outline:

- the *context* in which the intervention applies,
- the *mechanism* by which it works, and
- the *outcomes* which are produced.

A realist evaluation technique (RET henceforth) starts with the formulation of a middle range theory that connects contexts, mechanisms and outcomes to create what is termed a potential CMO (Context, Mechanism, Outcome) configuration [26]. RETs do not set out to make a judgement about whether or not an intervention is effective. Instead, it is a technique which aims to provide understanding of why an intervention is likely to work or not work within a set of given conditions [27].

Ranmuthugala, Cunningham [28] proposed the use of RETs for evaluating CoPs since these interventions depended on the social and cultural norms of participants. According to Ranmuthugala, Cunningham [28], when realistically evaluating CoPs, the contexts are the connections, interactions and knowledge flow, membership, level of maturity and activities of members (in this case; health visitors in the online CoP). The mechanisms are factors and resources that collective participation potentially offers members (health visitors) to influence change (either enabling or disabling). The outcomes are not predefined in RETs.

RETs utilise multiple sources in order to construct key events and actions undertaken by stakeholders and their intended consequences on the intervention [23]. 250 health visitors were registered on the platform at the end of the second year after launch. In this study, data for the RET used a mix of qualitative and quantitative methods of data collection over the 2-year period including focus groups, online survey, workshop evaluation forms, a focus group with parents, observation of online interaction (netnography) and reflective notes taken during workshops and dissemination meetings.

Netnography; a qualitative method for studying communities and culture emerging from computer mediated communications [29] was employed via an approach which involved documenting data about user names, their location, the intent of joining the community, the number of posts and replies made by health visitors registered who registered on this online platform. As part of the third stage of the RET, Ranmuthugala, Cunningham [28] encourage the use of social network analysis to explore contextual information about connections, relationships and knowledge exchange within a CoP. This is because collating information describing how regularly members in a virtual forum communicate, interact and exchange know-how can provide a good enough indication as to whether or not a CoP is emerging or not. This data was analysed using social Network Analysis (SNA) to generate contextual information about the connections, relationships and knowledge exchanged within the online CoP [28,30]. SNA was used to visualise the nature of cohesiveness, the formation of sub-groups and cliques and the density of the overall methods of interaction among health in order to document the development of the online CoP.

An online survey was also undertaken at the end of the second year to explore overall use of the community by health visitors and as well as to test the perceived view of the platform's impact on collaboration, learning and sharing evidence among health visitors. The survey included demographic data about the work life of the health visitor, questions about contributing to discussion and the nature of their knowledge of evidence-based practice in health visiting. 97 health visitors out of the 250 health visitors registered as users to the CoP responded to this survey (38.8% response).

Since the intervention was developed to enable health visitors to share best practices about improving the care provided to children and the families, it was also important to explore how parents as potential users of such knowledge perceived the usefulness of the platform as part of the RET. One focus group with 8 parents was conducted to explore how parents perceived outputs from the hub. The parents were recruited from local parenting support groups in Hertfordshire through a snowballing approach and all had seen a health visitor in the last year preceding attending the focus group. The focus group explored how parents gauged the relevance of discussions in the Community to issues they faced. Elsewhere, it has been argued that attention to how actors; who are not themselves practitioners participating in a CoP gauge the legitimacy and usefulness of knowledge shared in CoPs, can be a crucial but under-explored criteria for evaluating if the products of CoPs are capable of improving everyday healthcare outcomes [31].

Results

Stage 1: Developing a Middle range theory

To underpin the realist evaluation, a brief review of the literature on online CoPs in health research was conducted. This was done to understand key elements about the role that online CoPs had played in other related health contexts. Studies in community health nursing [10], mental health research [32], orthopaedic surgery [33], identified that online CoPs help to promote dialogue and networking among health professionals online without needing face-to face commitments. Therefore participating in online discussion saved time and strengthened peer support that would otherwise be unavailable to practitioners who worked in isolated circumstances. These features of online CoPs from the literature were compared with responses from workshop evaluation forms, focus groups and registration requests to join the online Community from health visitors.

Registration requests from health visitors noted reasons like wanting to share their experiences, accumulate evidence from a wider variety of settings, learn from other practitioners and their experiences and expertise, provide easy access to a wide range of evidence based resources and to keep up to date and to take part in evidence based practice, as the main reasons for joining the platform. Focus groups conducted with health visitors noted that the CoP was extremely useful not only as a single point for information, but also because existing networks did not offer mechanisms to support collaboration and exchanges specifically geared at health visitors.

Reflective notes taken from locality meetings visited to explore use in everyday practice by the research teams also revealed that health visitors in their practice settings felt participating in an online forum was a great way to access peer-reviewed evidence on the go as part of aiding mobile

Table 1 CMO configuration statements tested as part of an online survey exploring users' experience of participating in exchanges with other health visitors online.

Participating in the Community of Practice has allowed me do the following:	I strongly agree	I agree	Neutral	I disagree	I strongly disagree
1. Introducing a new method or approach to solving a problem that I experienced in my practice	□	□	□	□	□
2. Providing me with access to expertise not available locally	□	□	□	□	□
3. Allowing me to keep abreast with the latest evidence	□	□	□	□	□
4. Being able to bounce ideas/good practice with other practitioners	□	□	□	□	□
5. Supporting me to share issues in practice	□	□	□	□	□
6. Improving my knowledge of building community capacity	□	□	□	□	□
7. Access to peer-reviewed evidenced-based practice discussions	□	□	□	□	□
8. Getting access to a wide range of evidence based resources to aid my professional practice	□	□	□	□	□
9. A positive impact on my career development	□	□	□	□	□
10. Helping on at least one occasion in my ability to solve a work-related problem	□	□	□	□	□
11. Attending the workshops and other face-to-face meetings which has helped me to establish links with other Health Visitors	□	□	□	□	□
12. The commitment of the other members of the CoP encouraging my participation in the CoP	□	□	□	□	□
13. Providing me with the opportunity to discuss work-related problems in a non-judgemental environment	□	□	□	□	□
14. Access to a trusted colleague that I can turn to for advice or a second opinion, when needed	□	□	□	□	□
15. Getting access to information that demonstrates success of evidence-based practice (EBP) makes it more likely that I will adopt EBP in my practice	□	□	□	□	□

working In the workforce. The focus groups conducted for parents also highlighted that parents saw the potential that the mechanism of an online CoP presented. This included amalgamating the conflicting advice parents sometimes received from different health visitors as well as the opportunity for the information they received to be informed by real life stories of other health visitors working with parents like themselves.

While most health visitors registered on the platform embraced its potential as a point of peer-reviewed knowledge for practice, some users noted the difficultly encountered in expressing professional experiences online in the form of textual utterances. Some suggested that health visiting practice was a combination of gut instincts, grey areas, vagueness, subtlety etc., that made conveying tacit experiences in texts properly, rather difficult. Other reason included concerns about lack of reciprocity to posts, poor engagement in the community's discussion by senior managers' not encouraging staff to use the platform at work and the problem of competition within and between teams of health visitors.

A further set of concerns were noted by health visitors regarding limited IT skills and social media literacy, difficulty in navigating the web interface of the hub, huge caseloads, time-pressured environments and staff shortages, and the high mentor to students training ratios as preventing active participation. Feeling exposed and vulnerable online because

of not knowing which other health visitors were online, concerns about self-disclosure and vulnerability online and not wanting to be feeling daft for asking an obvious question, were key themes highlighted in the focus group discussions.

Stage 2: Hypothesis generation and online survey

The variety of responses from health visitors were used to generate statements for a wider testing as part of an online survey for stage three. These statements were converted into a set of 15 questions, to which health visitors were asked to indicate their level of agreement against a Likert scale about their participation in the online forum. The statements to test the RET's mid-range theories as hypothesis in stage 2, were included in an online survey and sent out to the health visitors taking part in the study. The statements to test the RET's mid-range theories as hypothesis in stage 2, were included in an online survey and sent out to the health visitors taking part in the study (see Table 1). The survey also collated information of the context of the health visitor's participation in the Community of Practice including the length of time of being a member of the online Community, their age, practice setting, frequency of use among other indicators. 97 participants responded to the survey (response rate of 34.6%).

Stage 3: Testing the theory—observation/ netnography and social network analysis

Apart from the online survey a NodeXL spreadsheet was generated of the names of the Health Visitors who posted to the community, the names of health visitors who they replied to or replied to their posts and their geographical location. The relationship between these items were analysed using social network analysis (SNA) in order to identify key knowledge brokers and boundary spanners who were connecting in the Community. This relationship is shown in Figure 2 and displays how 63 of the 250 health visitors who have posted and replied to another health visitor on the platform have connected via the online platform.

Overall, the emerging community has an overall graph density of 0.035 (3%). This figure suggests that despite a flourishing activity of over 400 posts in the hub, little connections and relationships have developed among users in the community in its first two years, with informal clusters of 19 groups of health visitors obvious in the online network. Despite these limited connection, 3 users had the greatest betweenness centrality measures of 989, 403 and 141 (NodeXL analysis, July 2014).

In Figure 2, these betweenness measures show the users with the most important brokering potential. These users are *Fai* in Group 1 (G1), *Lau* in Group 2 (G2) and *Bec* in Group 6 (G6). These key brokers are important to identify in the network because their activities challenge the development of knowledge silos and help create broader connections across otherwise disconnected professionals. Through SNA, it becomes possible to highlight that the departure of the users with high brokering tendencies (as indicated in the betweenness measures) can result in problems regarding knowledge flows spanning the several small groups and clusters. Locating and incentivizing key

knowledge brokers, may be an option for developing effective online Communities for health professionals.

Stage 4: Programme specification

Results of the online survey showed that of the 16 CMO configurations derived from the middle range theory stage, only 3 statements were rejected by 67% of survey respondents. The statements on attending the workshops and other face-to-face meetings which have helped me to establish links with other Health Visitors, helping on at least one occasion in my ability to solve a work-related problem and a positive impact on my career development were noted as not useful aspects from the online platform.

Discussion and conclusion

This study sought to explore whether health visitors are able to develop an effective CoP for sharing evidence and knowledge about everyday practice on an online platform. And at a crucial time with health visiting numbers on the increase and with services increasingly being commissioned by local authorities, tools for effectively appraising and sharing peer reviewed evidence will become essential for mentoring students and newly qualified health visitors as part of the continuing professional development of the workforce. As at October 2014, nearly 200 health visiting students, forming 70% of the over 350 current health visitors using the evidence hub, found the online platform a valuable resource for mentoring and exploring evidence in practice. Having the added advantage of a virtual environment allowed health visitors, collectively pose issues, solutions, evidence and resources and engage in the process of collective professional knowledge as a coherent professional group with peers in other parts of the country; a networking opportunity which was previously unavailable.
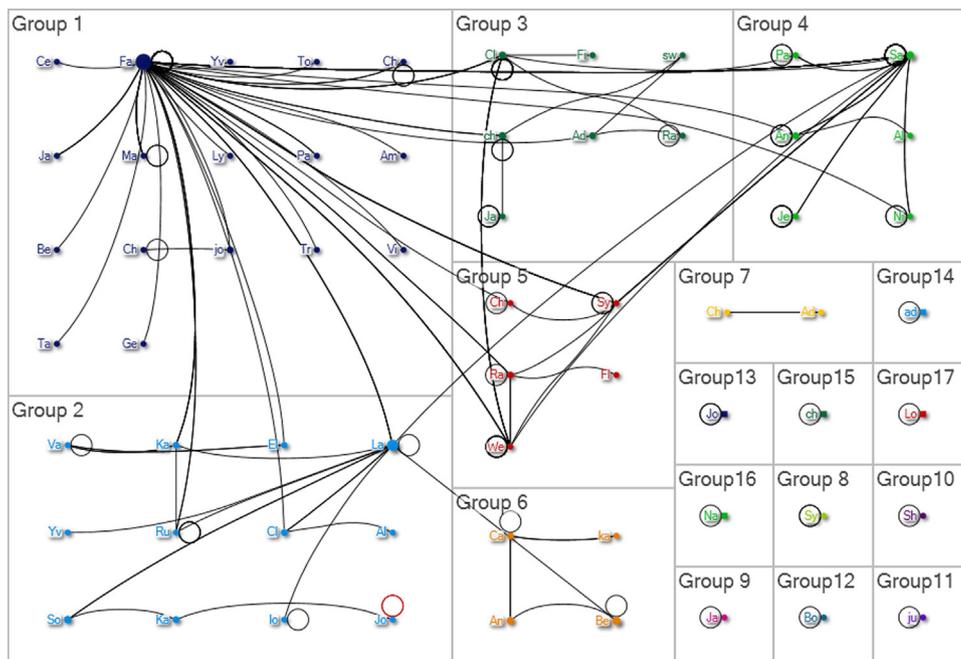

Figure 2 : Social network analysis showing key knowledge brokers and Champions in the online community goes here.

The RET on which the findings from this study are drawn from suggests that a network of health visitors that is capable of transforming, improving and delivering peer reviewed evidence based health visiting services that responds to specific community needs is emerging through this virtual point of interaction. These results after 2 years of online interaction are promising and show that with proper facilitation and well managed knowledge brokering activities, online CoPs can become a mechanism that can equip health visitors with peer reviewed knowledge that prioritises clients' needs in relation to local community needs. However, the results from the study are drawn from a snapshot of events in what is a rather young community.

Demonstrating the effect of an improved workforce that responds to specific community needs of clients however requires that health practitioners remain motivated in their quest to highlight and share good practice with peers. Commitment to facilitating safe and supportive discussion context overtime as well as encouraging users to post rather than lurk must be part of a long-term strategy if online CoPs are to thrive. The role of facilitation as key role for preventing attrition in participating in online CoPs is a worthwhile venture to consider as part of evaluation [34]. In our study, face to face workshops, presentations at locality meetings, newsletters, regular digests and competitions to facilitate participation all proved important activities in curbing attrition. Nevertheless it is important to consider other kinds of facilitation skills including presentations, lecturers, stories, guided practice and guided problem solving [35] that are equally likely to be effective in supporting the continued existence of a CoP.

A lack of commitment to continued support and facilitation overtime has resulted in many studies of online CoPs being too short-lived and not maturing enough or even taking off to tell us anything about decision making [36]. There has also been limited attention to issues such as the design/format of virtual platforms, how health practitioners are recruited, the role of human agency, organisational support, policy context, technology competence, skill level and other multiple social structures that may influence the uptake of online tools for improving practice [36,37].

After the pilot study was completed some of the aforementioned issues identified were implemented to explore how the CoP flourished. The use of the platform was embedded more in professional practice and linked to the Institute of Health Visiting (www.iHV.org) where members of the institute were encouraged to use the platform via a series of masterclasses, webinars, recruiting of champions. An experienced health visitor was also recruited by the institute to help identify champions who would take on the responsibility of highlighting key issues on the CoP and also organised masterclasses and webinars to keep up momentum among new and more experienced users of the CoP.

The platforms' home page was redesigned to reflect a quick three step guide and a help video featuring a health visitor in practice using the CoP was developed to help users navigate the platform. As at November 2015, the number of users on the platform has risen to 639 users and there were over 721 posts on the platform. In addition and as part of the plans to prioritise clients' needs in local communities, the CoP established a twitter account @HVeCOP and has since had two live chats between a small group of parents who have become followers of @HVeCOP on Twitter and champions and members. The enthusiasm of the parents group to share their experiences of receiving a health visiting service and how research informs the advice and information they received led to some very informative discussion about aspects of the evidence base that may not be well understood. The first chat considered the hopes and expectations of service users and health visitors for this type of activity and the second chat focused on the topic of bed sharing.

Demonstrating outcomes that reflect that interaction of participants in a CoP is making a difference to practice however goes beyond evaluation studies. For instance, work around Normalisation Process Theory (NPT) is a promising way to do follow up work to identify key issues of coherence, collective action, participation and feedback which can explain how technological interventions like these platforms become implemented, embedded and integrated in everyday practice [38-40]. Normalisation Process Theories [41] explore the wider contexts of the implementation integration, and sustenance of complex technological interventions and may prove more useful in complementing evaluation studies of this nature and possibly be able to define more predictive models about the relationships between CoPs and translating evidence into practice. As the platform continues to flourish the plans could be to use methods like NPT to measure how health visitors understand the value of technologies like online CoPs to their practice and whether health visitors have modified their work e.g. become more technologically competent, in response to interventions like this.

The organisational commitment of the Institute of Health Visiting to support professional leadership education and training as well as develop the research base would benefit from actively supporting a platform like this because it is unique, free and will continue far in to the future. A respondent from a subsequent evaluation of the Champions role and the use of the CoP overall noted that:

"The profession(health visiting) is still quite young and early in its revitalisation and work needs to continue to 'bed' down the knowledge and experience of practitioners who are approaching the end of their careers or who have been champions for many years. The passing on of knowledge to either newer HV's, or indeed to more experienced practitioners who may be either extending their careers or developing new skills is important" [42].

For the future and in the interest of implementing this technology into other health and social care disciplines, we would recommend that careful planning with the community that the technology is meant to support is carried out, that an on-line CoP requires the resource of a co-ordinator even on a part time basis, that members of the community can be brought together to act as champions and promote the knowledge sharing activities. It can be challenging to encourage busy health practitioners to use the CoP regularly and this is integral to the growth of networks and the expansion of knowledge sharing. It is therefore recommended that prompts such as newsflashes, notification of followers and 'likes' are used in a similar way to other social media to generate contributions to the CoP. In this way the growth of rich networks of contributions and discussions, we believe, can grow and enable users to translate this knowledge sharing into their day to day practice.

Author statements

Competing interests

None declared.

Ethical approval

Ethical approval for the study was through the University of Hertfordshire ethics committee on 13 September 2012 (Approval number NMSCC/09/12/1/A).

Conflict of interest

The author(s) declare that they have no conflict of interests.

Authors contribution

Faith Ikioda – Writing study design, analysis & data collection. Sally Kendall – Study design and writing.

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