



## Boundary spanners: Negotiating connections across primary care and domestic violence and abuse services

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### ABSTRACT

Improving access to support for people experiencing domestic violence and abuse requires better connections between healthcare services and specialist domestic violence and abuse (DVA) support agencies. We examined the work involved in restructuring the relationship between primary care and specialist DVA support services. This was part of a broader study of the implementation of a general practice DVA training and support programme (IRIS). We conducted an ethnography in two different UK areas where the IRIS programme was being delivered. We investigated the work done by specialist DVA workers (Advocate Educators) in the dual role of providing training to GPs and advocacy support to patients. Drawing on concepts of boundary actors and boundary objects, we examined how interactions between clinicians and patients changed after the introduction of the IRIS programme. The referral pathway emerged as a boundary object, meeting a shared ambition of general practitioners and patients to distribute responsibility for addressing DVA. However, maintaining this as a boundary object-in-use required significant, and often unseen, work on the part of the Advocate Educator as boundary spanner. Our study contributes to scholarship on boundary work by highlighting the role of marginal boundary actors in maintaining the use of boundary objects among disparate groups.

### 1. Introduction

There is a growing emphasis on improving patient care by building better pathways between different parts of the health care system in the UK. This includes improving links within healthcare services, between different public services, between National Health Service (NHS) and health research communities, and between public and community services. However, studies of collaboration demonstrate clearly that enabling structural connections between different types of organisations and groups does not in itself guarantee improved quality of interaction (Rycroft-Malone et al., 2015).

Wenger (1998) proposed that different groups of professionals operate in different communities of practice. What is required to build connections are practices or processes that have symbolic resonance in different worlds and enable interaction between them (Melville-Richards et al., 2019) and people operating in bridging positions at the boundaries between groups (Levina and Vaast, 2005). These are often referred to respectively as boundary objects (Star and Griesemer, 1989) and boundary spanners (Long et al., 2013).

This paper explores the boundary work involved in improving connections between primary healthcare services in the UK and

specialist domestic violence and abuse (DVA) support services. We investigate the work done by boundary spanners in the dual role of providing training to GPs and advocacy support to patients.

### 2. Background

#### 2.1. The identification and referral to Improve Safety (IRIS) programme

This paper takes as a case study the implementation of a primary care DVA intervention developed in the UK called Identification and Referral to Improve Safety (IRIS). The intervention aims to improve identification of DVA in primary care settings and increase referral to support services. In the UK, DVA is defined as ‘any incident or pattern of incidents of controlling, coercive, threatening behaviour, violence or abuse between those aged 16 or over who are, or have been, intimate partners or family members regardless of gender or sexuality’ (Home Office, 2016). Abuse can encompass, but is not limited to, psychological, physical, sexual, financial, and emotional abuse.

The IRIS programme includes: training for the whole team co-delivered by a specialist DVA support worker (Advocate Educator) and a clinician; a direct referral pathway to the Advocate Educator (AE)

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providing advocacy support for patients; a prompt to ask about abuse in the electronic medical record; and domestic violence resources and materials for practices. The AE represents the two central parts of the intervention, through the provision of education to general practice and advocacy support to patients.

The IRIS intervention focuses on improving access to DVA advocacy services. Advocacy is a term that incorporates legal, practical and emotional support. Advocates give a voice to survivors of abuse and support them to make changes in their lives. Specialist services in the UK are the product of feminist activism in the 1970s, which aimed to offer support to women experiencing abuse. This started with refuges and rape crisis centres, and later expanded into a wider range of advocacy services. These services are often provided in a community setting and are structured around theoretical models of empowerment, involving tailored assistance relative to the needs of individuals (Reisenhofer and Taft, 2013). This is viewed as a form of secondary prevention, in that it can reduce repeat incidences abuse and may improve the psychological wellbeing of survivors (Rivas et al., 2015).

There is increasing recognition in public policy and academic research of the association between experiences of DVA and a number of negative health outcomes (García-Moreno and Hegarty, 2014), the high prevalence of DVA among those attending health care settings (Richardson et al., 2002), and the important role that can be played by clinicians in identification and referral for specialist support (WHO, 2005). However, there remains limited movement of patients between health care settings and specialist support services. Clinicians infrequently enquire about DVA, typically citing discomfort in raising the issue and lack of time as a barrier to discussion (Roberts et al., 2005). Women are reluctant to disclose without being directly asked (Feder et al., 2006). Women report valuing a validating, non-judgmental response from a trusted health professional and their support facilitating change (Taket et al., 2003).

DVA interventions in health care settings have historically focused on providing training to clinicians about how to recognise and respond to DVA. These have had a limited effect on identification of patients experiencing DVA and on referral for further support (Minsky-Kelly et al., 2005). In the early 2000s, the IRIS intervention was developed to improve the primary care response to DVA in the UK. A central component of this model (see Fig. 1) was the advocate educator: a specialist DVA support worker with the dual role of delivering training to general practice teams and advocacy to patients experiencing DVA referred by GPs. Referrals to DVA advocacy services can reduce further physical violence and improve quality of life (Rivas et al., 2015).

In a randomised controlled trial in Bristol and London, the IRIS intervention was found to be successful at improving the connection between general practice and specialist support. IRIS increased identification of DVA in patient records (3-fold) and referral (discussion of referral 22-fold, actual referrals 6-fold) of patients (Feder et al., 2011). Following this success IRIS was recommended in a number of national guidance documents (Department of Health, 2017; Home Office, 2016) and has been commissioned locally in over 40 areas of the UK.

While there is ongoing evidence that IRIS leads to increases in identification and referral of patients experiencing DVA, there remains limited theoretical investigation of how it changes interactions. In this study we have sought to understand the practices that underpinned relationship-building between primary care and DVA support services. This study forms part of a wider investigation of the success of the national implementation of the IRIS programme (Sohal et al., 2018).

## 2.2. Collaborative work

In this section our intention is to introduce readers to the ways in which collaborative work between different professional groups has been theorised, with a focus on boundary work. This sets out a context in which to understand the collaborative work between general practice and DVA support services that is undertaken as part of the IRIS

programme.

Star and Griesemer's (1989) early exploration of the collaboration between biologists and amateur naturalists in the establishment of the Museum of Vertebrate Zoology in California developed the idea that loosely structured working arrangements, or 'boundary objects', are critical for enabling different groups to work together. They argued that such objects hold different meanings in different social worlds, with a temporary structure that is standardised enough to more than one world to make them recognisable, but loose enough to have a specific local meaning. They used the concept of boundary objects to explore how maps, libraries and collecting and recording techniques co-ordinated the interactions between trappers, scientists, state officials and naturalists, enabling the successful development of the museum. In doing so, they demonstrated that the creation and management of boundary objects is an important process in developing and maintaining coherence across intersecting communities (Bowker and Star, 1999).

Further exploration of the concept has had a tendency to seek a typology of boundary objects in order to establish intrinsic or essential properties which can be replicated (Lindberg et al., 2017; Fox, 2011). However, a common finding is that, in many cases, objects that have been designated as useful for boundary spanning and that possess desired characteristics remain un- or superficially used (Levina and Vaast, 2005). Success as a boundary object may be an unintended consequence of design. Rather than trying to determine what a boundary object is, other approaches have examined what boundary objects do (Levina and Vaast, 2005; Melville-Richards et al., 2019). This is consistent with Star's (1989, Star, 2010) original thesis of boundary objects, in which the object is understood to perform in a specific setting relative to characteristics of the relationships within that context. As Griesemer, 1992:54 puts it, '*what makes a tool right for a job ... is the joint articulation of tools, jobs and claims*'.

Melville-Richards et al. (2019) elaborate on the action-based qualities of boundary objects that make them useable. While many objects may have the potential to facilitate interaction, those that are successful are objects that are considered *authentic* by users. Only those that are meaningful to the multiple groups involved, able to align divergent interests, and resonate with what is at stake for them in collaboration, prove effective at enabling shared work.

Their insights also help explain a key challenge of keeping boundary objects-in use: ensuring that they remain resonant with the groups using them despite ongoing change. Boundary objects are temporary working arrangements and in flux relative to changes in the collaborative work from which they emerge (Lutters and Ackerman, 2007), meaning that they can fall out of use. For instance, in their study of the initial success and then subsequent failure of the Liverpool Care Pathway as a tool for improving the care of dying patients in hospitals, Seymour and Clark (2018) found that the pathway became a negative boundary object over time. It began to resonate negatively with the groups using it and led to fierce criticism and disagreement. This was as a result of a policy change that saw the pathway move from a loosely structured working arrangement to a rigid set of rules about process and interaction. It lost the flexibility that led to its initial popularity and which had allowed it to be tailored to suit the needs of the different environments in which it was being used.

A further challenge is that interactions between groups often involve navigating power imbalances. Boundary objects can be used as tools for negotiating professional jurisdictions (Wright et al., 2019; Bechky, 2003) but, as Allen (2009: 327) notes, while boundary objects, '*have a strong cohesive power to appeal to a range of stakeholder groups, their breadth of appeal also disguises tensions between different agendas and frames of reference*'. This was evident in Owen's (2015) examination of the acceptability of different complementary and alternative therapies within biomedical institutions. She argued that acupuncture practitioners purposefully aligned with western medicine, using acupuncture needles strategically to create a symbolic shared jurisdiction with

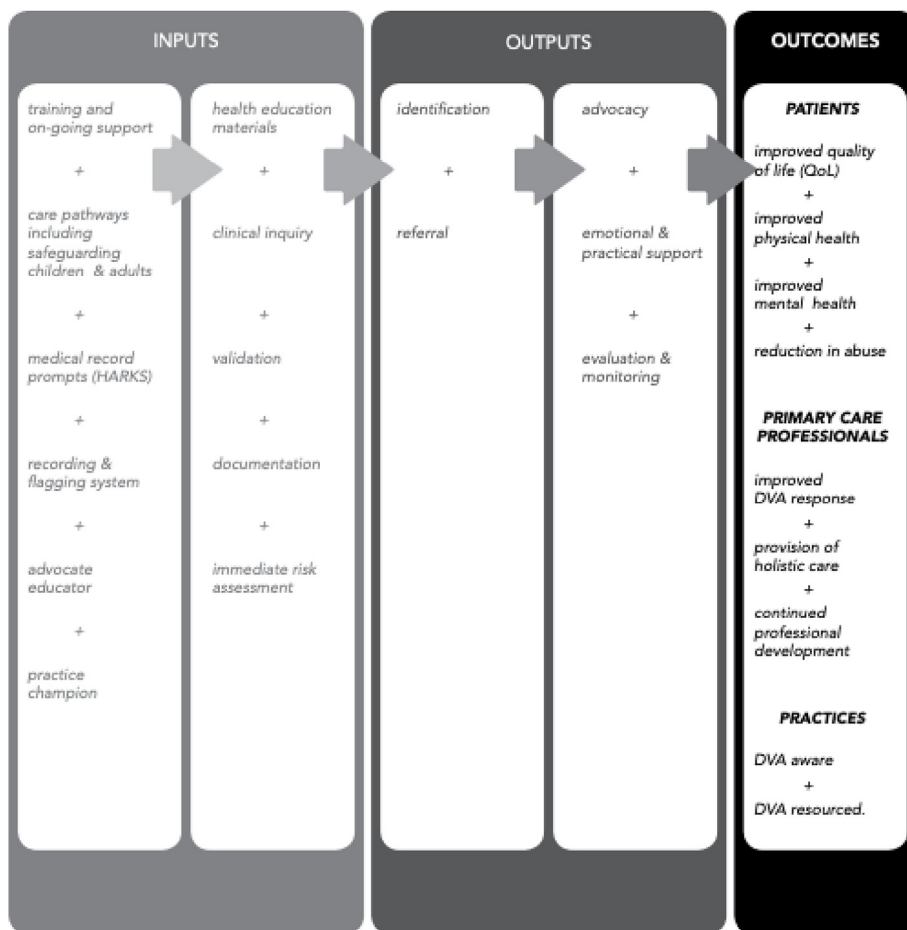


Fig. 1. The IRIS model.

medical practitioners. This ensured acupuncture remained within the biomedical sphere, but did not resolve ongoing tensions between different approaches to medical practice.

Given the inherent difficulties in boundary crossing, Melville-Richards et al (2019) argue that boundary objects are most likely to emerge and remain in use if there are actors who help the process. These actors operate from marginal positions at the boundaries of different groups and encourage participation. These are commonly referred to as boundary spanners or knowledge brokers. Taking up the role of a boundary actor ‘requires becoming a legitimate, but possibly peripheral, participant in the practices of both fields’ (Levina and Vaast, 2005). They ‘are able to make new connections, enable co-ordination and ... open up new possibilities for meaning’ (Wenger, 1998: 109).

People in boundary spanning roles do work to maintain the positive resonance of boundary objects among collaborators. Levina and Vaast (2005) note that not all those in designated boundary spanner roles are successful at this work. Similar to unintended boundary objects, the work of brokering can instead be done by those in roles which are not necessarily intended for that purpose. Bossen, Jensen and Udsen (2014) for example, demonstrate how medical secretaries attend to the uptake among hospital staff of an electronic health record as a boundary object, and Ross Winthereik and Langstrup (2008) highlight the role a trial manager in maintaining shared use of an asthma self-management tool between patients and clinicians. When undertaken by those not in official boundary spanning roles, this work can end up undocumented as a part of the smooth running of a process or procedure (Star and Strauss, 1999). If those who undertake it are not recognised and supported it can lead to role overload, burn out and stress (Long et al., 2013).

To summarise, the insights from the existing theoretical literature are that different professional groups can be supported to collaborate through identifying flexible working arrangements, ‘boundary objects’, which enable them to interact toward a shared goal but also achieve goals that are relevant within each particular group. These boundary objects emerge out of the requirements of a particular set of interactions, and might be practices, processes, materials or concepts. To become boundary objects-in-use, they must resonate and hold meaning for all involved, and be capable of converging multiple interests. This work also crucially involves boundary spanners who operate at the margins of groups and maintain commitment to using boundary objects, acting as interlocutors between the different stakes involved in an interaction.

The concepts of boundary object and boundary spanner have been widely applied as heuristic tools to examine and design processes that could lead to improved interactions across professional groups in healthcare. This has included looking at how new institutional structures facilitate interaction (Melville-Richards et al., 2019), how clinical guidelines link different professional groups (Akoumianakis et al., 2010), the successes and failures of care pathways as a mechanism for ensuring cooperation between groups (Allen, 2009; Håland et al., 2015; Seymour and Clark, 2018), and how different hospital departments interact around patients (Cramer et al., 2018).

In this study we apply these concepts to the study of collaborative work between general practitioners and specialist domestic violence support services. We make a contribution to this literature through a close examination of the boundary spanning role of the Advocate Educator. We explore how they attend to boundary objects-in-use to support connections between primary care, people who have

experienced abuse, and specialist support services. In doing so, we highlight otherwise unseen aspects of their work.

### 3. Methods

We adopted an ethnographic approach to study the practices involved in the collaborative work between primary care services and specialist DVA support services. Two geographic areas delivering IRIS in England were selected as intrinsic cases (Stake, 1995). One researcher (GF) led the original trial of IRIS and facilitated collaboration with the national IRIS implementation team. Through a joint approach between the research and implementation teams two case studies were selected out of thirty possible areas, informed by Miles & Huberman's (1994) sampling criteria for cases. These included being relevant to the pragmatist conceptual framework of the study, having the potential to generate rich data, being ethical and being feasible. Four specific criteria were developed: having been running for over two years, similarity to the original model, capacity to participate in the study, and being practical locations for travel and data collection by the research team.

Links were made with the main provider of DVA services in each case study area, with access negotiated by AD. The case studies were both in large urban areas in England where a local government body and a Clinical Commissioning Group jointly funded a community DVA provider to deliver IRIS. Data from the case studies are treated collectively in this paper as the practices of boundary work were similar in both.

AD collected data through participant observation and interviewing. Fieldwork was conducted over 20 months between August 2015 and March 2017 (over 100 h per field site). AEs were the primary informants in each case study and enabled connection to other actors. Participant observation was structured around project management and commissioning of IRIS at an organisational level, the day-to-day delivery of IRIS as a programme of work (training and advocacy), and engagement in IRIS by its intended beneficiaries (clinicians and patients). Field notes formed the basis of the data from participant observation.

19 semi-structured interviews were conducted in each case study area with clinicians (case study one: 5, case study two: 8), services users (case study one: 8, case study two: 5), and actors involved in the commissioning and delivery of IRIS (case study one: 6, case study two: 6). Options for selective sampling among commissioners, managers and members of the IRIS team were limited, in that there were only a small number of professional roles in each case available for interview. Clinicians were purposively sampled according to different levels of engagement with the IRIS service (never referred vs. many referrals). Service users were sampled in order to represent a wide demographic range, in terms of age, gender, ethnicity and experiences of abuse. AEs recommended and approached service users who they considered it would be safe to invite to participate in the study.

Sample size was guided by Malterud et al. (2016) concept of 'information power'. For this study this represented a point where a wide range of different practices became visible and enough data was available to analytically engage with the emerging research problems, with contradictions and deviant cases present but with decreasing frequency.

Interviews were conducted at locations identified as convenient for participants, including general practice offices, coffee shops, homes, and commissioning headquarters. Meeting in a safe location was a priority for interviews with service users. Interviews were audio recorded and transcribed using a professional transcription service. Field notes were written before and after each interview, describing the recruitment process, preliminary analytical points and the environment in which the interview took place.

AD read transcripts and fieldnotes in full to become familiar with the data and moved back and forth between working with codes and re-

reading items of data, also returning to listen again to recordings. After a close reading of the text, AD developed initial codes using the 'gerund' approach to coding (Charmaz, 2012), which involves using the noun form of verbs in order to 'build action right into the codes' (Charmaz, 2012; Charmaz, 2012: 5). The analytical focus was on identifying the key practices of each group involved in IRIS, with the rationale that this would support the identification and analysis of shared working arrangements.

Analysis was done using a paper-based approach. Notes were taken in the margins of transcripts and field notes, collecting ideas together on a cover note. Analytical ideas were collected separately in a Word document as the analysis developed. Following analysis of several items of data AD employed the One Sheet of Paper (OSOP) approach (Pope et al., 2000; Ziebland and McPherson, 2006), collecting together practices identified from different data to display it in a way that would allow conclusions to be drawn. As data was added and practices that did not fit with the groupings were identified, the arrangement was reconfigured on a new piece of paper. MK and GF contributed to the ongoing development of thematic narratives as the analysis developed, and member feedback sessions were held with members of the IRIS delivery team in each case.

This study received ethics approval from the Queen Mary Research Ethics Committee (reference: QMERC2015/29a and QMERC2015b), the Barts Health Joint Research Management Office (ReDa number: QMERC2015.29b) and the appropriate local NHS governance bodies.

## 4. Findings

### 4.1. Advocate Educators as boundary spanners

There was minimal interaction between general practice and specialist DVA support services in the case study areas prior to the introduction of IRIS in each area. They represented two separate professional environments, or 'planets' (Hester, 2011). They had different histories, systems of bureaucracy, flows of time, spaces of work, professional skills, identities and jurisdictions. Discussions between patients and GPs about DVA were rare. Specialist services infrequently engaged directly with primary care services and received very few referrals from general practitioners.

The introduction of the IRIS programme altered this environment. Crucially it introduced new actors, Advocate Educators (AEs). They were recruited from a workforce of experienced DVA support staff within local communities. They had an understanding of the abuse theoretically underpinned by notions of power and control and pragmatically driven by risk reduction. Their desire to be involved in the work was to use general practice as a channel to access and provide support to more women affected by abuse. Despite being formally attached to local specialist services who had been appointed by commissioning bodies to deliver IRIS, they occupied a position at the margins and were able to move between the two groups.

They would cross the threshold of general practice to deliver training and subsequently use rooms within surgeries to see patients who had been referred. Christine, an AE, reflected that this was different from other services GPs might use:

They like to have a face; you can't get that with other services.

This personal interaction meant that clinicians perceived them more positively, as Chloe (GP) described:

If you meet a secondary care service or a community service that clearly are keen for referrals, that does change what you do a bit. You meet others who appear less keen or aren't very engaging when you do a referral, you do sometimes think twice.

They were also seen as 'different' by patients. Being able to discreetly meet an AE within a GP practice was important to many service users, particularly those who were still in abusive relationships.



However, the support provided was different from what they usually received in this setting. Advocacy was tailored to the needs of each particular woman. Anoushka (AE), for example, presented the breadth of the work of advocacy:

What we have to do is we have to empower these people by giving them tools, by giving them information so they know, should they want to change things, there are ways they can do it safely and that they're not alone. It's about slowly breaking down the barriers to make them not feel isolated; whether that's they don't speak English, that they have no access to benefits, whatever those barriers are, they need to sort it out slowly.

Women in this study were supported in range of diverse ways, including safely leaving or staying with their partners, seeking asylum, finding new accommodation, negotiating custody of children, making friends, and overcoming anxiety. For many service users this resulted in the relationship with the AE feeling more like a friend than like a professional service. Hannah, a service user, explained this:

She's like one of me mates that I can ring when I need her. I just know that she's there. She was dead welcoming, and easy to talk to, and she was immediately on my side. And I'd never had that happen.

AEs exhibited the characteristics of being legitimate but partial members of different groups (Levina and Vaast, 2005). This enabled them to act as a link that would encourage the movement of patients between general practice and specialist support services. However, before this was possible they had to gain access to general practice and introduce a flexible shared working arrangement, or *boundary object*, that would enable the potential for connection between clinicians and patients.

#### 4.2. Building a pathway to support

Before getting access to GPs, and subsequently to patients affected by abuse, AEs had to negotiate with the gatekeepers of general practices. These were practice managers, who controlled access to general practice teams. Training sessions were difficult to arrange within the busy schedule of primary care services despite posing no financial costs to practices.

AEs employed a range of different tactics in order to access practices. Caroline simply turned up outside the door of a practice manager who had been avoiding her emails and phone calls and 'shamed her into signing up' with her presence. Rosie took a more dramatic route of influence with reluctant practices, showing them pictures of women who had died as a result of abuse in their area. She jokingly labelled herself as 'the voice of doom'. Having gained access to general practice, they would work flexibly around the timetables of both the practices and the clinicians with whom they co-delivered the training, juggling times and dates.

Travelling across cities with suitcases full of training materials, AEs tried to cultivate an understanding of DVA as connected to the concerns of general practice among the clinicians attending training. Few GPs asked about DVA before becoming aware of the IRIS programme. It was not a core concept that informed their routine work, and was understood most clearly in relation to legal responsibilities GPs had towards safeguarding children. Some clinicians feared causing offence by raising the topic, and others thought it was not their responsibility. Given that few patients directly raised the issue of DVA, it was often easier to follow other routes through consultations based on presenting symptoms.

AEs went to great lengths to tailor a local meaning of DVA which would be resonant with general practitioners. They encouraged links between common presentations in primary care, such as headaches, chronic pain and gastrointestinal complaints (Valpied and Hegarty, 2015), offering phrases to start conversations about DVA during consultations. They altered the meaning of abuse from being something

private within a relationship, to a relatively standardised but broad range of behaviours and characteristics that were contained within a sanitised three-letter acronym. The potential to associate abusive behaviours with symptoms or situations that were common in general practice gave clinicians increased legitimacy to ask about DVA as part of their everyday clinical activity.

They constructed a referral route that allowed a movement of patients out of general practice and into specialist support, mimicking the processes GPs followed to refer to other services. They would establish broad referral criteria, emphasising their willingness to accept a wide range of patients. Any suspicion of DVA was enough to qualify a patient for the service. They would also practically address technical issues that might impede GPs from contacting them, such as making sure that the referral form was uploaded onto the practice computer system before leaving training. They offered a malleable service, with flexibility in the way in which referral information could be transmitted (by phone call, email, fax) and in when and where they would see patients. This flexibility created an intentionally porous boundary between the IRIS service and a given practice, representing what Star and Griesemer (1989) described as multiple points of translation.

#### 4.3. Redirecting interactions between general practitioners and patients

The stated purpose of the IRIS programme was to change interactions in primary care between clinicians and patients which would lead to more conversations about DVA and more referrals into specialist support.

For many clinicians, their hesitance in raising the topic of DVA related to being uncertain about what action they could take to support a patient. The key to engagement with clinicians was that, as well as improving their understanding of how DVA fit within healthcare interactions, the IRIS programme enabled them to distribute responsibility for addressing DVA. In this case, the IRIS pathway acted as a resource for putting a boundary on GP's professional responsibility for addressing DVA. Clive articulated this:

It's no good me asking all those questions if all I can say to this lady is "Thank you for telling me." There's a therapeutic role, but what it's going to generate is she's going to come back and talk to me about it again and again and again, and that will make her feel better for the five minutes she's here and maybe she'll know that somebody is caring that she's shared it with, but we haven't really helped in terms of trying to solve her problem. We've helped her to cope with it maybe a little bit, but having IRIS means that (a) you can identify it and (b) you've got a referral pathway.

Clive argued that being able to both identify and refer were crucially interconnected. DVA was an issue that few GPs wanted to take responsibility for addressing, despite considering it relevant to the holistic work of general practice. As Nancarrow and Borthwick (2005) discuss, boundary negotiation often involves distributing responsibility for work between professional groups. This means unwanted work can be shifted elsewhere.

GPs are accustomed to referring patients to other services when they encounter problems that believe cannot be addressed in primary care. In the absence of a clear route of referral, many GPs would simply avoid the topic. Where patients did disclose unprompted, GPs might attempt to direct patients towards support for other issues which are also associated with DVA perpetration, such as mental health or substance misuse (Williamson et al., 2015). Lily, for example, visited her GP to ask for support in managing the behaviour of her abusive partner.

I think maybe the first time I went the doctors, maybe he hadn't been introduced to IRIS. From the story I told him, it wasn't so much physical, but very verbal abuse, and he said to me, 'Oh you've got to get out of there, you must leave'. And I couldn't. It wasn't actually very helpful. So I left there, and he did actually do some things. He

did send somebody from the mental health team. That I felt at the time was quite helpful, but it didn't actually, it didn't lead to anything sort of being done or changing.

Lily had visited the GP to seek advice about how to safely remain in a relationship with her partner, for whom she was a full-time carer. In the absence of an understanding of the dynamics of abuse and how to appropriately respond to her disclosure, the GP had advised to leave the relationship and directed her towards mental health support. Lily's request for DVA support remained unmet. Several months later the situation escalated, and she returned to the GP with her granddaughter.

So there was two of us saying how things were. And from then, he said to me, there is, I think he used the words 'a new service', and 'I could arrange for you to see somebody here from the domestic violence team if you'd like to', so I said 'I'd love to, I need someone'.

The availability of the IRIS service enabled a different point of connection between Lily's request for help and the GP's desire to direct her out of general practice. It empowered the GP to take appropriate action in relation to DVA. It became a boundary object-in-use, in that it enabled a meaningful and resonant convergence of both needs (Melville-Richards et al., 2019).

As well as connections to other health pathways, DVA has connections with other public services, particularly police and safeguarding teams. Again, in the absence of a clear avenue of DVA support, clinicians might shift responsibility down these routes. Yasmeeen, for example, described a challenging initial encounter with her GP when she visited to have a wound dressing changed.

I still had stiches in my head, from the head injury, and I went to my GP, and I think he was remarkably predictable in his response. I was very vulnerable and I felt it quite acutely, what I consider his insensitivity. Because he said 'Well, why the hell didn't you call the police?' And I just said, 'Well, it's not that easy'. When a doctor says 'Why didn't you call the police?' you feel as though you really have lost your sense of self. But fortunately he was going through a training with Lisa [Advocate Educator] at that surgery, so he did call me the next morning, and I had to have some blood tests done and a health check, so next time I went he introduced me physically to Lisa. I don't know what Lisa said in that training that afternoon, but it was enough for him to pick up that phone and call me.

The response from the clinician was again to suggest a direction of action that would remedy the situation outside of health care, in this case involving the police. This response did not recognise the patient's presenting needs. Moreover, his response caused Yasmeeen to feel further shamed about her experiences. Having received the IRIS training, however, gave him a way to offer a different direction for support.

The majority of patients experiencing abuse visit their GP without a clear articulation of the support they need in relation to abuse. Instead, they might attend general practice seeking resolution for symptoms that are associated with abuse. The training AEs delivered as part of the IRIS service offered suggestions for how to redirect these conversations. Shazia, for example, went to her GP to talk about depression:

It was July, I remember, I was in a bad relationship with my partner, and it ended up with violence. I was really depressed, and just felt lost, the only thing that comes to my mind was to go to the doctor and ask for help to get some anti-depressant medication. It was hard with three children, you sometimes feel depression, because what is happening is very horrible. Then when I met her [the GP], she was aware of the violence because she had a report from the hospital and the police, and she said 'you have lots of things going on, so it's not something that I can help with antidepressant medication'. I was suffering from financial problems, living in a violent relationship, so she said 'it might help to refer you for something where they can help you with your housing issues, your financial issues and your emotional issues' and she referred me to IRIS.

In the absence of a conceptual framing of her violent relationship as something that could be directly addressed, the immediate solution available to Shazia was to seek medical help for her emotional suffering. Having the IRIS service available, her GP was able to redirect the conversation away from medication towards advocacy support.

Changing the direction of interaction was valuable for clinicians as well. Leanne, for example, described the impact that talking about DVA might have on a consultation:

If you've explored it and done everything you can for that physical problem, then you've identified there's a problem at home and you can say, "Look, perhaps this is happening because of this!" It can help make some of the physical symptoms easier to manage. I think on some level people may even realise, because the preoccupation with those physical symptoms maybe lessens once you deal with the other things.

However, the redirection of the general practice encounter towards the IRIS service was dependent on this converging with the needs of the patient. Diane gave an example of a patient who she perceived was reluctant to address DVA.

She denies ongoing violence in the relationship. They're not happy and they both acknowledge that, but she won't leave, and she's desperate for a baby which worries me because I think she's probably not being honest. There might be violence, but she realises that that could impact on me referring her for IVF. So it really is a horrible case and she is on medication, which could impact on her fertility, for her mood, and so down we go in a vicious cycle.

The goal of this patient was to get support from her GP in starting a family. As such, this patient rejected the category of DVA. Instead of holding a positive meaning, in that it could help to address the violence in the relationship, for this patient it resonated negatively in that it closed down options of being referred for fertility services. In this instance, the pathway acted as negative boundary object (Fox, 2011), leaving both clinician and patient in a *vicious cycle* of a repeating and unsatisfactory interaction.

To summarise, the IRIS pathway emerged in some instances as boundary object-in use due to its success at redirecting interactions in general practice, distributing the jurisdiction of responsibility for addressing DVA to the AE. Patients wanted support for the problems they brought, and clinicians wanted to be able to direct them to alternative services. The potential of an IRIS referral enabled interactions around abuse in primary care to move in different directions. Careful tailoring the concept of DVA to reflect primary care encounters enabled clinicians and patients to mutually achieve different goals.

#### 4.4. Maintaining connections

Enabling an interaction between a clinician and a patient around DVA did not in itself guarantee that an ongoing connection would be made with the IRIS service. Patients might not take up the service, and GPs might not refer again. As boundary spanners, AEs undertook a range of activities to maintain the referral pathway as a boundary object-in-use.

For example, upon receiving referral information from a GP, the AE would then attempt to make contact with a patient as soon as possible. Brenda (AE) described the process in her team:

We have a policy that says we make at least six attempts over a two-week period from when we get the first referral and we'll contact them, contact the same day referral is allocated. And if you can't catch them, you have to go back to the GP and get the GP to try and call them in. Then they get another seven days so that could be open for three weeks without ever having any contact, which is a bit of a pain but the thing is that we keep trying.

AEs also had to do continued work with clinicians to ensure that they remained committed to making use of the referral pathway. Given that a central meaning attached to the pathway as a boundary object was providing an avenue of support, it was important that they received feedback to affirm this. Nakesh elaborated on this:

I think the feedback that you got from the person that was dealing with it from. IRIS was what made it feel like it was more like a partnership and it was work in progress, rather than seeing things as success or failure, or even 'do the referral, problem solved!' I think often with these cases, it's not like that because resolution, if it happens at all, often might happen quite a bit further down the line. I think just sharing the burden with someone, or feeling more that it's a team effort I think is quite helpful, because otherwise it can feel like lots of things, but dispiriting is one of the things and frustrating.

As well as offering support to patients, AEs continued to offer support to GPs. Christine (AE) described her role as '*building trust with the GP and with the woman*', miming being on the phone to both at the same time. AEs attended to GPs continued use of the referral pathway as a boundary object through offering hope about outcomes for patients. With the jurisdiction of GPs expanding to include addressing DVA, the jurisdiction of the AE similarly expanded to include addressing the concerns of clinicians.

## 5. Discussion

Owens (2015) argues that studying boundary work can inform us about health care practices, in this case the complex work of addressing needs associated with DVA that arrive in primary care. The success of the direct referral pathway into support provided by the IRIS programme reflects a need within primary care to delimit the professional jurisdiction for addressing DVA, and share responsibility with other services.

Returning to Star's (1989) central thesis that boundary objects are formed out of the needs of different communities, we argue that the referral pathway carefully introduced and maintained by the AE redirects interactions about DVA in primary care. It reshapes the jurisdiction of care, allowing it to be redistributed to the IRIS service.

Boundary objects-in-use are defined as acquiring both a local usefulness and a common identity in practice (Levina and Vaast, 2005). In this study, the direct pathway into specialist DVA support services became a boundary object-in-use. It enabled patients to have their individual needs recognised, and allowed clinicians to put a boundary on their responsibilities. It was able to hold multiple meanings, converge different agendas, and was resonant among different actors (Melville-Richards et al., 2019). It enabled different, more satisfying interactions between general practitioners and patients.

We paid particular attention to the boundary spanning role played by AEs in building the referral pathway and encouraging others to participate in it. They nurtured points of connection, such as the flexible referral and feedback processes, encouraging the movement of patients into the service. Having an ongoing peripheral presence in general practice enabled them to engage informally in this work. In this case, the essential quality of marginality of the AE as boundary spanner was having a temporary physical presence among the different groups being connected. This was facilitated by their flexibility in being able to move in and out of general practice and in and out of spaces that were safe to meet patients. Like the work done by Melville-Richards et al. (2019) into the important qualities of boundary objects, we suggest that in future research it would be beneficial to further explore the qualities of marginality of boundary spanners that allow them to emerge in a given setting.

Where the AE was publicly recognised as a designated boundary worker, with regard to their dual role in training and advocacy, the ongoing work to maintain the referral pathway as a boundary object-in-use was not always seen. This is what Star and Strauss (1999) term '*dis-*

*embedded background work*', where the individual role is visible but the work done remains unseen. Ross Winthereik and Langstrup (2008), for example, found that the undocumented role of the trial manager in attending to the continued connection of patients and GPs in the use of an asthma self-management tool led to it being absent when the tool was rolled out more widely. This was an important contributing factor to its failure in implementation. In the case of IRIS, noticing and supporting the boundary maintenance work done by AEs is central to ensuring the ongoing success of programme implementation. Similarly, in a hospital context, the boundary worker role of specialist cardiac nurses was inconsistently realised in patients admitted with heart attacks (Cramer et al., 2018).

Moreover, neither the boundary spanning undertaken by AEs or the potential for connection offered by the referral pathway as a boundary object was able to overcome the negative resonance associated with DVA in all cases. Raising DVA as an issue in primary care also enabled the opportunity for negative associations to come to the fore, on the part of both patients and clinicians. This builds on Fox's (2011) examination of positive and negative boundary objects. Interactions around boundary objects can emphasise and reinforce differences as well as build connection. In practical terms, in opening pathways towards DVA support some other pathways, such as those to fertility services, might be closed. This also highlights an important limitation of this study. Participants were those who had benefited from connections with the IRIS service, and as such were engaged in its potential benefits as a positive boundary object-in-use. Clinicians and patients who were more engaged in the negative resonances of DVA were unlikely to participate in the research.

As Lutters and Ackerman (2007) highlight, boundary objects remain in use relative to the context in which they are operating. It is highly likely that the practices that might be required to enable interaction between clinicians and patients will change as primary care, the DVA support sector and public commissioning processes change. Furthermore, the cases described here are highly situated examples of the work of implementing IRIS in UK urban settings with a history of delivering DVA support. There may be different points of connection in settings that diverge from the ones encountered in this research. While the boundary objects described may not persist as practices that form connections, we believe that the attention this analysis draws to the tensions in interactions between the groups will remain valuable.

## 6. Conclusion

This paper draws on the concept of boundary objects-in-use to show how boundary spanners attend to meaning making at the boundaries of interactions. We have provided a thorough investigation of why particular types of boundary objects arise from the needs and restraints of different groups involved. We have also examined the dynamics of multiple interpretation, making visible the work of negotiating meaning. In this case, we have highlighted the crucial position of the AE in moving between multiple worlds of meaning. With regard to improvements in the general practice response to DVA, this work highlights that it is not simply the receipt of training or improved knowledge of DVA that leads to change, but the careful maintenance of a porous boundary by DVA specialists.

## Declaration of competing interest

None.

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## References

- Akoumianakis, D., Milolidakis, G., Akrivos, A., Panteris, Z., Ktistakis, G., 2010. Clinical practice guideline management information systems: cancer guidelines as boundary spanning transformable objects of practice. In: 2010 International Conference on Intelligent Networking and Collaborative Systems. IEEE, pp. 230–237. <https://doi.org/10.1109/INCOS.2010.27>.
- Allen, D., 2009. From boundary concept to boundary object: the practice and politics of care pathway development. *Soc. Sci. Med.* 69 (3), 354–361. <https://doi.org/10.1016/j.socscimed.2009.05.002>.
- Bechky, B.A., 2003. Object lessons: workplace artifacts as representations of occupational jurisdiction. *Am. J. Sociol.* 109 (3), 720–752. <https://doi.org/10.1086/379527>.
- Bossen, C., Jensen, L.G., Udsen, F.W., 2014. Boundary-object trimming: on the invisibility of medical secretaries' care of records in healthcare infrastructures. *Comput. Support. Coop. Work* 23 (1), 75–110. <https://doi.org/10.1007/s10606-013-9195-5>.
- Bowker, G.C., Star, S.L., 1999. *Sorting Things Out : Classification and its Consequences*. MIT Press, Cambridge.
- Charmaz, K., 2012. The Power and Potential of Grounded Theory. *Medical Sociology Online* 6 (3), 2–15. [http://www.medicalsociologyonline.org/resources/Vol6Iss3/MSO-600x\\_The-Power-and-Potential-Grounded-Theory\\_Charmaz.pdf](http://www.medicalsociologyonline.org/resources/Vol6Iss3/MSO-600x_The-Power-and-Potential-Grounded-Theory_Charmaz.pdf) In press.
- Cramer, H., Hughes, J., Johnson, R., Evans, M., Deaton, C., Timmis, A., et al., 2018. 'Who does this patient belong to?' Boundary work and the re/making of (NSTEMI) heart attack patients. *Sociol. Health Illn.* <https://doi.org/10.1111/1467-9566.12778>.
- Department of Health, 2017. The Government's Mandate to NHS England for 2016–17. London. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/600604/NHSE\\_Mandate\\_2016-17.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/600604/NHSE_Mandate_2016-17.pdf), Accessed date: 11 April 2019.
- Feder, G.S., Hutson, M., Ramsay, J., Taket, A.R., 2006. Women exposed to intimate partner violence: expectations and experiences when they encounter health care professionals: a meta-analysis of qualitative studies. *Arch. Intern. Med.* 166 (1), 22–37. <https://doi.org/10.1001/archinte.166.1.22>.
- Feder, G., Davies, R.A., Baird, K., Dunne, D., Eldridge, S., Griffiths, C., et al., 2011. Identification and Referral to Improve Safety (IRIS) of women experiencing domestic violence with a primary care training and support programme: a cluster randomised controlled trial. *The Lancet* 378, 1788–1795. [https://doi.org/10.1016/S0140-6736\(11\)61179-3](https://doi.org/10.1016/S0140-6736(11)61179-3).
- Fox, N., 2011. Boundary Objects, Social Meanings and the Success of New Technologies. *Sociology* 45 (1), 70–85. <https://doi.org/10.1177/0038038510387196>. In press.
- García-Moreno, C., Hegarty, K., Lucas d'Oliveira, A.F., Koziol-MacLain, J., Colombini, M., Feder, G., 2014. The health-systems response to violence against women. *The Lancet* 385 (9977), 1567–1579. [https://doi.org/10.1016/S0140-6736\(14\)61837-7](https://doi.org/10.1016/S0140-6736(14)61837-7).
- Griesemer, J., 1992. *The Role of Instruments in the Generative Analysis of Science*. In: Clarke, A., Fujimara, J. (Eds.), *The Right Tools for the Job*. Princeton University Press, New Jersey, pp. 47–76 In press.
- Håland, E., Røstad, T., Osmundsen, T.C., 2015. Care pathways as boundary objects between primary and secondary care: experiences from Norwegian home care services. *Health: Interdiscip. J. Soc. Study Health, Illness Med.* 19 (6), 635–651. <https://doi.org/10.1177/1363459314567789>.
- Hester, M., 2011. The three planet model: towards an understanding of contradictions in approaches to women and childrens safety in contexts of domestic violence. *Br. J. Soc. Work* 41, 837–853. <https://doi.org/10.1093/bjsw/bcr095>.
- Levina, Vaast, 2005. The emergence of boundary spanning competence in practice: implications for implementation and use of information systems. *MIS Q.* 29 (2), 335. <https://doi.org/10.2307/25148682>.
- Lindberg, K., Walter, L., Raviola, E., 2017. Performing boundary work: the emergence of a new practice in a hybrid operating room. *Soc. Sci. Med.* 182, 81–88. <https://doi.org/10.1016/J.SOCSCIMED.2017.04.021>.
- Long, J.C., Cunningham, F.C., Braithwaite, J., 2013. Bridges, brokers and boundary spanners in collaborative networks: a systematic review. *BMC Health Serv. Res.* 13 (1), 158. <https://doi.org/10.1186/1472-6963-13-158>.
- Lutters, W.G., Ackerman, M.S., 2007. Beyond boundary objects: collaborative reuse in aircraft technical support. *Comput. Support. Coop. Work* 16 (3), 341–372. <https://doi.org/10.1007/s10606-006-9036-x>.
- Malterud, K., Siersma, V.D., Guassora, A.D., 2016. Sample size in qualitative interview studies. *Qual. Health Res.* 26 (13), 1753–1760. <https://doi.org/10.1177/1049732315617444>.
- Melville-Richards, L., Rycroft-Malone, J., Burton, C., Joyce, W., 2019. Making authentic: exploring boundary objects and bricolage in knowledge mobilisation through National Health Service-university partnerships. *Evid. Policy A J. Res. Debate Pract.* <https://doi.org/10.1332/174426419X15623134271106>.
- Miles, M.B., Huberman, A.M., 1994. *Qualitative Data Analysis : an Expanded Sourcebook*. Sage Publications, London.
- Minsky-Kelly, D., Hamberger, L.K., Pape, D.A., Wolff, M., 2005. We've had training, now what? *J. Interpers Violence* 20 (10), 1288–1309. <https://doi.org/10.1177/0886260505278861>.
- Nancarrow, S.A., Borthwick, A.M., 2005. Dynamic professional boundaries in the healthcare workforce. *Sociol. Health Illn.* 27 (7), 897–919. <https://doi.org/10.1111/j.1467-9566.2005.00463.x>.
- Home Office, 2016. *Ending Violence against Women and Girls*. London. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/522166/VAWG\\_Strategy\\_FINAL\\_PUBLICATION\\_MASTER\\_vRB.PDF](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/522166/VAWG_Strategy_FINAL_PUBLICATION_MASTER_vRB.PDF), Accessed date: 11 April 2019.
- Owens, K., 2015. Boundary objects in complementary and alternative medicine: acupuncture vs. Christian Science. *Soc. Sci. Med.* 128, 18–24. <https://doi.org/10.1016/J.SOCSCIMED.2014.12.020>.
- Pope, C., Ziebland, S., Mays, N., 2000. Qualitative research in health care: Analysing qualitative data. *BMJ* 320, 114–116. <https://doi.org/10.1136/bmj.320.7227.114>.
- Reisenhofer, S., Taft, A., 2013. Women's journey to safety - the Transtheoretical model in clinical practice when working with women experiencing Intimate Partner Violence: a scientific review and clinical guidance. *Patient Educ. Couns.* 93 (3), 536–548. <https://doi.org/10.1016/j.pec.2013.08.004>.
- Richardson, J., Coid, J., Petrukevitch, A., Chung, W.S., Moorey, S., Feder, G., 2002. Identifying domestic violence: cross sectional study in primary care. *BMJ* 324 (7332), 274. <https://doi.org/10.1136/bmj.324.7332.274>.
- Rivas, C., Ramsay, J., Sadowski, L., Davidson, L.L., Dunne, D., Eldridge, S., et al., 2015. Advocacy interventions to reduce or eliminate violence and promote the physical and psychosocial well-being of women who experience intimate partner abuse. *Cochrane Database Syst. Rev.* <https://doi.org/10.1002/14651858.CD005043.pub3>.
- Roberts, G., Hegarty, K., Feder, G.S., 2005. *Intimate Partner Abuse and Health Professionals: New Approaches to Domestic Violence*. Churchill Livingstone, Edinburgh.
- Ross Winthereik, B., Langstrup, H., 2008. The making of self-monitoring asthma patients: mending a split reality with comparative ethnography. *Comp. Sociol.* 7 (3), 362–386. <https://doi.org/10.1163/156913308X306663>.
- Rycroft-Malone, J., Burton, C.R., Wilkinson, J., Harvey, G., McCormack, B., Baker, R., et al., 2015. Collective action for implementation: a realist evaluation of organisational collaboration in healthcare. *Implement. Sci.* 11 (1), 17. <https://doi.org/10.1186/s13012-016-0380-z>.
- Seymour, J., Clark, D., 2018. The Liverpool care pathway for the dying patient: a critical analysis of its rise, demise and legacy in England. *Wellcome Open Res.* 3 (15). <https://doi.org/10.12688/wellcomeopenres.13940.2>.
- Sohal, A.H., Feder, G., Barbosa, E., Beresford, L., Dowrick, A., El-Shogri, F., et al., 2018. Improving the healthcare response to domestic violence and abuse in primary care: protocol for a mixed method evaluation of the implementation of a complex intervention. *BMC Public Health* 18 (1), 971. <https://doi.org/10.1186/s12889-018-5865-z>.
- Stake, R.E., 1995. *The Art of Case Study Research*. The Art of Case Study Research. Sage, London. <https://doi.org/10.1108/eb024859>.
- Star, S., 2010. This is Not a Boundary Object: Reflections on the Origin of a Concept. *Science, Technology & Human Values* 35 (5), 601–617. <https://doi.org/10.1177/0162243910377624>. In press.
- Star, S.L., Griesemer, J.R., 1989. Institutional ecology, 'Translations' and boundary objects: amateurs and professionals in Berkeley's Museum of vertebrate Zoology, 1907–39. *Soc. Stud. Sci.* 19 (3), 387–420. <https://doi.org/10.1177/030631289019003001>.
- Star, Susan Leigh, Strauss, A., 1999. Layers of silence, arenas of voice: the ecology of visible and invisible work. *Comput. Support. Coop. Work* 8 (1–2), 9–30. <https://doi.org/10.1023/A:1008651105359>.
- Taket, A., Nurse, J., Smith, K., Watson, J., Shakespeare, J., Lavis, V., et al., 2003. Routinely asking women about domestic violence in health settings. *BMJ* 327 (7416), 673–676. <https://doi.org/10.1136/bmj.327.7416.673>.
- Valpied, J., Hegarty, K., 2015. Intimate partner abuse: identifying, caring for and helping women in healthcare settings. *Women's Health* 11 (1), 51–63. <https://doi.org/10.2217/wh.14.59>.
- Wenger, E., 1998. *Communities of Practice : Learning, Meaning, and Identity*. Cambridge University Press, Cambridge.
- Williamson, E., Jones, S.K., Ferrari, G., Debonnaire, T., Feder, G., Hester, M., 2015. Health professionals responding to men for safety (HERMES): feasibility of a general practice training intervention to improve the response to male patients who have experienced or perpetrated domestic violence and abuse. *Prim. Health Care Res. Dev.* 16 (3), 281–288. <https://doi.org/10.1017/S1463423614000358>.
- Wright, S., Porteous, M., Stirling, D., Young, O., Gourley, C., Halliwell, N., 2019. Negotiating jurisdictional boundaries in response to new genetic possibilities in breast cancer care: the creation of an 'oncogenetic taskcape'. *Soc. Sci. Med.* 225, 26–33. <https://doi.org/10.1016/J.SOCSCIMED.2019.02.020>.
- Ziebland, S., McPherson, A., 2006. Making sense of qualitative data analysis: an introduction with illustrations from DIPEx (personal experiences of health and illness). *Med. Educ.* 40 (5), 405–414. <https://doi.org/10.1111/j.1365-2929.2006.02467.x>.