

The Journal of Applied Behavioral Science

<http://jab.sagepub.com>

Toward More User-Centric OD: Lessons From the Field of Experience-Based Design and a Case Study

Paul Bate and Glenn Robert

Journal of Applied Behavioral Science 2007; 43; 41

DOI: 10.1177/0021886306297014

The online version of this article can be found at:
<http://jab.sagepub.com/cgi/content/abstract/43/1/41>

Published by:

 SAGE Publications

<http://www.sagepublications.com>

On behalf of:


NTL
INSTITUTE

NTL Institute

Additional services and information for *The Journal of Applied Behavioral Science* can be found at:

Email Alerts: <http://jab.sagepub.com/cgi/alerts>

Subscriptions: <http://jab.sagepub.com/subscriptions>

Reprints: <http://www.sagepub.com/journalsReprints.nav>

Permissions: <http://www.sagepub.com/journalsPermissions.nav>

Citations (this article cites 16 articles hosted on the SAGE Journals Online and HighWire Press platforms):
<http://jab.sagepub.com/cgi/content/abstract/43/1/41#BIBL>

Toward More User-Centric OD

Lessons From the Field of Experience-Based Design and a Case Study

Paul Bate

Glenn Robert

University College London

This article argues for a major shift in focus from the strong management orientation of organization development (OD) to a more “user-centric” OD, one that seeks to mobilize and privilege change on behalf of the consumers or users of an organization’s product or service, involving them at every stage of the design process, from problem diagnosis to solution generation and implementation. This reconceptualization of OD draws its inspiration from the rapidly expanding field of experience-based design (EBD), a subfield of the design sciences whose distinctive features are direct user participation in the design process and a focus on designing experiences as opposed to systems or processes. The article reports on an original EBD intervention methodology designed and tested by the authors and colleagues in a cancer clinic within the National Health Service, which following successful “proof of concept,” offers OD some promising new directions for the future.

Keywords: change; organization; design; users; experience

REDEFINING THE CLIENT AND THE TASK FOR ORGANIZATION DEVELOPMENT

A frequently asked question in organization development (OD) is “Who is the client, and whose ‘felt need’ should it be responding to?” Apart from the occasional call for it to become more labor or “worker-centric” (Baba, 1998; Nord, 1974), OD practice for the past half decade has remained stolidly “management- or leader-centric”

in outlook, and this is hardly surprising given that it is senior management that normally pays any consulting fees and is also the group that is seen to hold the key to significant and successful change within the organization (Boss & Golombiewski, 1995). In answer to the question, it is therefore almost a taken-for-granted of the field that the “principal client” (Massarik & Pei-Carpenter, 2002) is the senior leader (or team), with the OD consultant acting in a “close relationship” with him or her in the role of “trusted source of advice and . . . provider of counsel . . . to help guide the leader in discovering the answer” (Carucci & Pasmore, 2002, p. 2). This assumption of senior leader as principal client and OD as a “managerial strategy” is a feature of most of the early classic works in OD and has rarely been challenged either before or since (cf. Beckhard, 1969; Bennis, Benne, & Chin, 1961; Cummings & Huse, 1989; French, Bell, & Zawacki, 1978).

Meanwhile, OD as a field of research and practice is said to be languishing and losing its zest and its traditional assumptions and practices coming under increasing scrutiny, most notably from within the OD field itself (cf. December 2004 issue of *JABS*). Against this background, we wish to engage with this current renewal debate by challenging the long-standing assumption of “leader as client” and the companion notion of working for the “client organization.” In the following we shall propose an alternative to this internal-facing, elitist bias in the form of an externally oriented “user-centric,” user-empowered OD, one that seeks to mobilize and privilege change on behalf of the consumer or user of a product or service. This alternative calls for inclusion of the user or consumer as codesigner in the whole development process, from design to implementation and even beyond, to spread and sustainability. The aim of such a process, which is modeled on the rapidly expanding field of experience-based design (EBD) in the design sciences, is not so much to improve organization health, performance, or effectiveness as the product or service itself, or more accurately, the users’ experience of it. Thus, in place of the usual dyadic relationship between OD consultant and top organizational leader, there is a triadic relationship between consultant, leader/staff, and user in which the users’ needs and outcomes take precedence over all else and where the stress is on improvement—making things better in terms of that experience rather than simply changing or developing. To put it very plainly, the switch is from “leader as client” to “lead user as client;” the notion of the “client user.” This placing of the user of a service or a product at the very heart of the design process has become today’s *grande idée* in the design industry professions such as architecture, computer, building, product, graphic, and service design, and we now wish to put the case for extending it into OD.

The case study research and literature review on which the article draws was funded by the National Health Service Institute for Innovation and Improvement (<http://www.institute.nhs.uk/>). We are grateful to “thinkpublic” (our design partners in the case study) for the representation of Figure 2 and to the two reviewers for their helpful comments. All responsibility for the final text remains with the authors.

Professor Paul Bate holds the chair of health services management within the medical school at University College London in the United Kingdom.

Dr. Glenn Robert is principal research fellow within the medical school at University College London in the United Kingdom.

The empirical basis to the article is a yearlong action research study within the English National Health Service (NHS) carried out by a team whose members included the authors of this article. The case study involved prototyping, piloting, and field testing an EBD process as part of a wider design methodology in an acute hospital with the aim of improving the care and treatment experience of head and neck cancer patients and their carers. This codesign process saw the users of the service sitting and working alongside staff, senior managers, and physicians—the providers of the service.¹

In this article, we want to explore what the burgeoning, multidisciplinary field of interactive or user-centric design, and particularly one of its variants, experience-based design, or experience-based codesign to give it its full title, might bring both to OD and health care improvement (Bate & Robert, 2006) by way of new frameworks, approaches, methods, and processes. In addition, we want to explore what is implied by the idea of OD specialists and health care practitioners becoming more like the kind of designers found in the design professions generally and in participatory or codesign more particularly (Bate & Robert, in press).

THE FIELD OF INTERACTIVE EXPERIENCE-BASED DESIGN

The field of interactive EBD, from which this work directly draws, is made up of a loosely connected network of design professionals who employ a variety of different labels to describe their work (Shedroff, 2001, 2004a, 2004b; Experience Design Network, 2006). Despite differences in nomenclature, the one thing that binds them together is the aim of making the service or product experience “better” for the user (although motives vary) and uniquely, achieving this by making the user integral to the design process itself. Frank Gehry (2003), one of today’s leading designers and building architects, puts the idea at its simplest when he says, “Without the client, you’re one hand, you’re the sound of one hand clapping. The client is the variable, and if the client engages with you, that’s the opportunity” (p. 23). What Gehry was getting at was the fact that leaders and managers may have a wide variety of knowledge and specialist skills, but only users have that unique personal knowledge that comes from having experienced the service or product firsthand, of being on the receiving end, and the special insight that gives as to how it might be made better in the future.

EBD consists of two core elements, a participatory element, which sees users directly involved in the design and development process for a product or service (no third-party representation), and an experience element, which focuses on improving the whole experience of that product or service in terms of how it looks and feels. We examine each of these briefly in the following.

User Empowerment and Participation in the Design and Change Process

Participatory and collaborative approaches to change are obviously no stranger to OD, particularly OD in health care (Boss, 1989; Bragg & Andrews, 1973), but the notion of systems, product, and service design for, with, and by the users (Briefs, Ciborra, & Schneider, 1982) takes this involvement a step further, with the

emphasis on user participation rather than the more usual staff participation (Bartunek, Greenberg, & Davidson, 1999).

Participatory codesign is not solely user led however. The *co* prefix in codesign in this instance suggests more of a partnership, with internal staff and users meeting and engaging in “service dialogues” (Forlizzi & Battarbee, 2004) with each other as they search for new and innovative ways to improve a product or service. At the same time, it does not mean trying to make the users design—or for that matter, change—“experts” but having them there precisely because they are the consumers not the experts, the “lead users” rather than leaders (Von Hippel, 2005), with that precious and very special kind of firsthand knowledge and lay expertise we call experience. Hence, codesign is an extension of the Likert-type influence continuum that takes user involvement one step further on but stops short of control, or in the case of our particular area of work, of a “patient-led” service (Bate & Robert, 2006).

A Focus on the Aesthetics of User Experience

EBD is a particular form of participatory design that puts the emphasis on changing or improving the experience of a product or service rather than the product or service itself—the second core element of this particular approach to design (Shedroff, 2004a, 2004b). Formally defined, it is therefore a user-focused design process with the goal of making user experience accessible to the designers, to allow them to conceive of designing experiences rather than designing products, systems, processes, or services. Experience is designated as how well people understand the product or service, how they feel about it while they are using it, how well it serves its purpose, and how well it fits into the context in which they are using it (Alben, 1996). By identifying the main areas—“moments of truth” or “touch points” (Gage & Kolari, 2002)—where people come into contact with the service and where their subjective experience is shaped, and therefore where the desired emotional and sensory connection needs to be established, and working with the front-line people who bring alive those various touch points, the design emphasis shifts from abstract processes to subjective and often highly emotionally charged experiences.

Industrial designers have claimed “Understanding experience is a critical issue for a variety of professions, especially design” (Forlizzi & Battarbee, 2004, p. 4), and so too, we shall argue, might it also be for OD. We shall propose that designing services, environments, interactions, and processes for the human experience—literally “targeting experience”—would be one of the core challenges of a new user-centric OD, which is not just about being more user-centered or promoting greater user involvement but about placing users’ experience goals at the very heart of the organization design and development endeavour. The nature of the challenge is to understand their experience at a deep level, always bearing in mind that it includes all aspects of subjectively experiencing a product or service, physical, sensual, cognitive, emotional, kinetic, and aesthetic, and to use this understanding to design a set of experiences that will be more successful and fulfilling for the users than it has been before. This is not reengineering in another guise however, and designers are under no illusion that experiences can be “engineered.” Fulton Suri (2003) for example notes,

Experience itself is personal and, though designers can influence it, it cannot be designed. Indeed many aspects of experience—those affected by people’s internal states, moods and idiosyncratic associations or by context—are independent of designers’ control. But experience is also influenced by factors that designers do control: the formal sensory qualities, sound, feedback, rhythm, sequence, layering and logic—all the expressive qualities inherent in the products, environments, media and services we design. (p. 41)

Forlizzi and Ford (2000) say very much the same thing when they point out that “We can’t really design an experience, only the mechanisms for creating it, and the interactive and expressive behaviors that modulate experience” (p. 27).

As context for this article, we should like to draw attention to the fact that much of the current discussion about the future of OD (and organization studies more generally) has been around the relevance and utility questions (Bradford & Burke, 2004; Romme, 2003, 2004; Rynes, Bartunek, & Daft, 2001). In the case of the U.K. NHS, any work that focuses on closing the current participation and experience gaps described here would seem to address both concerns, and what could be more relevant than a process that seeks to improve the quality of the world that people live in?

WHAT IS A GOOD DESIGN?

EBD is a paradigm, method, and process. Before getting in to the last two of these by way of the case study, we want to offer some initial reflection on the first as we believe that the design paradigm, and EBD in particular, is about starting OD and health care improvement from a different place.

Traditionally, the aim of OD has been to change the organization to make it more “healthy” and effective. However, within a design framework, the focus shifts from change to improvement, from process to outcomes, the role of the OD professional in a design context being to bring his or her particular skills and knowledge to bear in helping to design and implement an intervention that will ultimately lead to a “good” (or better) design and a “good” experience for the users. This invites the question, what is design (and how similar is it to organization design)? Furthermore to this, it asks, what is (a) good design, or even (a) great design (think of some of your favorite designs, from airplanes to domestic products, restaurant services to health services)? The intriguing point here is that designers claim that these are fundamentally the same whatever they are and wherever they may be and regardless of whether one is talking about buildings or computers, products or services. Berkun (2004) boils it down to three things (Figure 1):

- a. performance (P): that the product or service does what it is supposed to do. In the case of health care, how efficiently it does the job of treating and caring for the patient;
- b. engineering (E): how safely and reliably it is engineered or (in the case of a service) discharged (no harm, no error, consistency, durability, reliability);
- c. aesthetics (A): that is a good experience and looks and feels good when you interact with or use it, the issue of the interfacing and interactivity between the user and the product or service.

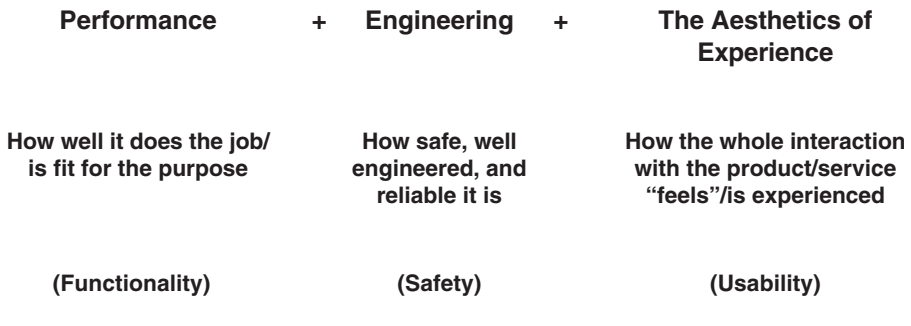


FIGURE 1: The Components of Good Design

SOURCE: Berkun (2004); adapted by Bate

Interactivity, the third element is the distinguishing feature of EBD, hence the challenge for an OD practitioner acting out of this paradigm would be to help those involved to design and develop a process that will lead to the product or service being “better” in the user’s terms—subjective estimates being more important here than objective ones. Testing out this new paradigm for organization development and improvement was one of the core aims of the following case study.

THE HOW OF EXPERIENCE-BASED CODESIGN: A CASE STUDY

The following case study of implementing an experience-based codesign approach draws on our work with head and neck cancer patients and staff to improve services (on all three aforementioned design dimensions and especially the third one, experiences) within a secondary care hospital in the south of England. In describing the case study, we seek to illustrate how an OD practitioner could use and participate in an EBD approach. Given that the approach itself retains the traditional core of OD (i.e., EBD can be overlaid on top of a traditional OD intervention), this is not some great leap forward but rather a reconceptualization of the OD process and aims. Our proposition is that it is within the coanalysis and codesign by staff and users (employing concepts such as touch points and design rules) that EBD can help forge new directions for OD while at the same time OD can bring change models and skills to EBD that designers in other fields may currently lack. The case study presented in the following explores in turn the overall EBD process, touch points, and design patterns.

The EBD Process

Figure 2 shows the overall approach employed in the case study and highlights that this is indeed a codesign process, with both staff and patients involved from the outset, first on their own and then together in a working partnership. Thus, although

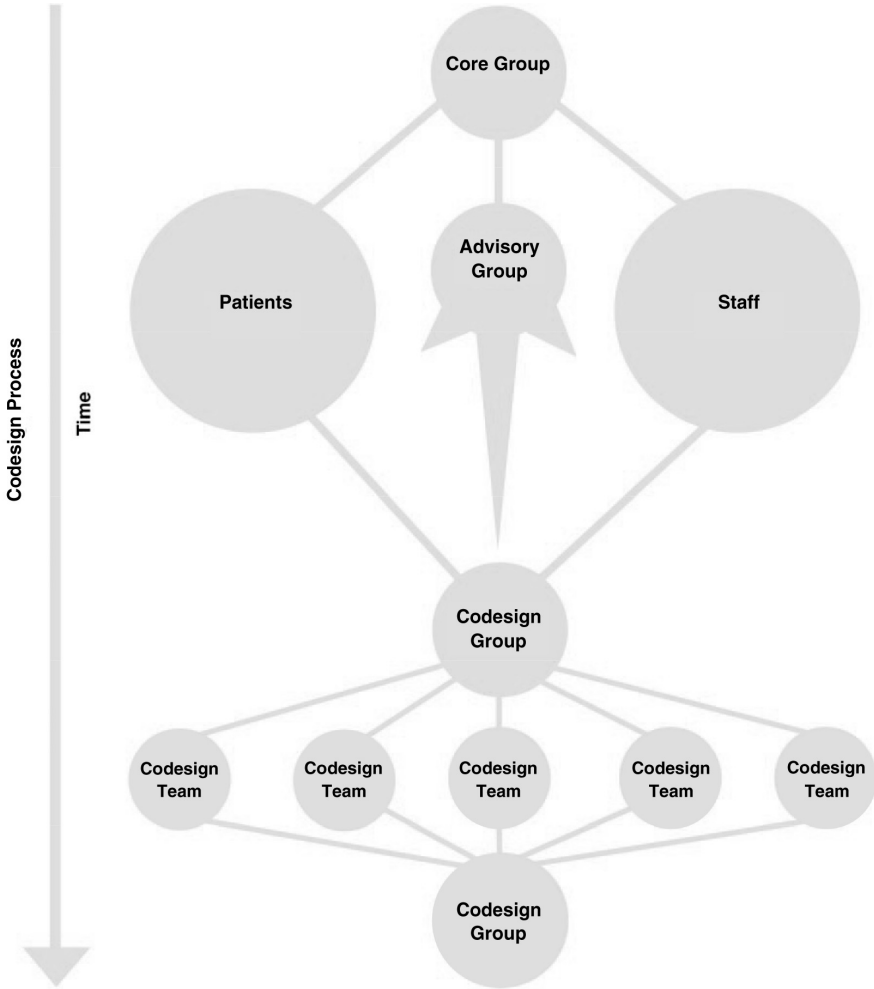


FIGURE 2: The Experience-Based Codesign Process

EBD is highly patient centered (in aiming to make it a better experience for patients), it is not patient led as such. Rather, leadership is shared between staff and patients in what is effectively a process of codetermination based on a set of common aims and purposes. The various elements shown in the figure are described next.

Core Group

In this case, the core design group consisted of the OD researchers (two in this particular case study and this article's authors), an external professional graphic

designer (who prepared various project materials, newspapers, and tools), a filmmaker (whose film of the process provided both a resource during the project and a record of what had been done), internal hospital improvement specialists (two), and the national sponsor of the project (one).

Advisory Group

This group was made up of patient and carer volunteers who were currently using the service or had used it in the recent past (four), plus internal staff, such as the chief nurse, medical director, general manager, and a head and neck (H&N) cancer surgeon. The role of the steering group was broadly to “advise, encourage, and warn” and to provide a performance management role in respect of the core group. In practice however, given that this was an experiment in which everyone was feeling their way, the advisory group was to play a wider role in helping to agree both the specifics of the EBD approach and design the intervention itself.

Staff

The EBD process began with a combination of direct observation of the H&N clinic and one-to-one interviews with staff (led by the two organization researchers but involving other members of the core group in rotation to allow for the transfer of learning to the organization), its purpose being to enable the core group to hear and learn about the service (think of this also in terms of an induction and familiarization), their experiences of it, and how they felt patients also experienced that service. Such observation and interviews provided early insights into the key touch points in the process and together with input from the advisory group enabled an interviewer’s guide for patients to be compiled and piloted and pretested with the patient members of the advisory group. In terms of the *co* part of codesign, it should therefore be noted that patients and staff not only participated in the later design of services (the intervention) but also in designing and evaluating the research methodology and approach for the project itself.

Patients and Informal Carers

Observation and staff interviews were followed by interviews with patient volunteers and informal carers (typically partners or friends)—in this case study filmed and tape-recorded with the patients’ formal consent—which took place either in their homes or the hospital, the choice of venue being theirs. In all, 8 patients (4 of whom were interviewed with their carers), who were identified and recruited either directly by clinic staff or via a general poster displayed in the waiting room of the clinic, were sent the main headings of the ground to be covered in advance so as to help them begin the process of recalling and reflecting on their experiences. The interview guide retained the rough chronology of events (primary care, outpatient clinic, treatment, follow-up), allowing the interview to follow the course of a narrative or story—“So, let’s begin at the beginning,” “What happened next?” “Can you remember how that felt at that point?” “If you went through that again what would make it

easier/better for you?”—so that it was the patient taking the researcher through every stage of his or her journey as naturalistically as possible and with minimal intervention from the interviewers.² Thus, the patients and carers were more like informants or guides than interviewees, sometimes completely passing over points in the journey that we and staff had expected to be important and at other times focusing on things that to us seemed almost minor or trivial but to them had major symbolic, cognitive, or emotional significance. The stories concluded with a series of questions around particular themes and issues such as information and level of involvement in choice of treatment.

Having taken away and analyzed the data from the staff and patient interviews and the direct observations of the treatment process, the core group convened full meetings of staff on their own first and then patients and carers on their own to

- a. feed back (in this case study via both film of the interviews and other less “high-tech” materials) and validate the findings relating to their stories and experiences;
- b. correct or add in anything that may have been missed out;
- c. agree a two-column agenda of items, the first column consisting of issues they wished to carry forward to work on jointly with the other half of the codesign group and the second of issues they preferred to work on separately; and
- d. jointly design the follow-up codesign event (another example of staff and patients codesigning the design intervention itself).

Codesign Group Meeting

This meeting represented the first coming together of staff and patients face to face to exchange their experiences of giving and receiving the service, using film and exercises to identify and define key touch points where improvements might be made.³

Touch Points

The aim of the patient and staff interviews and observational work, both singly and in combination, was to help patients, carers, and staff to identify and then jointly explore the many and various touch points on their care or treatment journey, with a view to designing better future experiences around these. Touch points, which we began to explore earlier, represent the key moments or events that stand out for those involved as crucial to their experience of receiving or delivering the service. Touch points are quite literally points of contact with the service but also intensely personal points on the journey where one recalls being touched emotionally (feelings) or cognitively (deep and lasting memories) in some kind of way; the points of emotional and cognitive connection,⁴ the “big moments” (as an oncologist we interviewed called them) that patients and users will keep coming back to in the telling and retelling of their stories of care in the years following their treatment.

This concept of identifying touch points is central to EBD in all its forms. In the early days of the airlines they were referred to as the “moments of truth,” the crucial times when you call to make a reservation to take a flight or when you arrive at the check-in desk when your overall view of the airline, good or bad, is formed (Carlzon,

1987), whereas the less dramatic terms *contact points* or *critical points* are now the preferred choice of customer experience and customer management professionals. From an EBD designer's point of view, the quality of the users' experience of a product or service is the sum of all their interactions with that product or service, particularly those around the various touch points (positive and negative) where the experience was at its "hottest" or most intense.

As part of the feedback to the patient group, attendees were asked to map (on a wall chart of the many touch points of their journey) the emotions they felt at each of the touch points previously identified in the interviews. The result was an emotional roller-coaster revealing the highs and lows of their journeys, the emotional highs being recorded on post-its and posted above each touch point on the chart and the lows posted below (one patient stuck one of her lows on the floor to show just how unhappy she felt at one particular point in time). The Joinedupdesignforhealth (2005) team refers to these as the "chain" or "necklace" of subjective experiences that make up the patient and carers' journey, and which may be very different from the objective formal process map or clinical care pathway. Methods may vary, but any touch point analysis should always be striving to achieve what computer scientist David Gelertner (1992) calls in his book *Mirror Worlds* "topstight," an informed vantage point that provides parallel insights into both the big picture and the way its component parts fit together to form the whole. We cannot stress how important it was that those involved were starting the design process from the same vantage point and addressing the issue of "fragmented experience" from the outset.

As Figures 3 and 4 make clear, it is a fairly straightforward task to reconcile a subjectivity-based "experiences map" (the exemplar "callouts" in Figure 4) with the more familiar objectively based "clinical process" map (Figure 3) found in the mainstream service redesign literature, which to date has formed the basis of most health care service change/improvement interventions. The traditional process map in Figure 3 objectively charts from left to right the ideal steps in the first stage of the head and neck cancer patient's journey (namely, attendance at an outpatient clinic) and is well suited to identifying problems and solutions and finding ways of compressing or cutting out the cul-de-sacs and unnecessary steps on the journey. This is the familiar notion of process redesign that is especially well suited to dealing with the functionality (P) and engineering (E) aspects of the service (Figure 1).

In contrast, the staff, patient, and carers' stories as related in the interviews and supplemented by the observational data revealed a dimension of care and treatment that is largely missing from the process map. This missing dimension is the chain of experience or experience map shown in Figure 4. Each of these callouts represents an "experience anecdote" that arose naturally as patients and carers related their stories of receiving care and treatment. These came entirely from the tellers (emic, actor-centered) and were neither expected nor predetermined in any way by the interviewer. Behind each callout (and only a small number are included in Figure 4), there was a story to tell, a story that would take in the whole range of memories and emotions, good and bad, from wry humor, hope, optimism, security, and relief to anger, fear, vulnerability, confusion, and disbelief.

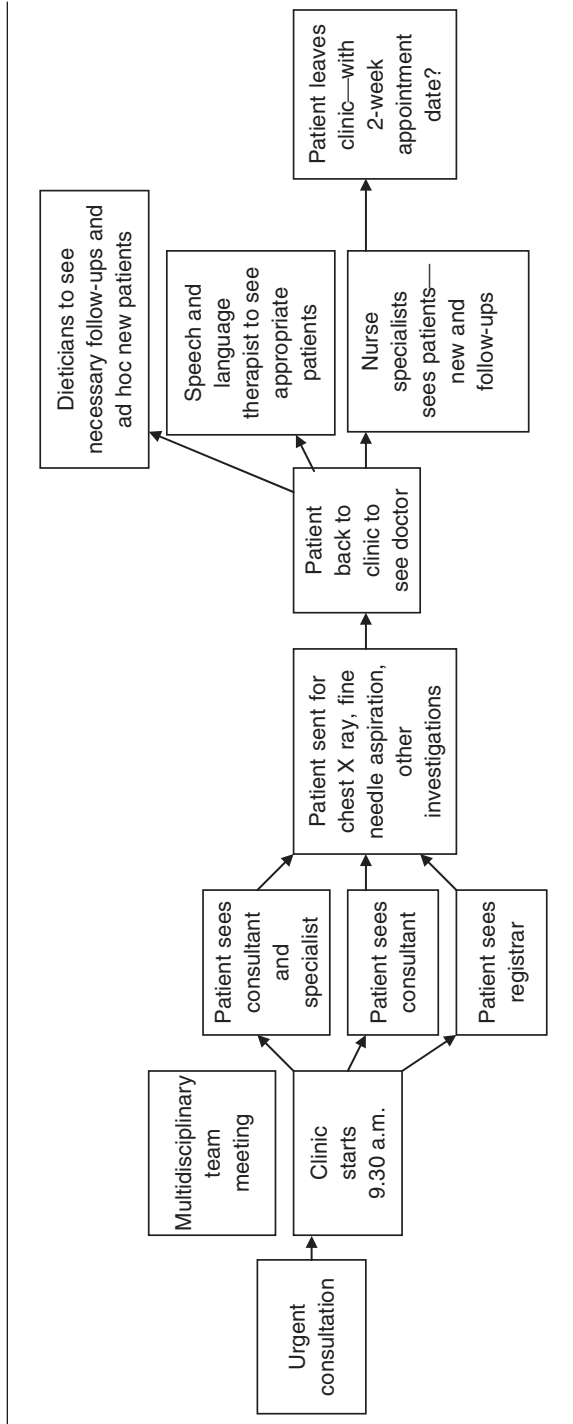


FIGURE 3: Traditional Staff-Led Process Map: Head and Neck Outpatient Clinic

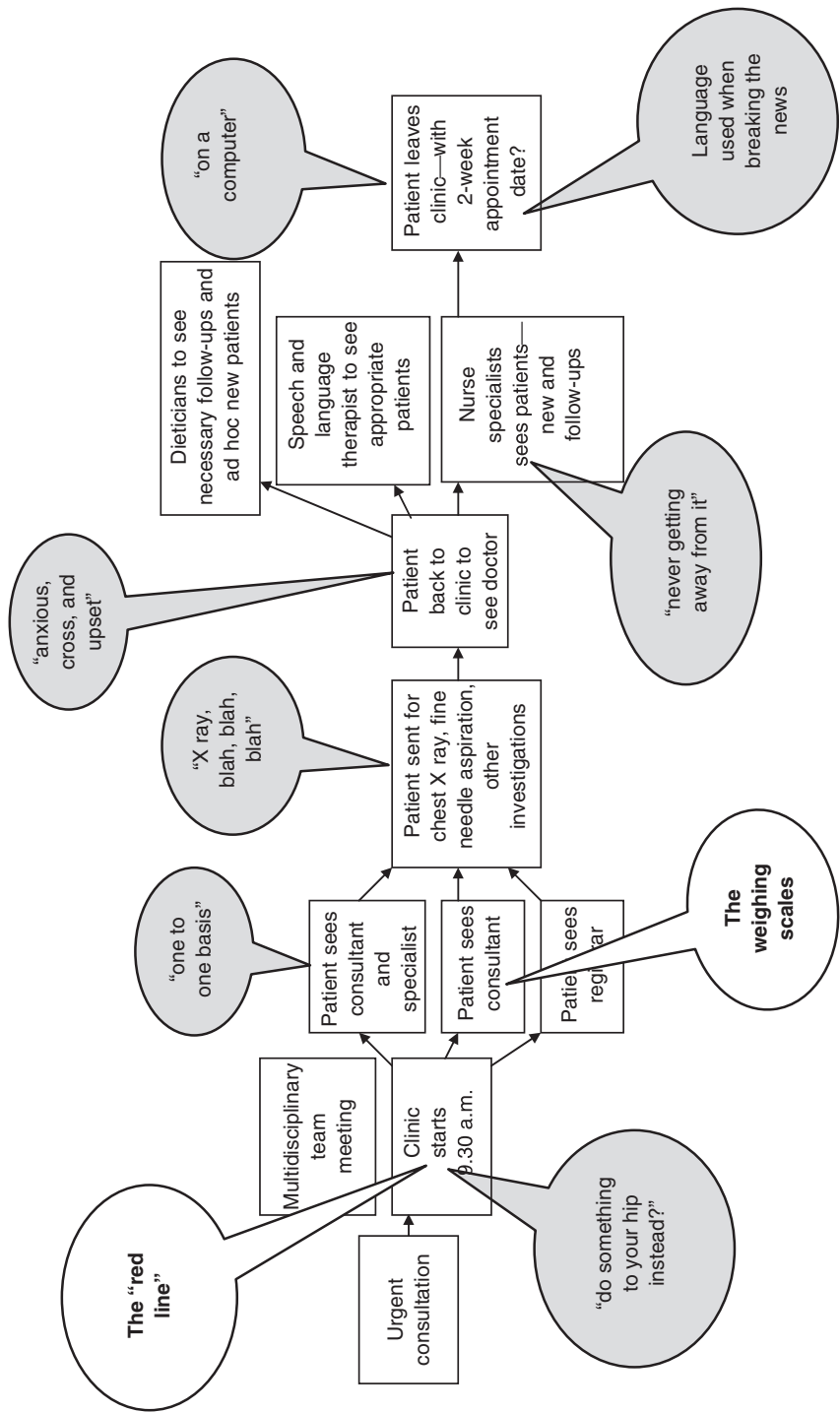


FIGURE 4: Patient Experience Map: Head and Neck Outpatient Clinic

What follows are extracts taken from the huge arsenal of patient and carers' touch point stories we gathered. Limitations of space prevent us from describing each of the touch points shown in Figure 4, but the two examples (the unshaded in the figure) serve to illustrate what a rich source of knowledge, guidance, and insight these emotionally charged touch points provided within the design process.

The red line. Just before the reception desk in the outpatient clinic there is a red line painted on the floor, behind which patients are expected to queue before "checking in." As we observed the comings and goings of the clinic we noticed that this line was causing much confusion and embarrassment to patients who, as they arrived for their appointment, often failed to see the line and walked straight up to the reception desk, only to then be told to go to the back of the queue that they had just unwittingly strolled past. We were subsequently informed by a member of the staff that the line had been put there by staff to protect patient privacy. In fact, it served no such purpose as sitting in the clinic we could clearly hear every word of the exchange between receptionist and the patients as they arrived; rather—almost from their very first interaction with the service—the line served only to make many of the patients feel uncomfortable and silly when they failed to notice it. The line also held symbolic portent for patients:

I would think that once you're over that line you move into the institutional side, as it were. If you stand on this side, you're a client, you're a person. If you go over that line then you are the property of the hospital.

And yet when we reported our interim findings to the medical director of the clinic prior to the staff feedback session, his reaction was "I didn't even know there was a line."

The weighing scales. Before patients are taken through to the consultation rooms in the clinic they are asked to remove their shoes and to step on to a set of weighing scales. The scales are in a side corridor but in full view of everyone sitting in the clinic. One patient commented,

I think that could be done in the consultants' room. It only takes seconds. I don't know why they have to weigh somebody before they go for their consultation . . . it only takes seconds, it would be in a much more private environment. Because you go in there in your ordinary clothes and you have to take your shoes off.

We observed patients—either through age, frailty, or obesity—who, in full view of all the other patients who were sitting in the clinic, were unable to bend down to remove their shoes. In addition, "There is nowhere to put your coat and shoes and things, and you're looking for somewhere to balance it all while you jump on." The medical director's reaction to his patients' evident discomfort at having to be weighed in such a setting in this case led him to say "Let's just move them [the weighing scales]." This response illustrates how solutions to some of the issues identified in an EBD process can be implemented almost immediately; other touch points

require longer term solutions, including for example the reallocation of resources or new staff roles.

Of course, these stories and touch points continue beyond a patient's first attendance at the outpatient clinic and run for the whole of the care and treatment episode, often engendering stronger emotions than embarrassment or mild discomfort of the type caused by the red line or the scales. For instance, after surgery and often after a short stay in the intensive care unit, patients would be moved to a ward, typically for a week or more. It became clear that this particular part of the patients' experience typically contained several touch points that had a profound effect on their overall recollection of the interaction with the service:

And then suddenly the pain started to kick in. Wow! I'm allergic or I react to anything that's a codeine derivative, and I'd made this quite plain, but there wasn't anything else on offer to me at that time, other than paracetamol, headache pills! And I was eventually persuaded to have minute dose of diamorphine. Wow! Never again! I hallucinated. My hand was a big octopus and I had to keep making sure they were on the bed. And I had this terrible moment of, like, nightmares and things, and I couldn't make anybody hear, because the locker was behind me and the bell was on it and this was in the early days when I was all trussed up with my drains. And there was no way, even if I'd been aware of it, I couldn't reach the bell. The night before I couldn't actually call loud enough, and even when a nurse was in the ward, my voice didn't seem loud enough to attract her, so I couldn't get any help, and then later on in the night, I got these chest pains and I could feel my chest getting tighter, and I eventually managed to attract some attention and she said, "You should have rung the bell." And I felt quite angry about it. And I was angry, too, because they said, "The doctor's coming," and no doctor came, and I said, "Please stay with me because I feel I'm going to die." And I really did, because these chest pains were so bad and I was still hallucinating and I just wanted to know that I was still living and there was somebody with me. I think it was absolute terror.

This sense of complete helplessness in the face of fear is a good example of the kind of challenge a codesign group faces as it struggles to find ways of restoring control and peace of mind to the patient and avoiding this (literally) nightmare experience in the future.

Armed with both traditional process "boxes" and experience callouts (and the poignant, touching—often devastating—stories the latter contain), service designers, staff and patient, can begin to explore areas where improvements might be made, constantly switching between the objective and the subjective journey representations and testing among other things whether a change to the first might help effect an improvement to the second or whether a change to the second may require some kind of change to the first. In this regard, the stories contain all of the information designers require for the design process, and probably more besides. As the extracts show, they can refer to interactions with staff, the physical and cultural environment, the various steps in the journey, or clinical procedures.

Moreover, just as people can be oblivious to some of the big things, so too can small things (at least to the outsider) acquire a disproportionately greater significance in the totality of experience, referring to qualities that do not even show up on the "ideal" process map: the receptionist's welcoming smile of recognition; the nurse who takes your hand at a particularly difficult moment or sits down to read poetry with you; the words of the doctor as recalled by his patient of "You came in as a

friend needing treatment, not as a patient with an illness;" or on the negative side, the wrong word or look or an unfortunate interaction with a member of staff. For example, language and script are often more important in the experience than either physical environment or setting. To take an obvious example, how does the surgeon actually tell the patient he or she has cancer? How does the surgeon address this "management of information" issue? The patients told us that the words that are used in this exchange—the "breaking the bad news" moment or touch point—are far more important than where the news is relayed. As part of our early observational work we sat in on more than 50 patient-doctor consultations and scribbled down the words used by the doctors during this crucial touch point. The words included *blisters*, *lumps*, *ulcers*, *polyp*, *warty things*, *necrosis*, *lesions*, *naughty tumor*, *aggressive*, *progressing*, *carcinoma*, *precancerous change*, and finally *cancer* itself. This variation prompted us to consider what the choice of language implied for the patient's experience at this key moment. Did the language used in fact matter? And why was there such variation anyway? As the patients subsequently told us, this choice of words as well as the pace at which information is disclosed and style of their delivery did indeed matter a great deal.

Of course, in all of this, the fact that it is codesign—that patients are there in person, sitting down with staff and designers, discussing and explaining the stories and how it "feels" to be in them—is what gives the design process its power, poignancy, and above all, impact.⁵ Including users' stories and experiences in the design process may be one thing, but having users there in person and directly involved in examining and offering interpretations of their own experiences within the design process itself is quite another. Further power is added to the codesign process when not only the narrative voice of the patient and user are heard but juxtaposed with the voice from the "other side," that of the staff member. The result is two, often very different cross-cutting "takes" on the big moments.

The first of four scenarios that we found in the data was where both patient and staff member corroborate a touch point where improvements to patient experience could and need to be made. As an illustration, consider one of the most critical touch points in the case of a cancer patient: the point we have already briefly referred to when they are told for the first time that they have cancer. Our research with such patients leaves us in no doubt that what they are told and the manner in which they are told are etched as indelibly on the memory as a deep signature cut into the bark of a tree. So how does it look from each side? In this case, both patient and physician clearly agreed that this is one touch point that needs to be addressed in the department's experience design process. Equally of interest however are three other scenarios:

- a. touch points identified by patients and carers/caregivers that have never been seen as such by staff and that therefore come as a complete surprise to them;
- b. touch points identified by staff that turn out not to be touch points for patients at all, again often to the surprise of staff; and
- c. touch points that are visible to staff but not to patients.

One example of a touch point identified by patients that came as a surprise to staff (a) was their lack of preparation and understanding of what the term *radiotherapy*

planning might entail. Although one staff member said to us, “I think going through the planning process is very difficult but we go to great lengths to explain what’s involved,” the patient perspective was very different:

And she [oncologist] told us about the process of radiotherapy and wrote down on a very useful leaflet that she gave me, six and a half weeks Monday/Friday radiotherapy planning beforehand and that I would need what she called a shell and I would call the mask, and I think I probably had to wait about five weeks before the planning began, but what I didn’t realize was that planning is nothing to do with sitting around a table discussing this. It’s being “done to” and that was only disconcerting, but it was probably one of the worst periods. So we went down to [the radiotherapy center] for the first planning meeting and sat outside this room which had red lights flashing on and off. We waited about half an hour because there was somebody else in there, and I did wonder why there were red lights and I still thought I was actually going to be discussing something with someone. So when I was called in, there was a nurse who I didn’t see immediately, a female nurse, but the person I saw, somebody called James . . . I’m sure he won’t mind me mentioning his name, came and said “Hello” and his name was James and said, “Right, strip to the waist!” and I was absolutely dumbfounded because I simply didn’t expect that this was anything to do with an examination or whatever. And I can remember the nurse, when I was on the couch, trying to pass me some stiff paper to put over the top of me, and of course, it wouldn’t stay on any way and looking back it was probably quite amusing, but at the time it wasn’t really. And I know that somebody else actually said something to James and he said, “Well, I’m so used to it” and of course he is, but we aren’t.

An example of the second scenario (b), a touch point for staff that turns out not to be a touch point for the patient, would be the staff anticipation (as reported to us) that the cramped and crowded conditions of the fortnightly outpatient clinic and the long waits therein would be a major negative touch point for patients. Staff were therefore surprised to discover that although being a source of irritation to patients, such issues were not a major touch point (“If I am kept waiting it can only mean someone else’s need is greater than mine; I would hope to receive the same consideration”); indeed, the patients told us that even though a new clinic would be nice, it would probably not dramatically alter their experience of the service.

Finally, an example of a touch point visible to staff but not to patients (c) would be the multidisciplinary team meeting that preceded each fortnightly clinic (which we also observed on several occasions). Patients were simply unaware that this meeting, involving discussion of the crucial treatment options for each of the new patients to be seen in the clinic later that morning, even took place; nonetheless, it was a key moment in terms of decision making with regard to each patient’s future management and care.

For those involved, the rewards of a systematic and careful touch point analysis, such as the one outlined earlier, are process insights at two levels, each contributing to the dynamism of the change intervention itself in its own distinct way: first, insights about specific experiences that left an indelible memory or trace in the patient’s heart or mind, positive or negative, these being the specific targets to which the EBD change/OD process can subsequently be directed, and second, insights about the whole experience of care, in its totality from beginning to end—the chain of experience.

Regarding this latter point, in our work on EBD we have been struck by what is, or should be, an obvious fact, namely, that individual members of staff only ever see

a small part of the whole patient's care or treatment experience, the part with which they are directly involved. The dangers and challenges of this are that surgeons, for example, see the cancer patient for diagnosis and surgery, then may "lose" them for months while they undergo radiotherapy or chemotherapy treatment in a different part of the hospital or even at a different hospital. When they see that patient again, in experience as well as clinical terms this is a very different patient from the one they saw some months earlier, and yet they may not fully appreciate or take this into account in the ensuing service they give. Handovers, the cause of a good deal of comment and criticism in health care, are therefore not just a "systems" matter but also (and this is rarely brought out in the literature) a "continuity of experience" matter, and to this extent they will only begin to be improved when staff are in a position of being able to appreciate the patient experience as a whole.

Design Patterns

The long list of touch points collated from the project data provides a description of patient (and staff) experience. To improve services, we then needed to move to prescription, to find the "must dos," the imperatives, that would improve the user's experience of the service. To this end, the next stage of the EBD process was to move to discovering the design patterns or rules, should they be implemented, that would bring about such an outcome. As Plsek, Bibby, and Whitby (2007) describe in this issue, design rules are heuristic statements in the form "If you want to achieve outcome Y in situation S, something like X might help" (Romme as cited by Plsek et al., 2007; see also Romme & Damen, 2007 [this issue], for further discussion of construction principles and design rules). Design patterns occupy the strategic space in which (descriptive) narrative is translated into (prescriptive) rules and directions for action.

Based on this case study, we have found that we can indeed extract design patterns from rich narrative and we can also help patients and staff to derive them for themselves from focused discussion around the touch points as part of the EBD process. Taking the earlier touch point of the patient feeling confused about what radiotherapy planning entailed, we could frame our joint search for a design rule around this part of the patient journey in terms of "If you want to improve the patient experience of receiving radiotherapy treatment (Y) in the regional cancer center (S), something like X might help." We might upon first examination of the touch point quoted earlier, for example, deduce (not unreasonably) that one design rule (or X) might be "Always ensure that the patient knows what is coming next." However, when we showed the films of the patient interviews to all the patients as a group it became clear that this—on first sight—commonsense design pattern might have a very negative effect on patient experience. After viewing the films for the first time, one patient said,

I took it [my cancer] as a horse race . . . take it one jump at a time, coming up to the next fence, up and over, little hurdles. . . . I gathered strength after every hurdle to go to the next one. . . . If I had known I had a 20 foot jump right at the end I would have laid down.

Beyond the specific, immediate response of "Let's tell them everything" to the acknowledgement that patients do not always know or understand what is the next

stage in their treatment, the actual meta design rule turns out—from discussions involving the patients themselves and verified by them—to “Never do anything that might take away from the resilience of the patient.” The issue here is that despite how it might present itself, the obvious and the common sense around a specific touch point may not always be good sense; a classic example of what designers call an “antipattern,” that is to say, a principle, rule, or assumption that on the face of it looks perfectly sensible, logical, and correct but that is in fact flawed and simply does not work. Once programmed in to the service or product (e.g., a computer), such antipatterns seriously impede its performance, reliability, or user friendliness (Brown, Malveau, McCormick, & Mowbray, 1998). The radiotherapy planning touch point is a clear example of why patients and staff need to interact on an ongoing basis in order to challenge the common sense and ensure that any “obvious” solutions are in fact the right or best ones. It also shows that one cannot run a complex process like care “by design rule.” The two possible alternative rules in this case of “tell them everything” (based on the logic that we should never deceive patients, surprise them, or keep them in the dark about their own illness) and “preserve maximum patient resilience” are tramlines, boundaries, or polarities that need to be managed and within which difficult judgments and decisions will always need to be made. This is one area where designing human processes and designing physical objects may be different. However, as the field of building architecture reminds us, human constructions, like buildings, will also fall down if certain golden design rules are not followed.

TOWARD MORE USER-CENTRIC, EXPERIENCE-FOCUSED OD

The whole thrust of this article is about the importance of being mindful of experience and the need to build that mindfulness into what we do as organization designers and developers and quality and improvement specialists. Encouragingly, there are signs that this is starting to happen in at least four places.

First is in the field of design itself, obviously among the experience-based designers described in this article but also other professional design groups and associations such as the American Institute for Graphic Arts (AIGA), the UK Design Council, and the Computer-Human Interaction Group of the Association for Computing Machinery who all work in organizational contexts, including health care, sometimes, as in the head and neck cancer case, in partnership with the external organization development researchers and internal improvement specialists, in so doing making the design task truly multidisciplinary.

Second and closer still to OD is in the overlapping field of management consulting where a number of today’s leading consulting organizations (i.e., Coughlan, Canales, & Fulton Suri of IDEO, 2007 [this issue]; and Pine & Gilmore, 1998, 1999, of Strategic Horizons) and senior corporate leaders appear to have grasped the significance and commercial potential of “experience,” some way ahead of the academics. For instance, the CEO of Procter & Gamble has talked about the need to put designing experiences “into the DNA” of Procter & Gamble. Similar things are being voiced by policy makers and practitioners in health care, for example the

U.K.'s current minister of health who recently asked a national conference of NHS leaders, "How can we make our patients' and users' experiences better? How would it feel if it was me or my elderly mum?" (Bate & Robert, in press).

Third is in the neighboring field of organization studies, for example in the publications of some of the people writing in this issue (Van Aken, Romme) and the seminal work of Boland and Collopy (2004a, 2004b) who recently brought together OS academics and architects and designers from many countries and disciplines to discuss the potential of the design paradigm for organization and social studies, especially in healing the gap between research, intervention, and practice.

And last but not least is in the OD field itself, not only in the ongoing work of the many authors represented in this issue but a wider, albeit still small group that includes prominent OD figures such as J. D. Adams (2001) and J. R. Galbraith (2005), whose recent book *Designing the Customer-Centric Organization: A Guide to Strategy, Structure, and Process*, has done much to forge the links between organization design and other forms of design, especially user-focused design.

So, as these developments move forward on many fronts we feel compelled to ask what opportunities and new directions they might offer to the field of organization development in the future. Before doing so, some possible limitations. First, the empirical work described in this article took place in the context of a large public sector organization with an explicit and widely shared remit to care for its "users." Clearly this is a "receptive context" in which one might reasonably expect a user-centric approach to find support and favor. Other organizational settings and contexts may be less welcoming; indeed, a user-centric approach may be much less relevant—or irrelevant—in some (e.g., a steelworks does not have to consider the car driver just because that driver's car is made out of their steel). Second, from time to time anxieties are expressed that we may become so user centric that we lose the edge of innovation and become overly driven by users rather than guided by their needs (see e.g., Malone, 2002). However, as counter to this view, the role of users in an EBD process (and the value and justification for their being there) is to bring the knowledge of their experience to the table so that the designers can work with them to translate and build that knowledge into new and future designs. It is in the coming together of two knowledge systems—what cognitive scientists call "folk" (everyday, experience-based) knowledge and "expert" knowledge (specialist, discipline-based)—that the innovation process really begins to ignite and take off.

Notwithstanding these caveats and questions, for us EBD offers four lessons for more user-centric OD. First, such an approach suggests new value commitments and orientations, where the client is not just "the organization" but also the user—in our case patient, family, or caregiver but equally any consumer or user of a product or service—and where the mission and vision extend beyond internal staff to external shareholders and to users or consumers. The rationale, in the form of a question we have already asked, is what is the point of a "beautifully" designed, or arguably highly profitable, organization or organizational process that delivers a mediocre or dreadful product or service experience? Of course, this is not to say that the organization and therefore organization development is not important. It is, however, only a means to an end in the cause of greater relevance and usefulness may need to find more direct

ways of using its knowledge and skills to influence real outputs and contribute more directly to improving the quality of life (see Mohrman, 2007 [this issue]). A commitment to the user, to improvement rather than change, to outcomes not just processes would certainly require some major conceptual shifts, but one of the values and attractions is that in the present user-centric design field, OD skills are often lacking and therefore is an area where OD specialists could make a difference.

On the other hand, a single user focus that ignores the needs and interests of internal staff would be a retrograde step, hence the emphasis throughout on codesign and copartnership involving both providers and recipients and the stand we have taken against the emerging “myth of user led.” Experience of this project gives us strong reason to challenge the current one-sided notion of “patient led” in health care (or user led in other service industries) and, we believe, a strong case for restoring the staff to the design equation. Primary among these is that codesign is a form of OD, and hence the same rules of “good change” apply, namely, that “authorship equals ownership” (people will support what they have helped to create) or that “a change imposed is a change opposed,” the pathology of exclusion being resistance or opposition from those who have been left out and the threat of a failed implementation. Other reasons for starting the EBD process with those providing the service as well as those receiving it include the following:

- a. The experience of giving the service is as relevant and important to design as the experience of receiving it; the design process needs to take account of both, and it is the bringing together of these two perspectives in the same place that in our opinion gives EBD its special power and insight as a change/improvement process.
- b. Working with staff from the outset helps them get attuned to EBD and the meaning of experience and the role they can play in shaping it. At the same time as familiarizing them with the EBD philosophy and approach, one is also building the change relationship and creating the necessary readiness for change for the design process to begin.
- c. Staff have an important role to play in the early stages of an EBD project such as identifying informants, familiarizing the researchers and designers with the service and the context, advising on prototypes of new tools and methods, and identifying possible patients and carer volunteers for the codesign group.

There are some huge implications here in the codesign arena, not least in addressing the asymmetries of power and skill that will inevitably show up at the design table and the fact that such diverse participants will invariably view the product or service from different, sometimes frustratingly irreconcilable perspectives (a strength and a challenge). Not only will the organization-customer relationship need to be reconfigured to take this asymmetry into account, so too will internal relationships within the organization itself as people from very different levels come together to codesign products or services on a much more equal basis (EBD needs staff from every part of the patient experience). This is a challenge for OD itself, which until quite recently was talking about leaders determining the culture of the organization and making sure their subordinates received feedback on the positive and negative aspects of their behavior (Beckhard & Harris, 1987). The ideology of participation and codesign may have much wider acceptance today, but a language that referred for many years to “subordinates” is not going to be eradicated that easily. The same may be said of user

involvement and patient led, which today may still mean little more than the token involvement of patients.

Second, within a design science paradigm, the aims of OD might also begin to change and widen. In this regard, we would repeat the bold assertion that “good design,” not only in health care services but the organization as a whole (including structures, systems, processes, etc.), is essentially no different from good design in any sphere whether it be a product, service, system, widget manufacturer, rail service, nuclear power plant, supermarket, or hospital. Following the three-dimensional model of Berkun (2004) described earlier (Figure 1), if the aim of OD in its widest sense is to help create (and maintain) a “good organization design,” as we believe it should be, then such a design not only needs to be functional (P) and well engineered (E) (in fact the usual OD concerns of performance, effectiveness, capacity, and reliability) but also a good experience for the user (A) (while not forgetting the provider). Perhaps therefore, the equation in Figure 1 defines not only a “good design” (arguably the aim or goal of any service improvement process) but the OD quest itself, which is to address simultaneously all three issues of performance, engineering, and aesthetics/experience. We say *simultaneously* because the three elements are closely intertwined and should never be considered as isolated elements. For example, P and E will clearly influence A (how the experience feels), but equally there is a subjective element to all three in that it is not only about how safe and effective the service is but how effective and safe it feels, which according to Wolosin, Vercler, and Matthews (2005) is only “moderately” safe in health care at the moment. The point for designers is that hospitals must not only make actual care safer, patients must also feel safe, especially given their constant exposure to medical errors in the media (as is the case with so-called dangerous diets, foods, and treatments).

As this case study shows, extending OD into experience, the third of these (A), clearly takes it into the “softer” areas like touch points and the management of emotion, which being central to the change endeavor must be no bad thing, but also at the same time into the “harder”—sometimes life or death—issues appertaining to usability and interactivity and the issue of how these can be improved in a product, service, or whole organizational sense. This is why we take issue with Cox and Minahan’s (2006) recent *JABS* article that not only calls for a move from OD as “design” to the more humble and superficial concept of OD as “decoration” (the opposite of what we have been proposing here) but also suggests that this is to be achieved by making it more of an “aesthetic endeavor.” This equating of aesthetics with the superficial, the ordinary, and the inconsequential needs to be challenged because it ignores this wide range of “hard” and profound issues around the human-machine/product/service interaction, which can be the cause of anything from car crashes to people being “fried” in x-ray machines.⁶

The third contribution EBD might make to the future development of OD is in the field of new diagnostic and intervention methods and approaches. Although much of the current stock is the same or similar, such as interviewing, contextual inquiry, participant and user interactive observation, and focus groups and listening laboratories, there are others, less familiar, that might reward the closer attention of OD researchers and practitioners: prototypes and prototyping (see

Coughlan et al., 2007), personas, touch points and design rules (described here and in other articles in this issue), scenarios and scenario-based development, storyboards and storytelling laboratories, cognitive and video walkthroughs, heuristic evaluations, pseudocodes (writing an imaginary rule book or manual for users), and empathetic methods such as “think thief” (see Bate & Robert, in press, for a full review of these methods).

Not surprising for a field like design, the designers’ methods tend to be more visual, tactile, exploratory, expressive, and creative than normally found in OD. For example, as we have discovered in the head and neck cancer case and working with designers, film, video, and photography can be very powerful tools in change interventions, pointing toward a much more visual future OD in which “mobilizing images” may play a major role alongside “mobilizing narratives” (Bate, 2005) in change processes. Designers, including luminaries such as Frank Gehry, also have a strong preference for low-tech tools that often resemble items in elementary school classroom: scissors, glue, poster boards, index cards, sticky notes, pictures, felt pens, cameras, Lego pieces, and so on. These are used to create models, collages, or images of the present and ideal situations, taking some of the weight off the mind and putting it in a more tactile, playful, and thus accessible form. There is also the creativity that comes from fun. As Gehry has noted, this free-flowing fun part (“free play idea”) can be found in both art and science and (reiterating Dewey) is fundamental to creativity and innovation breakthroughs. At the other end of the spectrum, designers have also seized the opportunities opened up by electronic communications for gathering ongoing “persistent conversation” in human-to-human interaction, that is to say the routine, everyday verbal exchanges embodied in e-mail, message texting, electronic reports (e.g., notes of patient examination), and other forms of electronic networking and recorded communication. So, whereas in the past most of this would have been lost forever, it can now be retrieved in the form of a rich “conversation archive” and replayed at will.

The fourth and final contribution of EBD to OD, we believe, is in showing how and where a change or improvement effort finds the energy to bring about and then sustain the change: the core issue of mobilization. One of the more interesting facets of this case study is that staff had for many years been fully aware of the many and long-standing weaknesses and shortcomings of their cancer service and the negative effects these were having on patients’—and their own—experiences. They were even committed (they told us) to doing something about the problems. And yet despite this, they had never quite managed to turn the motivation or desire into positive action. Here, it is important to distinguish between commitment, engagement, and mobilization. The first is the equivalent to being committed to climb on the change “bus,” the second to putting it into gear, and the third to actually moving it down the road—the issue of practical action. All too often, as in the cancer clinic, we see the first two but not the third. The great strength of EBD, we believe, is that once staff and patients have come together face to face on a regular basis, have listened to each others’ stories and experiences, shared their moving videos, and have had some (serious) fun with scissors and paper in prototyping new solutions, they find it difficult to walk away with the job incomplete. Change, making things better,

making a difference, takes on the status of an imperative. This is what we mean when we refer to the concept of mobilizing images and mobilizing narratives (Bate, 2004, 2005), and it is these that within an EBD context help those involved construct a shared identity as a “movement for improvement” and the deep sense of purpose that has come to sustain them on their journey together and will, we hope, finally carry them to where they—or rather where they want their service—to be.

NOTES

1. Until now the rhetoric of user involvement and “patient-centered” services has been running some steps ahead of its practice in the U.K. health care context. For example, a survey report from the influential King’s Fund (a national health think-tank) recently bemoaned the lack of progress toward real patient involvement in the design of health care services (Gillespie, Florin, & Gillam, 2002). The picture is similar elsewhere: An even more recent survey comparing patients’ perceptions of the quality of care they receive across six countries showed that the United States was in a similar or worse position than the United Kingdom in this regard. Out of the six countries surveyed, the U.S. health care system was ranked bottom by its own patients on four of the seven measures of quality used, namely, safety, equity, efficiency, and most significantly here, patient centeredness (Davis et al., 2006).

2. In many ways, the research method underpinning the initial stages of the experience-based design (EBD) process was therefore no different from the host of narrative and storytelling methods currently deployed in health care and other organizational settings (Bate, 2004; Cortazzi, 2001; Greenhalgh, Russell, & Swinglehurst, 2005). The only significant difference was that the interview “spine” for the stories and possible key themes and issues were identified and developed in partnership with patients and staff as part of our commitment to codesign so that everyone had the opportunity to comment on its form, language, and content before we went live.

3. Subsequent to the initial meeting of the codesign group, further codesign subgroups—touch point groups—might also be established, as in this case, to deal with particular clusters of touch points around different parts of the service (e.g., outpatient clinic, intensive care unit, radiotherapy/chemotherapy) or types of issue (how bad news is broken, information and communication, access and discharge). The advantages of these subgroups are that experiences can be delved into more deeply and the net of participation extended to a wider group of people (see Figure 2).

4. Among the many articles that have been written about touch points (to the point that they have become something of a buzzword in today’s design circles), Marty Gage and Preetham Kolari’s (2002) seminal article “Making Emotional Connections Through Participatory Design” still offers one of the most accessible and practical introductions to the concept.

5. This is where the EBD process differs from much of what currently happens in health care, where patient stories are recorded in a studio and posted on a Web site or even read out by a third party in the design process. In itself, this may be a powerful way of sharing experiences and enabling others to benefit from them, but it is not codesign. There is no live exchange or interaction, no joint sensemaking, no process of moving from talk to action.

6. Anyone who, like Cox and Minahan (2006), sees aesthetics as only skin deep and about “beauty” rather than the whole range of sensory perception might care to read a recent article by Nielsen (2005), a designer who reviews a study published in the *Journal of the American Medical Association* (Koppel et al., 2005) that reported on 22 ways that automated hospital systems can result in the wrong medication being dispensed to patients. He concludes that most of these flaws are classic “usability” problems that have been understood for decades. All of these flaws existed and remained uncorrected, says Nielsen, because of the failure of health care designers to be aware or reap the benefit of the past 25 years of experience with usability/interactivity research; and one reason why organizations are failing to uncover potentially fatal processes, he says, is that they are not “listening” to their users. In short, an organization development that extends its range into the soft and the hard of the “aesthetics of experience” has the potential for increasing its value, relevance, and utility manifold.

REFERENCES

- Adams, J. D. (2001). A primer. Managing dispersed work effectively. *OD Practitioner. Journal of the OD Network*, 33, 9-15.
- Alben, L. (1996). Quality of experience: Defining the criteria for effective interaction design. *Interactions*, 3(3), 11-15.
- Baba, M. L. (1998). Theories of practice in anthropology: A critical appraisal. In C. Hill & M. Baba (Eds.), *The unity of theory and practice in anthropology: Rebuilding a fractured synthesis* (pp. 17-44). Washington, DC: National Association for the Practice of Anthropology.
- Bartunek, J. M., Greenberg, D. N., & Davidson, B. (1999). Impacts of a teacher-led empowerment initiative in a federation of schools. *Journal of Applied Behavioral Science*, 35, 457-478.
- Bate, S. P. (2004). The role of stories and storytelling in organizational change efforts: A field study of an emerging community of practice within the UK National Health Service. In B. Hurwitz, T. Greenhalgh, & V. Skultans (Eds.), *Narrative research in health and illness* (pp. 325-348). London: BMJ Publications.
- Bate, S. P. (2005). Ethnography with "attitude": Mobilizing narratives for public sector change. In M. Veenswijk (Ed.), *Organizing innovation. New approaches to cultural change and intervention in public sector organizations* (pp. 105-132). Amsterdam: IOS Press.
- Bate, S. P., & Robert, G. (2006). Experience-based design: From redesigning the system around the patient to co-designing services with the patient. *Quality and Safety in Health Care*, 15, 307-310.
- Bate, S. P., & Robert, G. (in press). *Bringing user experience to healthcare improvement: The concepts, methods and practices of "experience-based design."* Abingdon, UK: Radcliffe.
- Beckhard, R. (1969). *Organization development: Strategies and models*. Reading, MA: Addison-Wesley.
- Beckhard, R., & Harris, R. T. (1987). *Organization transitions. Managing complex change*. Reading, MA: Addison-Wesley.
- Bennis, W. G., Benne, K. D., & Chin, R. (Eds.). (1961). *The planning of change. Readings in the applied behavioural sciences*. New York: Holt, Rinehart & Winston.
- Berkun, S. (2004). *Programmers, designers and the Brooklyn Bridge. Essays on design, engineering and project management*. Retrieved May 15, 2006, from <http://www.uiweb.com/issues/issue30.htm>
- Boland, R. J., & Collopy, F. (Eds.). (2004a). *Managing as designing*. Stanford, CA: Stanford Business Books.
- Boland, R. J., & Collopy, F. (2004b). *Managing as designing. Bringing the art of design to the practice of management* [DVD]. (Available from the Information Design Studio, Weatherhead School of Management, Case Western Reserve University, design.case.edu)
- Boss, R. W. (1989). *Organization development in health care*. Reading, MA: Addison-Wesley.
- Boss, R. W., & Golombiewski, R. T. (1995). Do you have to start at the top? The chief executive officer's role in successful organization development efforts. *The Journal of Applied Behavioral Science*, 31, 259-277.
- Bradford, D. L., & Burke, W. W. (2004). Introduction: Is OD in crisis? *The Journal of Applied Behavioral Science*, 40, 369-373.
- Bragg, J. E., & Andrews, I. R. (1973). Participative decision making: An experimental study in a hospital. *The Journal of Applied Behavioral Science*, 9, 727-735.
- Briefs, U., Ciborra, C., & Schneider, L. (Eds.). (1982). *Systems design for, with, and by the users. Proceedings of the IFIP WG 9.1 working conference on systems design for, with, and by the users*. Amsterdam: North Holland.
- Brown, W. H., Malveau, R. C., McCormick, H. W., & Mowbray, T. J. (1998). *Antipatterns. Refactoring software, architectures, and projects in crisis*. Chichester, UK: Wiley.
- Carlzon, J. (1987). *Moments of truth. New strategies for today's customer-driven economy*. New York: Harper & Row.
- Carucci, R. A., & Pasmore, W. A. (2002). *Relationships that enable enterprise change: Leveraging the client-consultant connection*. San Francisco: Jossey-Bass/Pfeiffer.
- Cortazzi, M. (2001). Narrative analysis in ethnography. In P. Atkinson, A. Coffey, S. Delamont, J. Lofland, & L. Lofland (Eds.), *Handbook of ethnography* (pp. 384-394). London: Sage.

- Coughlan, P., Suri, J. F., & Canales, D. (2007). Prototypes as (design) tools for behavioral and organizational change: A design-based approach to help organizations change work behaviors. *The Journal of Applied Behavioral Science*, 43, 122-124.
- Cox, J. W., & Minahan, S. (2006). Organizational decoration. A new metaphor for organization development. *The Journal of Applied Behavioral Science*, 42, 227-243.
- Cummings, T. G., & Huse, E. F. (1989). *Organization development and change* (4th ed.). St. Paul, MN: West.
- Davis, K., Schoen, C., Schoenbaum, S. C., Audet, A-M. J., Doty, M. M., Holmgren, A. L., et al. (2006). Mirror, mirror on the wall: An update on the quality of American health care through the patient's lens. *The Commonwealth Fund*, 12. Retrieved May 15, 2006, from www.techgnosis.com/experience.html
- Experience Design Network. (2006). Design. What is experience design. Retrieved August 2, 2006, from <http://www.experiencedesignernetwork.com/archives/00368.html>
- Forlizzi, J., & Battarbee, K. (2004). Understanding experiences in interactive systems. In *Proceedings of the 2004 conference on designing interactive systems: Processes, practices, methods and techniques* (pp. 261-268). Cambridge, MA: ACM Press.
- Forlizzi, J., & Ford, S. (2000). The building blocks of experience: An early framework for interaction designers. In *Designing Interactive Systems 2000 conference proceedings* (pp. 419-423). New York: ACM Press.
- French, W. L., Bell, C. H., & Zawacki, R. A. (1978). *Organization development and transformation*. Burr Ridge, IL: Irwin.
- Fulton Suri, J. (2003). The experience evolution: Developments in design practice. *The Design Journal*, 6(2), 39-48.
- Gage, M., & Kolari, P. (2002, November 3). Making emotional connections through participatory design. *Boxes and Arrows*. Retrieved April 1, 2006, from <http://www.boxesandarrows.com/archives>
- Galbraith, J. R. (2005). *Designing the customer-centric organization: A guide to strategy, structure and process*. San Francisco: Jossey-Bass.
- Gehry, F. (2003). *Gehry talks: Architecture and process*. London: Thames & Hudson Ltd.
- Gelertner, D. (1992). *Mirror worlds: Or the day software puts the universe in a shoebox: How it will happen and what it will mean*. New York: Oxford University Press.
- Gillespie, R., Florin, D., & Gillam, S. (2002). *Changing relationships. Findings from the patient-involvement project*. London: The King's Fund.
- Greenhalgh, T., Russell, J., & Swinglehurst, D. (2005). Narrative methods in quality improvement research. *Quality and Safety in Health Care*, 14, 443-449.
- Joinedupdesignforhealth. (2005). *Critical points. Improving patient experience of the NHS through design interventions. Demonstration project* (A report for the Sorrell Foundation in collaboration with Atelier Works, Fletcher Priest Architects, and Priestman Goode). London: Sorrell Foundation.
- Koppel, R., Metlay, J. P., Cohen, A., Abaluck, B., Localio, A. R., & Kimmel, S. E. (2005). Role of computerized physician order entry systems in facilitating medication errors. *Journal of the American Medical Association*, 293, 1261-1263.
- Malone, E. (2002). *AIGA experience design summit #5*. Retrieved August 2, 2006, from http://www.boxesandarrows.com/archives/aiga_experience_design_summit_5.php
- Massarik, F., & Pei-Carpenter, M. (2002). *Organization development and consulting: Perspectives and foundations*. San Francisco: Jossey-Bass/Pfeiffer.
- Mohrman, S. A. (2007). Having relevance and impact: The benefits of integrating the perspectives of design science and organizational development. *The Journal of Applied Behavioral Science*, 43, 12-22.
- Nielsen, J. (2005). *Medical usability: How to kill patients through bad design*. Retrieved August 4, 2005, from <http://www.useit.com/alertbox/20050411.html>
- Nord, W. R. (1974). The failure of current applied behavioral science—A Marxian perspective. *The Journal of Applied Behavioral Science*, 10, 557-578.
- Pine, B. J., & Gilmore, J. H. (1998). Welcome to the experience economy. *Harvard Business Review*, 76(4), 98-105.
- Pine, B. J., & Gilmore, J. H. (1999). *The experience economy*. Boston: Harvard Business School Press.
- Plsek, P., Bibby, J., & Whitby, E. (2007). Practical methods for extracting explicit design rules grounded in the experience of organizational managers. *The Journal of Applied Behavioral Science*, 43, 153-170.

- Romme, A. G. L. (2003). Making a difference: Organization as design. *Organization Science, 14*, 558-573.
- Romme, A. G. L. (2004, August). *The relevance gap: Action and design research*. Paper presented at the Academy of Management Symposium: Is Design Science Better at Creating Actionable Research and Knowledge Than Action Research Is? New Orleans, LA.
- Romme, A. G. L., & Damen, I. C. M. (2007). Towards science-based design in organization development: Codifying the process. *The Journal of Applied Behavioral Science, 43*, 108-121.
- Rynes, S. L., Bartunek, J. M., & Daft, R. L. (2001). Across the great divide: Knowledge creation and transfer between practitioners and academics. *Academy of Management Journal, 44*, 340-355.
- Shedroff, N. (2001). *Experience design*. Berkeley, CA: New Rides Publishing.
- Shedroff, N. (2004a). *Experience design. Designing the total experience*. Retrieved May 15, 2006, from www.webreference.com/authoring/design/expdesign/8.html
- Shedroff, N. (2004b). *Experience design: Interactivity*. Retrieved May 15, 2006, from www.webreference.com/authoring/expdesign/6.html
- van Aken, J. E. (2007). Design science and organization development interventions: Aligning business and humanistic values. *The Journal of Applied Behavioral Science, 43*, 67-88.
- Von Hippel, E. (2005). *Democratizing innovation*. Cambridge, MA: MIT Press.
- Wolosin, R., Vercler, L., & Matthews, J. (2005). How safe do patients feel? *Patient Safety and Quality Healthcare, 2*(6), 40-44.