

Design in Practice

Flexibility & Change within Healthcare Providers

Research Report





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Introduction

This report

This report summarises findings from an 18 month research project entitled “Design for Flexibility and Change within Health Service Providers” undertaken between April 2009 and October 2010. The project, funded by the EPSRC research centre HACIRIC (Health and Care Infrastructure Research Innovation Centre), investigated existing implementations of the Practice Based Commissioning (PBC) programme in the North West Strategic Health Area (NW SHA) in England.

A research team from Lancaster University, in collaboration with Salford University, explored the modes of governance and processes through which PBC is endeavouring to commission improved services for patients, and the degree to which these encouraged engagement, collaboration and innovation. In addition the team sought to understand if and how design and other creative methods and tools could support commissioners’ activities.

The research findings motivated the proposal of a different approach to GP commissioning, defined as Community-centred Commissioning. This outlined framework recognises the key role of GP consortia as facilitators (together with local authorities) of commissioning networks, but focuses on co-creation as main strategy for service innovation.

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Research Process

The Research process

The research project investigated the Practice Based Commissioning (PBC) programme focusing on the North West of England. Our work has been conducted, in particular, at four main levels:

1. NW Strategic Health Authority, where we examined how PBC has been implemented with a focus on the diversity of models of governance, support and collaboration;
2. PBC groups: an investigation of how PBC groups in practice re-design care pathways, mapping examples of their service redesign and commissioning processes;
3. Medical Practice level, where we studied how clinicians in their daily activities re-design their services, through participating in their meetings and conducting interviews and short design intervention.
4. Design Practice level, where we explored and evaluated how design and creative methods could support and enhance PBC. With this purpose we conducted four case studies of Service Design projects with the healthcare sector.

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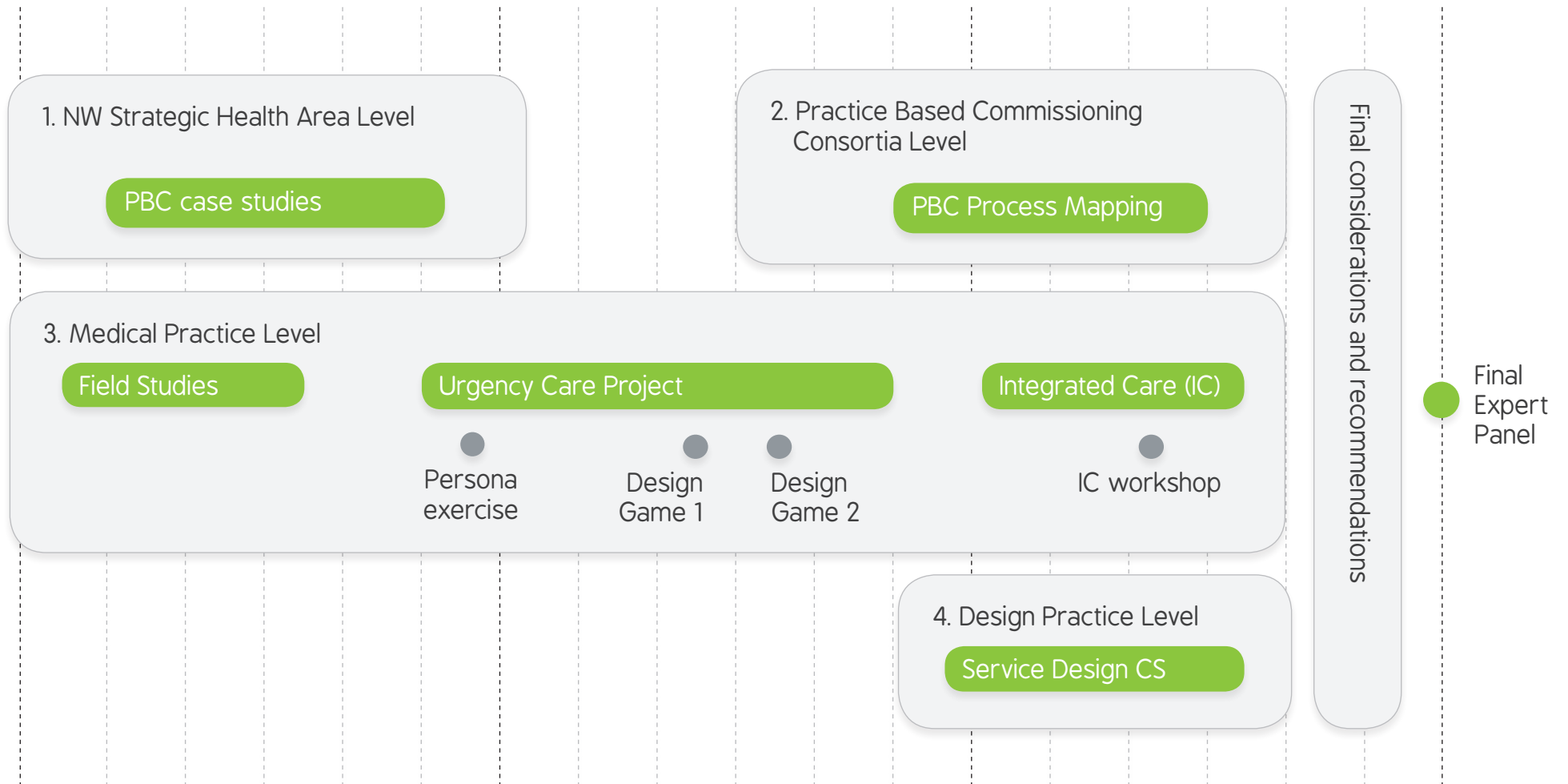
Karine Freire (Universidade do Vale do Rio dos Sinos)

April 2009

Oct 2009

April 2010

October 2010



Background Research – Practice Based Commissioning literature review

A definition of primary-care led commissioning by the Health Foundation suggests that it is:

“Commissioning led by primary care clinicians, particularly GPs, using their accumulated knowledge of their patients’ needs and of the performance of services, together with their experience as agents for their patients and control over resources, to direct the health needs assessment, service specification and quality standard setting stages in the commissioning process in order to improve the quality and efficiency of health services used by their patients” (Smith et al 2004).

Much has been written about Practice Based Commissioning since its inception in 2005. The Department of Health published the first guidance on PBC in 2004 (Department of Health 2004a, 2004b) and has continually published their PBC survey results since 2007, with the first set of surveys (from October 2007 until August 2009) focusing on GP practices and their perceptions of a) support received from Primary Care Trusts (PCTs) and b) general engagement of practices in PBC (Department of Health, 2009d). The next

phase of surveys focused on PBC Group and Independent Leads, with the first survey in October-November 2009 (Wave 1), followed by February and March 2010 (Wave 2) and May 2010 (Wave 3) (Department of Health 2009b, 2009c, 2010a, 2010b). The King’s Fund has also commissioned many analyses, briefings and reports (Lewis 2004; Curry and Thorley 2007; Lewis, Curry and Dixon 2007; Curry, Goodwin, Naylor and Robertson, 2008; Wood and Curry 2009), as have the Audit Commission (2006, 2007). The House of Commons Health Committee Report (2010) provided an in-depth investigation of all aspects of healthcare services commissioning.

The key issues, highlighted in the literature review as hindering the progress of PBC, and requiring further development were:

1. Relationships: difficulties associated with relationships between PCTs and PBC such as: lack of clarity over roles and responsibilities of PBC within PCTs; mistrust between hospital managers (particularly financial managers) and GPs; perceptions of poor support from PCTs and excessive bureaucracy associated with PBC business cases; poor data provision impeding

development of commissioning projects;

2. Motivation and Engagement: difficulties associated with lack of motivation and engagement of 'rank and file' GPs in PBC such as: lack of realistic and effective incentives to motivate clinicians to become involved in PBC; a perception that time devoted to PBC is not adequately rewarded through PBC frameworks; concerns related to practice workload and continuity of care for patients; lack of confidence in ability to analyse data and produce business cases
3. Approach to Service design: Although service redesign proposals have to align with the Joint Strategic Needs Assessment (JSNA) and the PCT priority areas, there is still a lack of a strategic approach to the redesign of local services through PBC, with a tendency to focus on easy wins, and short-term gains. It has been suggested that this is a result of a lack of a strong and well articulated vision able to sustain change in the long term and of understanding how commissioners can use the range of available levers in order to make service improvements (Health Committee 2010; King Fund, 2010).

Future Developments

The White Paper 'Equity and Excellence: Liberating the NHS' produced by the coalition government in June 2010, signals a complete restructuring of the NHS, with the aim of de-layering and simplifying NHS organisational structure, producing a 45% reduction in management costs and £20 billion in productivity

savings over the next four years. One of the key changes is the proposed abolition of Strategic Health Authorities and Primary Care Trusts, with responsibility for commissioning healthcare services for patients passing to GP commissioning consortia by April 2013, overseen by a centralised NHS Commissioning Board. The White paper suggests that 'liberating' professionals from top-down control will enable them to focus on 'the quality, innovation and productivity needed to improve outcomes' (DoH White Paper 2010).

The coalition government has suggested that GPs are best suited to take overall responsibility for commissioning as they are the healthcare professionals who are closest to the patients (DoH White paper 2010). In addition, it is recognised that they are better than specialists at managing co-morbidities (RCGPs 2006).

Potential perceived obstacles

Potential loss of skill base: Ever since the development of Primary Care Groups (the precursors to Primary Care Trusts) in 2001, there have been concerns about management capacity and capabilities in primary care.

With management cuts of 45% and managers in SHA and PCTs tasked (but dis-incentivised) with bridging and transferring skills during the transition period, how will GP commissioners develop or buy in the management skills required for this complex restructuring? One option is to re-hire the PCT and SHA managers, but there is a very real danger that the abolition of these authorities may leave

a vacuum in the organisational structure of the NHS. The White paper suggests that local authorities will take responsibility for public health and for integrating strategic coordination of health and social care spending, but this will be complicated by the loss of coterminous PCTs, and the necessity of dealing with a multiplicity of GP consortia.

Lack of established networks with third sector, social services and the local authorities: Although tasked with developing integrated care, many GPs do not have a broad perspective of the overall health and social care landscape in their local area. NHS guidance suggests a priority for GP consortia will be to develop a 'compact', or formal agreement, with local authorities and the third sector (NHSi 2010) but acknowledges that this involves investing considerable time in building trust and relationships through peer to peer dialogue.

Lack of motivation: Chris Ham, chief executive of the King's Fund, suggests that one of the key obstacles to effective implementation by the government of the plans outlined in the White Paper is "winning the support of those they are trying to liberate" (Ham 2010b). He suggests that expecting the majority of GPs to be enthusiastic about commissioning is a 'triumph of hope over experience' (Ham 2010a).

Contract negotiations with the General Practitioners Committee of the British Medical Association are crucial to the success of the government plan. Key issues with a bearing on GP commissioning, which have yet to be resolved include:

1. Practices will now be required to be part of a commissioning consortium, which means that GPs will be forced to be members of a statutory body with the

potential for personal (financial) accountability for performance.

2. A proportion of each practice's income will be linked to the outcomes achieved through the commissioning consortium
3. Separately, though possibly causing further barriers, is the reform of QOF, and the requirement for practices to take back responsibility for providing out of hours care.

Changing nature of the GP-patient relationship: GPs have traditionally been the local, trusted family health professionals. With GP consortia now assuming responsibility for NHS budgets, with the prospect of taking unpopular decisions, such as the closure of local hospitals, how will this change public perception of their role?

Potential improvements for GPs

Under PBC PCTs have held the final authority for service redesign and commissioning, along with budgetary control. Now GPs are being 'liberated' from these external mechanisms of control (although they will now have to assume responsibility for control within the consortia) and have been presented with a huge opportunity to lead change at a local level. For those GPs who are motivated and enthusiastic about taking responsibility for commissioning, they now have the opportunity to develop dynamic, innovative solutions to healthcare service provision. Those consortia, which have already developed well structured models of governance and have gained experience of reviewing and commissioning patient care pathways will be at an advantage in moving forward into fully GP-led commissioning.

Providing GPs with the possibility of working with local authorities and community services also offers the opportunity to develop a systems approach to health, social and community care, improving the lives of those with long term conditions and taking a broader socio-economic approach to health care and health promotion.



Case Studies – PBC models and commissioning processes

The team conducted interviews and mapping exercises to evaluate the working models and commissioning processes of three PBC groups active in the North West of England.

Governance Models

As a result of interviews with the PBC managers the team identified three different governance models depending on their relationships with the PCT.

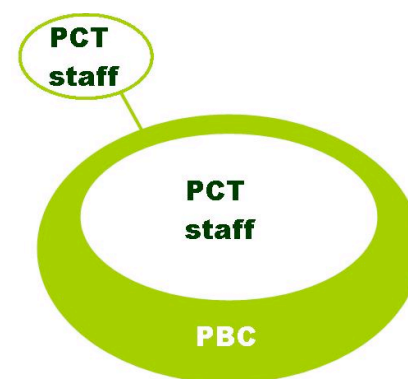
Centralised model: The Case Study 1 PBC group has been driven by two visionary people, a clinician and an executive director of the PCT, who together encouraged all of the 53 GP practices to form one large commissioning group, giving greater influence and reducing the governance structures which might have proliferated with smaller PBC groups. Engagement exercises were facilitated by the PCT, which adopted a 'top down' approach to PBC implementation. Once formed, the PBC group elected to become an Industrial Provident Society, managing the whole PBC framework,

and Case Study 1 Society, a charitable company, was formed in April 2007 with up to 45 staff from the PCT being seconded to Case Study 1 Society as business support. As such the Society has direct responsibility for almost all of the commissioning of health services within the PCT, managing a budget of £299 million for GPs with a patient base of 295,000 annually. Members of the society have developed a wide range of incentives and support structures for GP practices in the group, such as enhanced pension schemes, risk management and insurance, and even IT contracts. Membership of the Society is based on proportional representation from GP practices. Case Study 1 Health Enterprise is a GP owned social enterprise subsidiary company of SMC, acting as the provider arm, managing the provision of estates.

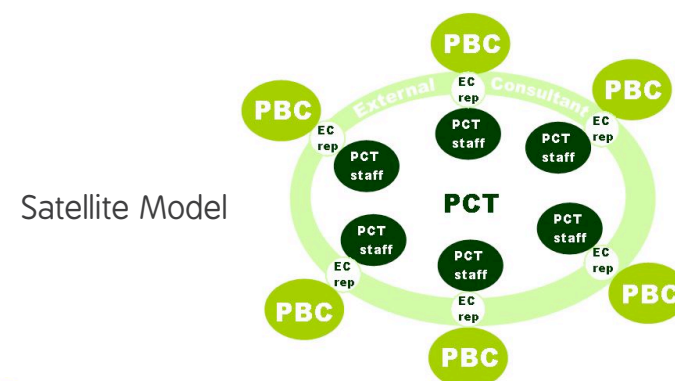
Satellite model: Case Study 2 PCT has six PBC groups with a patient list of around 50-65,000 for each group. The consortia self-formed around historical relationships and geographical boundaries. Activity of the PBC groups had been limited to some very small scale, local service changes with limited impact. In 2008 the PCT appointed an external consultant (Tribal Health Consulting), procured through the DoH Framework for External Support for Commissioners (FESC) programme, who acted as a catalyst for revitalising the PBC process.

With the appointment of a Tribal consultant to each PBC consortium, the PCT also provided a network group comprising a defined commissioning manager, commissioning assistant director of support (relationship manager), public health support, finance, data and medicines management support. These are fully funded by the PCT as part of their support package for PBC. Each of the PBC groups has now been given targets by the PCT beginning with developing the structure of the group, addressing health inequalities in their localities, examining demand and medicines management and taking responsibility for proactive management of the PBC budget.

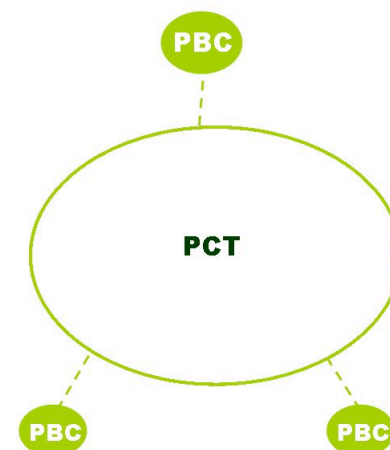
Evolutionary model: The Case Study 3 represents 22 GP practices, and around 158,000 patients. Because the area is quite diverse geographically, there are many very small practices, and the practices refer to different secondary care hospitals, the PBC consortium is now considering setting up a series of 'clusters' where four or five practices work together with community and social services focusing on integrating patient care in their specific area. Prior to the end of 2009 the integration and acceptance of PBC group activity in the PCT was perceived to be extremely limited, but, following the appointment of a new CEO to the PCT, PBC representatives are now being invited to key PCT meetings, and feel that their role and responsibility is now more fully recognised. The business managers of the PBC consortia, however, have indicated that lack of information from the PCT to enable the formation of accurate business plans, lack of a realistic budget and up-to-date reports on PBC activity and savings generated, and lack of support from staff in the PCT, have constituted major hindrances to the development of the PBC service design proposals, as have conflicting data from secondary care providers.



Centralised Model



Satellite Model



Evolutionary Model

Commissioning processes

Case Study 1: Re-design of Maternity Services

A spending review of maternity services revealed that Case Study 1 were spending almost twice the equivalent of comparative national health services, but with poorer outcomes in terms of the number of caesarean sections, percentage of breastfeeding, smoking during pregnancy, and teenage pregnancy rates.

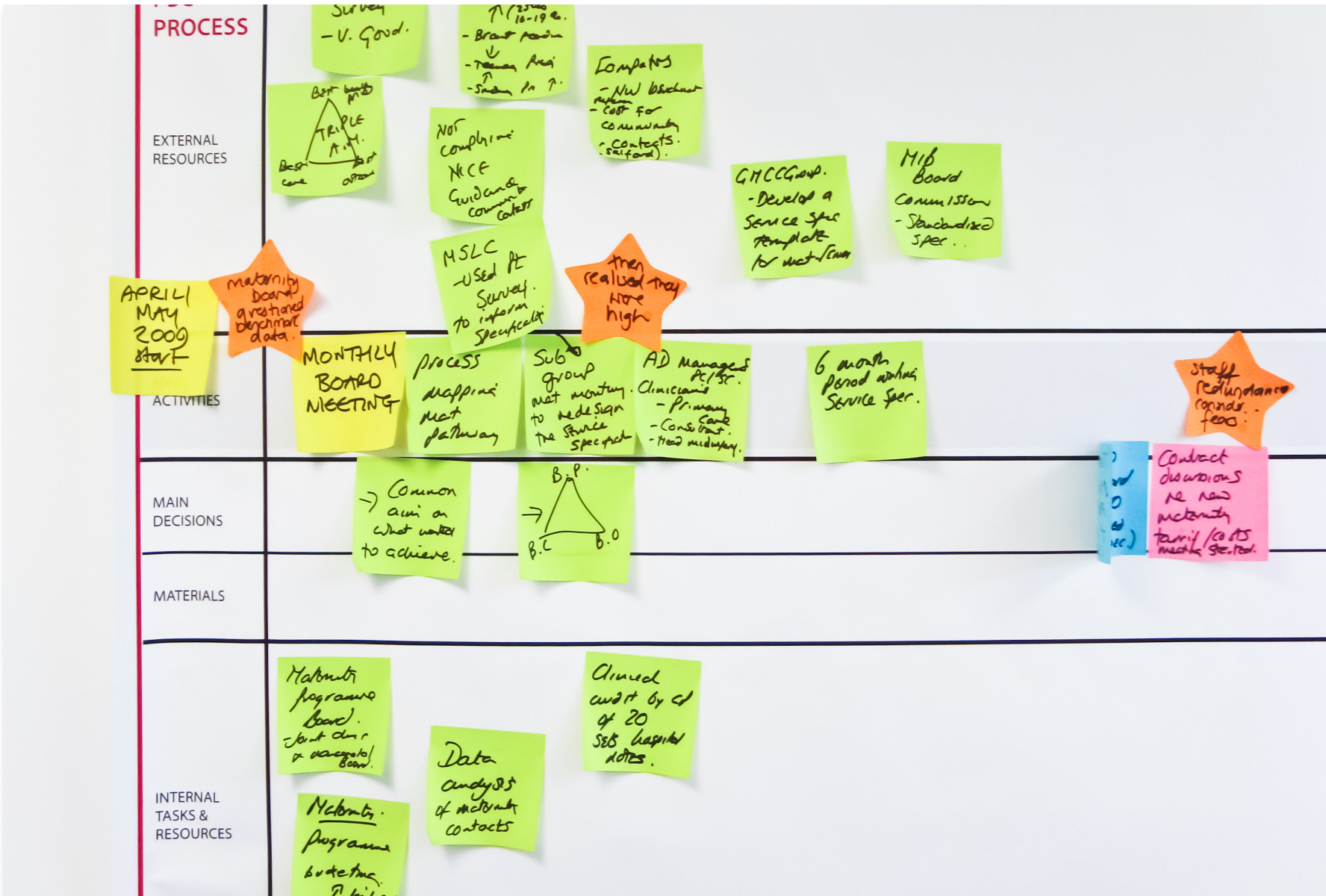
The Maternity board, which was a sub group of Case Study 1 Commissioning Group took responsibility for the service specification, with input from the MSLC and the maternity services steering committee. A sub group of the steering committee took responsibility for developing the service specification. This was comprised of around six people: lead GPs, Primary Care consultant, Assistant Directors from Primary Care, Secondary Care and the head of midwifery.

The first step involved articulating a common purpose using the triple aim model (best price, best care, best outcome). The next step involved presenting data regarding existing services and discussing how this aligned with the above model. Following questions about the veracity of the data, the Maternity board conducted their own audit, which confirmed the previous data. The sub-committee then took six months to develop a new service specification, with help from the specialist data management and finance teams.

New service specifications were taken to the Maternity Board in February 2010 and approved. Subsequent contract negotiations and tariff discussions with the provider proved to be difficult and it was necessary to schedule a meeting with the finance director of the Foundation Trust to achieve consensus regarding the financial implications of the plan.

Observations

As Case Study 1 Commissioning Group is now experienced in service redesign and specification, and have a good team of data managers and finance specialists on hand, the whole process progressed smoothly. In this project, field studies and direct observation of service delivery was not conducted, relying mainly on data and participants' understanding. Although the Maternity board comprised representatives from both 'purchaser' or commissioner and provider, the potential conflict of interests still had to be carefully managed. Additionally the implications of the over-spend on maternity services were only revealed when the service specifications were developed, at the end of the process. With experience it may be possible to predict the cumulative effects of efficiency gains in individual services against other areas in the secondary and acute care budget.



Case Study 2: Re-design of Stroke Care Services

The lead GP of the consortium had been looking at examples of best practice in PBC and had identified a paper focusing on the benefits of screening for Atrial Fibrillation (AF - a form of cardiac arrhythmia which is linked to increased risk of stroke). Stroke was already a PCT priority, and part of a national priority set called 'Vital Signs' which details, under the Improving health and reducing health inequalities categories, the implementation of an effective stroke strategy as an indicator of performance for local health authorities.

When the lead GP raised the issue of screening for AF in the PBC consortia many others in the group expressed their concern about the stroke care pathway in general. When the lead GP approached the PCT he discovered that they had already employed an external nurse consultant to evaluate the stroke care pathway, and more specifically, the stroke care ward, to baseline the activity and look at evaluating the service against best practice, and national guidance.

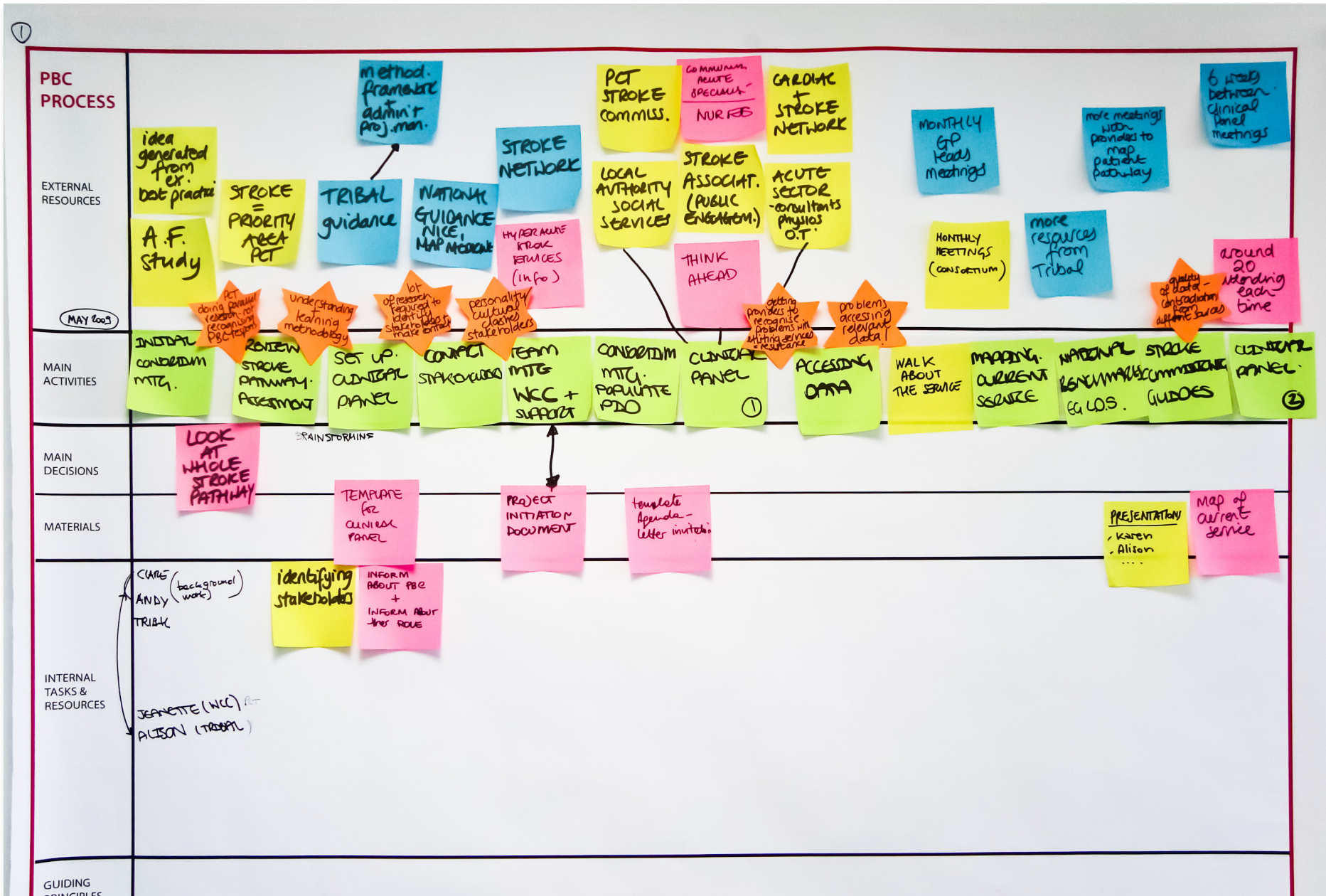
The core team consisted of the PBC manager for Case Study 2, the lead GP, a supporting member of staff from Tribal, and the PCT project manager. Others involved in the clinical panel were GPs (one representative from each consortium); practice nurses (one in particular who had extensive experience of the stroke care pathway through a family member); the lead commissioner from the PCT; The Stroke Association and a local stroke charity – think ahead; a Greater Manchester and Cheshire cardiac stroke network representative; and,

from the Acute sector, the consultants, physiotherapists, and Occupational Therapists (OT); some representatives from the community sector, social services and the local authority.

Case Study 2 has a clearly defined service redesign methodology, which has been provided by Tribal Group, the FESC partners. The guidance produced by Tribal suggested that the first step to service redesign was to set up a clinical panel, involving as many stakeholders as possible in the ongoing development of a new specification for the stroke care pathway. In line with the Project Initiation Document (PID), the core team then had to identify the appropriate stakeholders to involve in the service redesign project. Tribal provided templates and guidance for all of these documents, including an invitation to be involved in the clinical panel.

PBC brought a clearer, holistic, and more structured approach to service redesign along the whole stroke care pathway in Case Study 2 which might not have been otherwise possible.

The Commissioning Advisory Board of the PCT agreed the service specification produced by the Clinical Panel and forwarded this promptly to the provider (the Acute Trust), who are allocated a certain amount of time to respond. The TIA and acute section of the service specification were generally acceptable. However, because the section on rehabilitation entails the majority of care being transferred into the community, this has been more complex and controversial, again resulting in loss of income to the Acute Trust, the potential closure of one of the hospital wards, and the tendering of the service to any willing provider. The PCT and Acute trust boards are behind the overall strategy to improve stroke care but, again, the implications of the commissioning process have highlighted the inherent conflict of interests in the purchaser-provider split.



Case Study 3: Re-design of Dermatology Services

The absence of any reliable data from the PCT and the Acute Trust meant that the Case Study 3 commissioning group decided to focus on a service for which they could gather sufficient data themselves. A further factor contributing to the decision on the area of focus came from one of the GPs who had a special interest in dermatology, and was seeking to extend her expertise. The focus on dermatology also aligned with PCT concerns over costs associated with unscheduled care and high levels of referral to secondary care.

Through preliminary data analysis it was discovered that each dermatology referral led to two further outpatient appointments, incurring what was perceived as unnecessary expense as it was felt that up to 60% of these referrals could be dealt with, with some basic training, in an intermediary dermatology clinic in primary care.

Around three GPs and the PBC project manager were the core group reporting back to the consortium each month. Once secondary care became interested and involved two dermatology consultants from the hospital became involved.

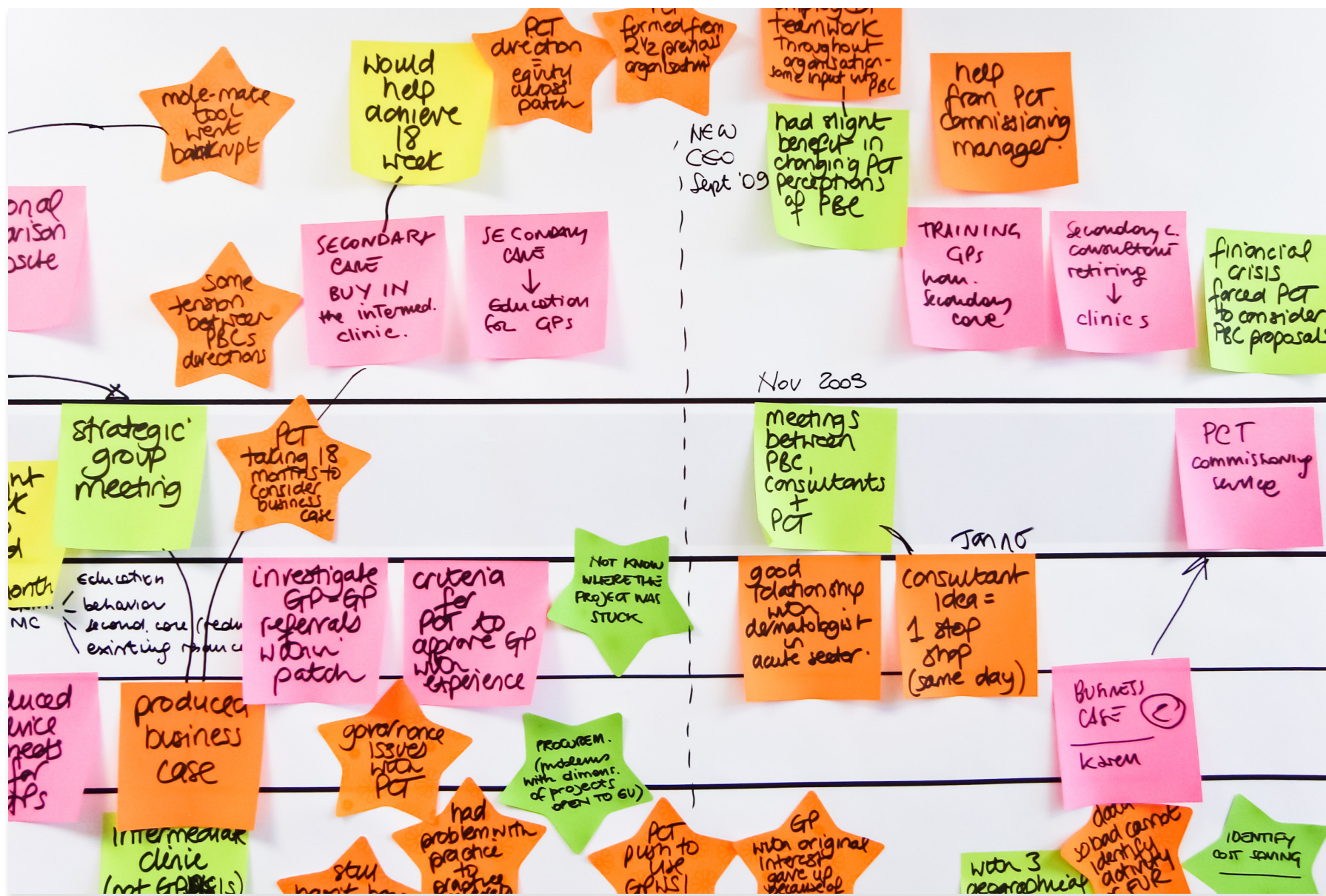
The initial decision to explore the possibility of redesigning and re-specifying the dermatology service was made in April 2008 and the service is due to 'go live' on 1st July 2010, giving a project duration of around 27 months. A preliminary investigation of tools such as 'mole mate' proved unfruitful when the company went bankrupt but the commissioning

group did manage to produce some education leaflets for GPs with help of the experienced GP. The commissioning group felt that the progress of the project was hindered at every stage by the PCT who had no clear understanding of the place or role of PBC, and their insistence on risk aversion approaches (related to practice to practice referrals) delayed any progress on the project for 18 months.

The appointment of a new chief executive at PCT in September 2009 changed the overall attitude towards PBC and they were subsequently allocated a seat at the table, and involvement in the decision making processes. In November 2009, after initial reluctance from secondary care to be involved, the threat of sanctions for not meeting their 18-week referral targets forced the clinicians in the Acute Trust to consider dermatology treatment in primary care. They were then able to prove to the PCT that it would be more expensive to have GPs with Special Interest running the clinic than allowing them to do so.

In February 2010 one of the secondary care consultants (who is shortly due to retire) suggested a one-stop shop (where patients are seen, treated and discharged on same day rather than an 'intermediate clinic') and agreed to train some GPs with an interest in dermatology. Again, this seemed also to be based on personal interest, as this consultant is ready to retire and so is happy to do some work for primary care.

This Case Study 3 illustrates very effectively the difficulties of implementing PBC where the respective roles and responsibilities of the PCT and GPs involved in commissioning are not agreed and clarified at the outset. It is to the credit of the PBC group that they persevered with the project.



Findings from PBC Case Studies

Relationships

Conflicts of interest among stakeholders: many projects showed how project participants involved in commissioning bring diverse perspectives and motivations. Those representing the providers, such as secondary care, may not support solutions aimed at reducing admissions to hospitals. Taking time early on to articulate a common aim and vision related to improving health in the locality may encourage stakeholders to accept compromises by emphasising potential alternative benefits. Case Study 3 illustrates very effectively the difficulties of implementing PBC where the respective roles and responsibilities of the PCT and GPs involved in commissioning are not agreed and clarified at the outset.

Motivation and Engagement

GP engagement in PBC: Currently practices are incentivised to be involved in PBC through distribution of enhanced service payments and promises (and occasionally packages) of support from the PCT. However it is generally a minority of motivated GPs who take most of the responsibility for PBC. The more highly structured PBC groups, set up by the PCTs have managed to achieve more in terms of the number and extent of services reconfigured successfully, but this may be at the expense of engaging a

broader base of GPs. The more emergent PBC groups, which are GP led offer the possibility of more ground-up initiatives but are hindered by lack of business management skills, and poor data.

Patient and stakeholder engagement: service experiences were mainly investigated through data analysis. Only in one case (Case Study 2) did people go on an exploratory journey of the care pathway. Data can obfuscate the real life circumstances faced by patients, particularly co-morbidities and complicating life factors. The set up of dedicated panels with key representatives of interested parties or the involvement of informed organisations were fundamental to the development of more integrated and effective solutions. Some issues were raised concerning the difficulty of actively engaging all project participants in decision-making or ideas generation. Possible barriers are the perception of power distribution in the groups and the effective impact of the process. Tools for managing engagement and overcoming these limitations should be explored.

Approach to Service Re-design

In prioritising services to be redesigned, projects are generally based on initiatives and pressure from visionary GPs who may have a specific interest in a particular area. Although these must be linked with PCT priorities, evidence suggests that some PCTs are choosing easy win targets for their WCC indicators (Health Committee 2010: 48). Data analysis and national comparators may also point towards a source for a project, but it is not always clear to what extent these choices are really representative of the local needs or how they relate to the Joint Strategic Needs Assessment (JSNA).

Case Study 2 evidently benefited from a clearly structured commissioning process with clear phases, deliverables and guidelines and also by a growing clarity of roles and responsibilities. Transparency of processes, discussions and outcomes were key to generating more trusting interactions. In contrast, little clarity about design and decision-making processes and internal conflicts of interest reduced the potential for action for the Case Study 3 consortium.

Evidence based medicine – Experience based design integration: Clinicians face difficulty in negotiating priorities among several issues and, by the scientific tradition, are compelled to pre-evaluate the impact of any projects in terms of clinical

outcomes. In addition they are now expected to model the financial implications of these clinical decisions in the form of business cases. Given this level of complexity, they look for evidence-based solutions and accurate datasets that can inform their decisions, looking to NICE guidance and Map of Medicine for example. They have focused less on engaging with patients, understanding patients' narratives of their experiences, and designing for improved patient experience. In this respect there has been some suggestion that GPs have focused more on treating the disease and less on the social determinants of health or the person in a holistic sense.

Positive and real change: with the slow progress of PBC in many areas it has been difficult to measure the effectiveness of redesigned services commissioned through PBC. Although some consortia have managed to gather information about financial savings, most clinicians do not feel that PBC has improved care for their patients significantly.

Design interventions – Design in Practice

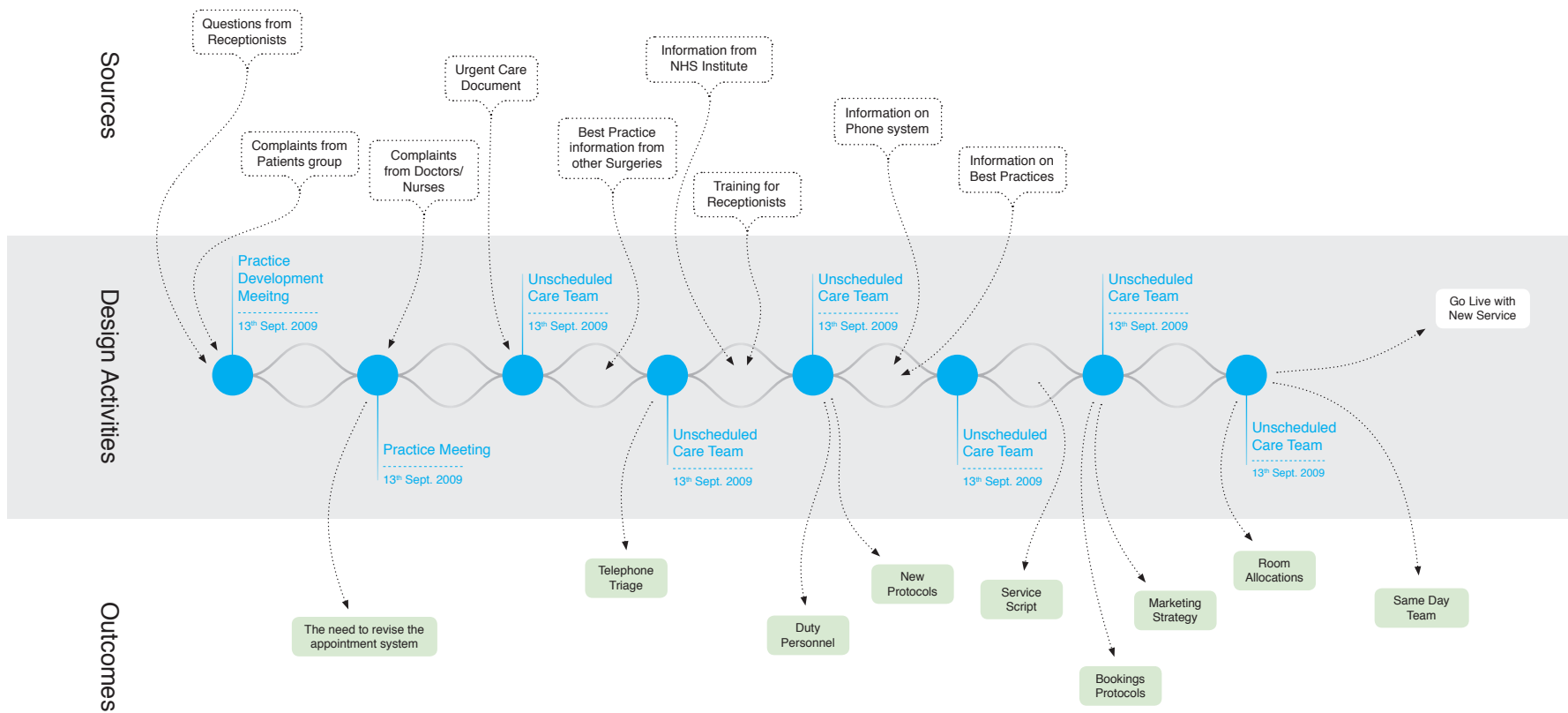
Medical Practice 1 was formed in April 2005 through the merger of four general practices across a small seaside town in the North West. Two of the practices had about six thousand patients each and the other two had between ten and eleven thousand each. The merger produced a large multi-site practice with a patient list of thirty two thousand patients, one of the ten largest GP practices within England. Many of the patients come from areas of high deprivation and there is a high proportion of patients with complex health needs and addiction problems.

We collaborated with the Medical Practice 1 to explore and understand how they 'design in practice', meaning how they re-design their services as part of their daily activities. We conducted the following actions: observations of Medical Practice 1 daily practice and interviews with key staff, observations of meetings for the re-design of the Urgency Care Centre, and facilitation of short design sessions.

Urgency Care Project

Medical Practice 1 had previously commissioned an extension to their existing premises at one of their sites in order to provide accommodation for four extra consulting rooms, two treatment rooms and a central waiting area. The intention was that this facility would consolidate 'urgent' or 'same day' appointments within a new Urgency Care Centre (UCC), in an attempt to balance the ongoing chronic disease workload in a more managed way without lots of extra, 'urgent' patient slots being added to the end of surgery for many of the doctors. It became clear, however, that in addition to an architectural response to the problem, there existed a service management issue with regard to administering the demands for urgent or same day care.

Following from a staff development session when many of the reception staff expressed concerns regarding how they interpreted demands for same day care, the practice set up a group to explore the options for redesign of the 'same day care' service. The title 'Unscheduled Care' group was chosen as, in initial discussions, it became clear that demands for same day care were not necessarily based on cases that the practice would deem 'urgent'. Two of the research team sat in on the Unscheduled Care meetings for two months observing decision making processes and



negotiations as staff reflected on and redesigned the service, producing a set of protocols for reception staff to use.

The process of redesigning the Urgency Care service was collaborative, involving representatives of most staff on the redesign team; the source for ideas were contacts with other practices, literature on best practices, government guidance and suppliers. It was an iterative process, with ideas suggested and refined through discussion among staff present.

Through design conversations the team gradually introduced the idea of telephone triage, a service protocol and scripts for the receptionists, the establishment of a 'same day' team with a duty doctor to cover the service, a new booking protocol and a light re-organisation of the use of spaces to accommodate the needs of the service. In a month the team started a pilot service with the aim of observing how patients would react, gathering statistics of calls distributions and any emerging issues.

What became evident was that, together with organisational issues related to capacity management, a main design concern was related to the interpretation of 'urgency'. Doctors, nurses, reception staff and patients perceived levels of urgency in different ways. Most of the re-design conversations aimed to support the best interpretation of urgency and the best decision in terms of referral pathways.

Finally although the staff discussed patient concerns about the service, they did not have a process in place for inviting any patients to be involved in the service redesign. Patients were 'consulted' at the end of the redesign process, when

the service had already been launched. Once the service was established the practice would have also chosen the best strategy to communicate the new offering to the community.

These considerations led to the development of two design experiments: an exercise (personas) aiming at understanding the existing knowledge of their patients, and a second exercise (design game) aiming at exploring the interpretation of 'urgency' both with staff and patients.

1. Patient knowledge: Persona exercise

From our studies of the Practice-Based Commissioning Groups in NW SHA, it became clear that some consortia had developed formal methods of engaging with local communities through involving patient user groups (such as The Stroke Association) in service redesign proposals. Other consortia have relied on the GPs 'inherent knowledge of their patient group'.

As a means of exploring this tacit knowledge, the Design in Practice team conducted a workshop with Medical Practice 1, as a first step to exploring how user experience and design tools might be applied in the redesign of health services in the area. This first exercise was perceived as a scoping study and a means of probing staff perceptions of patients, before moving on to further user engagement approaches. In Interaction Design the process of persona creation involves a gathering of data about different clients or 'users' of a service, which is then used to construct a 'type' or 'persona' of a typical user of the product or service (Pruitt and Adlin, 2006). When a company wants to explore the perceptions of different types of users, they may use a series



of personas based on different age or socio-economic groups. Product or service design developments are then tested against the perceived abilities and desires of these users.

The Design in Practice team prepared a series of photographs representing some of the typical users of Medical Practice 1 services. These were anonymised by presenting partial views of the person or by having their faces obscured. Staffs were asked to take the photographs in groups and construct a 'persona' for each photograph, suggesting biographical information such as: where they lived, worked and spent their time; what their family life was like and what health conditions they might have. The intention was that, in considering redesign of the healthcare services offered by the practice, they might be able to assess the impact of any proposed changes on the different types of patients, or 'personas' and translate this knowledge into design innovation.

Around 60-70 staff in nine interdisciplinary groups produced 'personas' which showed in-depth knowledge of their patients' lifestyles, however, staff later agreed that some of the health trajectories proposed were excessively negative. This demonstrated the impact of group dynamics and peer pressure when different disciplines and characters are asked to work together, sometimes using (black) humour as a means of overcoming tensions in the group. In defence of their interpretations, one of the doctors explained that black humour is often used by clinicians as a coping strategy, and that, given the social demographic of the area, staff do encounter a higher than average number of very demanding, chronically ill patients, and it is usually the worst cases that imprint on staff memory. This feedback

gave important insights into the coping strategies and daily stressors on practice staff. The exercise did illustrate to the practice the need to broaden their engagement with patients, developing a deeper understanding of their needs and experiences, which they have attempted to do through inviting more people to the Patient User Group.

2. Enhancing Design Collaborations: Design Games

The redesign activities of the Urgent Care Centre into the Unscheduled Care Service seemed to be working around a key question about 'what is urgent and what is not urgent'.

Answering this question is fundamental in the interaction with the patient, in decisions about the care pathway and in the booking of appointments as well as in the treatment. Patients, receptionists and doctors might have different perceptions and interpretations of what is 'urgent' and develop different strategies to find out. Protocols, booking systems and training all support this interpretation.

The Design in Practice team used a design methodology - design games - to further explore this question with the aim of achieving a convergent understanding of the possible answers and their impacts on the service path. Games are metaphors for design collaborations. They are used as a way of involving participants in the process of envisioning and experiencing future work situations in fun and liberating ways.



‘Games are helpful because they provide a familiar, relaxed, and relatively egalitarian atmosphere within which the stakeholders can combine their diverse backgrounds to develop new solutions and to meet one another’s’ needs’ (Muller et al. 1994).

The design game session was held twice, once with service staff representatives and once with patient groups representatives. In the first case the aim was to explore how current interpretations are framing the service, highlighting possible gaps and divergences in the process; while in the second case it was to help understand how patients interpret what is urgent and how this shapes their consequent expectations and evaluation of the service.

In the first session with staff a game board and series of cards were prepared. The aim was to promote discussion and increase clarity of understanding about how to assign patient requests for service in the most appropriate manner. Currently doctors and the practice manager have produced a protocol for reception staff to follow which includes a list of symptoms and illnesses with an indication of the appropriate response for the patient needs such as: Immediate visit to A&E/call ambulance, home visit by doctor, telephone triage, same day appointment with any available doctor or nurse in unscheduled care team, routine appointment with doctor within one week, a task message sent to the doctor to follow up the patient request for care or advice. We reproduced these levels on a game board and provided three kinds of cards: a situation card where staff would fill in requests of care based on their experiences, a system card with external conditions that could influence decision making, and a solution card to

give staff the opportunity to suggest alternative solutions to the patient demands for care and dilemmas. Because of the numbers of participants (over 30) staff were divided into two groups. Within the groups the participants were put into pairs, then given two situation cards, asking them to fill one in with a typical demand for care which staff might receive every day, and then the other with an atypical or complex demand for care. There was some discussion among participants as they filled the cards in, and this took around 5-10 minutes. The game board was set in the middle of the group with a member of the team on the floor moving the cards to where the staff indicated was appropriate. Each pair was asked to read out their situation and tell where they felt that should be assigned, the rest of the group were then asked if they felt this was the right response and some discussion ensued about all of the variables in each situation. One of the system cards was then turned over and, if this was an applicable constraint in that case, the complications ensuing from that constraint were then discussed. Notes of which section the pair felt that the demand should be assigned to, and any further discussion, were made on the solution card, before setting it up on the agreed section of the board. Each pair in the group took turns to read out their typical situation card, then going round the circle again, following the same process for the atypical situation. This process took around 45 minutes.

Being in a circle and allowing each person (or pair) to make their own observations before discussing these in the group meant that the more reserved members of staff also had a chance to verbalise their thoughts and participate in the discussion. It became clear that some of the reception staff felt very confident in asking the patients further questions about



their illness as a means of ‘diagnosing’ the problem before assigning it to what they felt was the right category. However, in one of the groups, staff expressed reservations feeling they might be criticised about the decisions they made, and a senior manager suggested that reception staff must be very wary of trying to ‘diagnose’ a patient’s problem before passing it through the system. In this respect the “game” also turned into a tense discussion as the participants in this group represented different hierarchical levels in this organisation. This we called the ‘diagnosis dilemma’ as receptionists were actually doing ‘diagnosis’, but were not formally allowed to do so.

The session played with patients was slightly different as the game board was left intentionally blank to allow the patients to express their expectations of how soon, where, and from whom they would receive care, and to explore their perceptions of how the service was currently framed.

Also the situation cards for the patients had space on the front for them to write what their expectations of care would be; and the patients were given green, orange and red cards, to allow them to describe problems with different levels of urgency related to requests for healthcare. Place markers were used to represent each card as it was easier to position these on the board.

The patients filled in the three situation cards they were given, most indicating health issues which either they or a family member had experienced. We then went around the group asking each person to read out one of their cards and explain what their expectation of service would be from the practice. They then indicated where on the board they thought their marker should be placed indicating

their perception of the urgency of the case (from ++ to -).

After we had gone around the group three times and each participant had read out all of their cards, we then had a time of discussion where we asked the participants to group the cases together and indicate the levels of response they would think were appropriate for each case. But the different categories they felt were appropriate (in order of urgency or concern) were: A&E, Doctor go out, see known doctor same day, see any doctor same day, see doctor same day if possible but ASAP, see doctor within one week, see doctor within two weeks, seeing own doctor prioritised over how soon they could be seen.

The patients seemed to engage well with the game and expressed feelings of achievement at being consulted and having been able to make constructive contributions to the discussion. Some issues that became clear were:

1. Patients perceived receptionists as knowledgeable and helpful and would expect the receptionist to give them advice about what to do;
2. Patients expressed a preference to be seen by their ‘own’ or a ‘known’ doctor, although they accepted that, in an urgent case, they would be happy to be seen by any doctor;
3. Patients also revealed a lack of understanding of the role and capabilities of nurse practitioners, even expressing, “Well, a nurse could not do anything about that (recurring headaches) could she?”
4. Patient perceptions of contacting the surgery were very much focused around doctors.



3. Developing a vision: Integrated Care Workshop

The Urgency Care project showed how the practice dealt daily with incremental innovation. Service changes were decided based on contingencies and pressure on the organisation by the growing same day care demand and were inspired by government guidance and best practices examples. It was not clear though how Medical Practice 1 dealt with more systemic changes and radical innovation.

Against this background we decided to engage the practice in a scenario building exercise. The intention of the workshop was to help identify and strengthen connections across boundaries of care, by bringing practitioners and clinicians from primary care, social services and the third sector together to explore current models of care delivery in the local area.

Integrated care was chosen as the focus of the workshop, as this is consistently emphasised in Department of Health and government policy, as offering the potential to improve coordination of care for patients, supporting people to remain healthy and avoid crises, while offering greater value for money. Looking to the future, the workshop offered participants the opportunity to envision how they might progress the idea of integrated care, imagining the impact of new roles, places or collaborations. Participants were people from different local organisations such as Help Direct, Health Trainers, Signposts, Medical Practice 1 (managers, doctors and nurses), Age Concern, Citizens Advice Bureau, Lancaster Adult Social Services, N-compass, Lancashire Link. After an icebreaker activity mapping out people's existing connections, we developed two main activities:

Activity one: Integrated care as it stands

Groups were formed around three key profiles of patients representing three main age groups. People in the groups were asked to suggest, starting from the patient situation, what care they, as individual organisations, could provide. After filling each individual contribution, existing links among organisations and services were identified together with barriers for integration of care.

All the groups clearly visualised in their maps the complexity of care assessment, ranging from housing, benefits, family and work situations to lifestyle, social isolation, mental health, diet, special treatments, etc. As an effect of this complexity, care has been described as provided in a discontinuous and disconnected way from both the patient and the staff perspective. Barriers mentioned were: lack of communication, time, feedback on care journeys and little understanding of each other's activities and potential contributions to the patient's care.

Activity two: Integrating ideas

In the second activity each group was asked to move from thinking of what they could offer as individual organisations, to what patients really needed for their support. They were asked to imagine themselves as a working team to assess, plan and implement care based on the patient profile they were given. Each group identified key patients' needs, imagined what kind of services could be provided for each of the needs and which vouchers could be spent to set up the new ideal system.

The three groups worked around three main ideas, which they developed: 1) 'one stop shop' for general advice



with new triage and health care roles; 2) individual health & social care budgets supported by a virtual care broker platform and common referral system; 3) individual iPad for health and social care information, supported by a new role, a 'wellbeing coordinator'

In three hours the workshop initiated a conversation around the future of integrated care. The picture that emerged from the activities and conversations is one of an extremely rich and varied, but partially disconnected, system of actors. Organisations seem to communicate and interact with each other via key, but weak, mediating nodes (such as GPs or Help Direct).

The key issues limiting integration were identified as: 1) a limited understanding of each other's activities; 2) limited time to assess peoples' health and social needs; 3) lack of integration of information systems; 4) limited tracking and feedback system of individual care journeys.

As a result of discussions and activities a strong vision for an individualised care design and management seem to emerge:

- Patients should be supported with technology, training and personal care professionals ('wellbeing coordinators', 'new health care managers' or 'case worker') to create the best support system they need;
- Given the complexity of the system and the constant update of rules and possibilities, individual technological interfaces for both staff and patients have been suggested;

- Distributed but integrated 'one stop shops' could host different actors and their services and also have a virtual representation on line.

One-stop shop for local area?

In the final discussion Help Direct was suggested as an existing service offering the potential for guiding and coordinating care, but it is seen to still lack visibility and credibility from the patient perspective. Patients still focus on doctors and professionals and do not understand or value the role and potential of Help Direct.

A successful example of a one-stop hub is the StartNow! project in Fleetwood where different professionals and organisations (such as citizen advice, local solicitors, job centres, benefit advisers, health trainers etc.) provide their services within a Sure Start children's centre, although this is not linked with a provider of GP services. The main question raised was whether the best solution might be a single central physical place, where people would go, or a virtual platform connecting different people working in different locations closer to patient needs.

A single assessment process?

The need for a tracking and care management system was discussed. The existing Single Assessment Process has been suggested as a relevant tool to generate integration but, so far, the information systems of the different organisations are not set up to communicate with each other. Health trainers described their data collection and monitoring system, which is currently accessible only to the PCT and not to individual GP practices. Is there any solution that could reduce this fragmentation?

Findings from design interventions

Observing daily design conversations within a primary care centre on the urgency care project, showed how the act of designing is intertwined with the service management and delivery. The process of redesigning the service was collaborative, involving representatives of most staff on the redesign team; the source for ideas were contacts with other practices, literature on best practices, government guidance and suppliers. It was an iterative process, with ideas suggested and refined through discussion among present staff and verified through pilot implementations and quantitative (number of calls and visits) and qualitative evaluations (emails and notes from staff). Some aspects emerged from our observations and design interventions:

Patients knowledge and engagement: Patients were part of the process through formal and informal 'complaints' and 'consulted' at the end of the redesign process, when the service had already been launched. Staff mostly relied on their 'inherent knowledge of patients', but as the persona exercise partially showed their representations were often influenced by 'coping strategies' in relation to the most difficult cases. Building and collecting representative stories and profiles of patients might support design strategies, although careful preparation and guidance related to the development and distribution of these is necessary.

Collaborative Design: health services rely on complex diagnostic processes that are conducted by different professionals in different

phases. The Urgency care project showed how negotiations and interpretations over the meaning and conditions of urgency need to be made explicit and collaboratively discussed in an egalitarian and collaborative setting to allow dilemmas and conflicts to arise. Patients should be engaged as well as their contribution to diagnosis is fundamental. Peer to peer learning sessions can support useful knowledge exchange. Design games approaches can provide a structure to facilitate these conversations. In the context of our research project and its obvious limitations, design games were found useful in allowing people to share their different views on a given topic and in supporting them to have much needed conversations to come to terms with their differences.

Creating a vision and local synergies: service re-design appeared to be a day-to-day activity based on emergent needs, constraints and opportunities that allow for limited radical transformations. Systemic change needs to go beyond individual care pathways and individual professional work and consider health as the result of a wider set of conditions and contributions. Clinicians need to engage in conversations with various local actors to generate an agreed vision for change and identify potential synergies among their individual work and service offerings. Creating spaces and times for these convergences is fundamental, while scenario building activities and mapping exercises can provide useful structures and tools to facilitate these encounters.

Design case studies – Designing for Public Services

As part of the Design in Practice Project, an evaluation of the use of service design tools in public service health projects was conducted, with a view to ascertaining which might offer benefits to GPs seeking to engage with patients and innovate new models of healthcare services. The team have selected four completed design projects that applied design thinking to innovate healthcare services:

Case 01: Living well with diabetes

RED collaborated with Bolton Diabetes Network (BDN) in order to create a new service to help people live well with diabetes.

Methodology: Using a user-centred research method, they interviewed people in their own homes, observed their shopping behaviour, and how they managed their condition in the context of daily lives; using generative tools RED explored how participants felt about diabetes, what they said about it, what contacts they had with the health services in Bolton, and how they viewed the practices prescribed by the medical professionals. After this phase (called ‘shallow dive’)

the RED team worked in data visualisation and identified patterns in the way people live with diabetes. Thereafter they drew three different individual profiles as pen portraits (brief sketches of the lives of the participants): the ‘Knowing Struggler’, ‘Determinedly Naïve’ and the ‘Able Knower’. From this insight they decided to focus the new service on diabetes management: a service to support people in the context of their everyday lives. Thus the aim of the project became to empower patients to describe their needs, act on new knowledge and lead more fulfilling lives. The RED team understood that diabetes management is complex, as people have to evaluate a lot of interdependent variables at one time; however, the support that was given by NHS did not help to deal with complexity, as the encounters with doctors were just focusing on education and compliance.

Service Outcomes: The RED team created Agenda Cards, self-diagnosis cards to support the collaborative process of care planning between the patient and the doctor. Even though people with diabetes had the knowledge to live well with diabetes they needed support to internalise this knowledge and change their behaviour. RED thought this could be provided by an external agent like a coach, so the team started to develop the concept of a new role for this service: an agent to behavioural change. Finally, the team understood that, for effective self-management, people

needed to have access to their own records, submit test results from home, and obtain real-time advice from coaches and other caregivers. So, they developed a platform: a diabetes blog. These ideas were all quickly mocked up as service prototypes during feedback sessions with PCT management, practice nurses, a psychologist and with the Bolton residents to verify and refine the ideas before implementation.

Of the various solutions suggested, The Bolton Diabetes Network decided to pilot just the BoND Agenda cards. The project did not go beyond the pilot phase; the Programme Manager of Bolton PCT said that “unfortunately the clinicians were very reluctant to use the cards and found them too time consuming in consultations”. When asked why the project did not go ahead, a RED team member mentioned how “there was a fundamental error that both groups made [...] we did not involve, early enough in the project, the people who might be able to carry the work on afterwards”.

Case 02: Activmobs

Kent County Council (KCC) worked with the RED team to promote more active lifestyles and potentially reduce chronic disease among their population. KCC proposed to work in a deprived area of Maidstone in and around the Park Wood estate.

Methodology: RED used the double diamond method (Discover, Define, Develop and Deliver) working with Kent residents in two main phases called by the team “shallow

dive” and “deep dive”. The shallow dive involved two days of contextual research, including visits in six homes of potential participants, interviews conducted through visual exercises (generative tools). The information and ideas from this phase were taken back to RED design studio, where the team developed the preliminary analysis. They created a range of pen portraits (brief sketches of the lives of the participants) and then returned to conduct a workshop in Kent with local stakeholders such as the community support officer, youth club leaders, a local vicar and an Age Concern worker, asking them to complete the portraits with profiles that were missing. The team also asked this group to brainstorm ideas for motivating individuals to increase activity. The team worked with more than 200 ideas and began to sketch and consolidate some concepts.

The ‘shallow dive’ phase showed that being healthy and living an active life is not easy for Park Wood residents. They did not prioritise exercises in their busy lives. The key challenges were to increase the motivation to be active, removing barriers such as the perception of crime, ill health and disability. The initial ideas were clustered in two groups: Park Wood Olympics and “individual and small group activity like flash mobs”. Inspired by two residents’ social groups and also by Tupperware parties, the group developed the concept entitled ‘Fitmobs’. The idea was to encourage a social commitment to get active and stay active. Fitmobs would be informal, initiated by the interests of the residents, and self sustaining. They ran some service prototypes with Park Wood residents where the emphasis was on trying ideas out and adjusting as they went along, using feedback immediately rather than at

the end. Over five weeks they alternated between working at developing ideas in the studio and testing them out in Park Woods, in an iterative and simultaneous process.

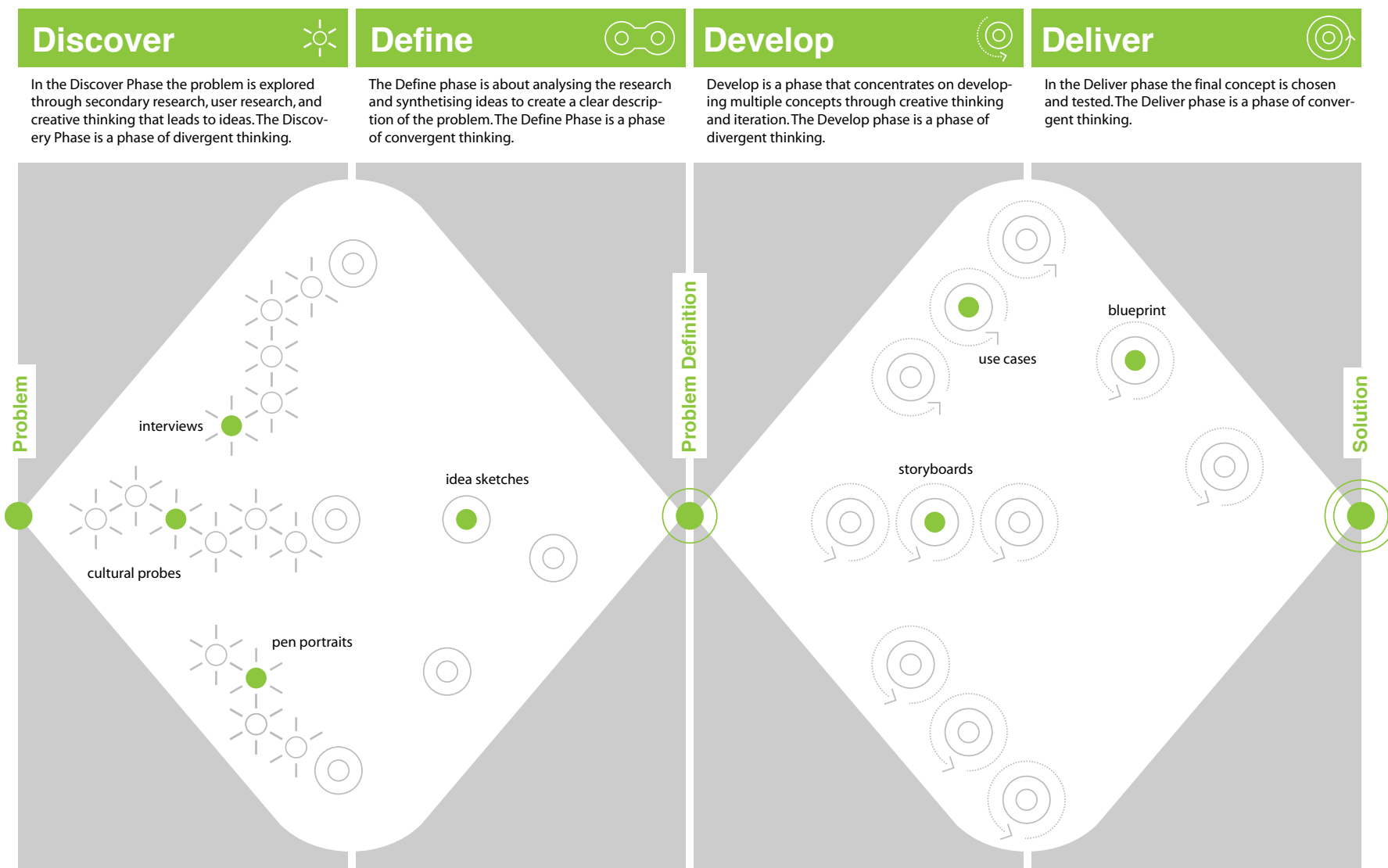
Service Outcomes: The design outcome was the Activmobs concept, an informal self-organising group between 2 and 15 people (a mob), formed around a shared activity that could benefit health and well-being (for example, dog walking). Activmobs provided an on-line platform that would support the creation, registration and validation of each mob, and tools to motivate people to sustain their group activities such as: “health miles” cards, which would give discounts from public facilities, shops and services for active participants; self-rated qualitative improvement measures like ‘well-being chart’, where people could indicate tangible changes in their well-being; and a “statement” to be delivered every three months to participants, showing their well-being improvements. The platform was implemented in KCC and is still running today. Now, Activmobs is helping other communities (like Betteshanger Community) to set up their own active projects.

Case 03: Open Door

Martin Bontoft and his design team were asked by North East Lincolnshire PCT to solve a problem of health inequalities in Grimsby. The main goal of this project was to motivate people to register with a General Practitioner, and take better care of their health conditions.

Methodology: The design team used a co-design approach articulated in four main phases: discovery, define, develop, Deliver. In the discovery phase the team conducted ethnographic studies using techniques such as cultural probes, interviews, and observation, and conversation cards. In the Define phase, the team facilitated a workshop with the stakeholder group (NHS Staff, Drug Agencies, third sector, Citizens Advice Bureau, a Bank) to visualise the data and define the problem. The key findings were that although there were different groups of users, they had similar emotional needs: they needed a place of safety, opportunities for socialisation, someone to listen, simple help and advice, and to be respected and valued. There was also the sense of being disempowered and isolated, distanced from work or health, and unable to make a positive change for themselves. In the Develop phase, they started to develop some potential solutions that were shown to the users group to get their feedback. The final solution was a health and social care enterprise, funded mainly by NHS called Open Door. In the Deliver phase the team prepared a document to communicate the service process and values and a rough prototype of the service.

Service Outcomes: Open Door is an health and social care enterprise, defined as an “activity centre – somewhere you go to engage, be challenged and supported, meet like-minded people, feel part of something, and do something useful”. After two years, the benefits that Open Door brought to East Marsh went beyond the original expectations. It increased by four times the number of people attending the health centre, while re-introducing 187 people to mainstream health services. Simultaneously they have seen a concomitant reduction of 12% in reported crime each year since Open Door was introduced. Open Door was twice profiled in Society Guardian, and was awarded with a “pathfinder” status by Department of Health’s Social Enterprise Unit.



Case 04: Multiple Sclerosis

The London Borough of Ealing asked NHS Institute to develop a new service model for their 300 Multiple Sclerosis (MS) patients.

Methodology: NHS Institute set up a team to support Ealing PCT which comprised representatives from NHS Institute's Service Transformation team and service design consultancy Live|work. The team aimed to understand the problem and the service experience from the point of view of the patient, their family or carers, as well as frontline staff and other stakeholders. They established a multi-disciplinary project team, which included a neuro-physiotherapist, occupational therapists from health and social services, a speech therapist, a development manager from the MS Society and a commissioning lead from the PCT.

NHSi followed four main phases: discovery, define, develop and deliver. Live|work led the discovery phase, conducting interviews, observation, shadowing, service mapping and timelines of events. As a result, they understood that the main the problem with MS patients was that nobody really knew what services were provided, where to access them and how. They also noticed that, although many patients attended a monthly clinic, these scheduled appointments rarely coincided with the patient exhibiting the specific symptoms they needed to discuss.

In the Define phase, the team synthesised their understanding of people's experiences in user profiles, with

photos and quotes. After developing initial ideas into service concepts, the team organised a number of working sessions with patients and their families to evaluate and refine the ideas into concepts through the next stage of the project.

In the Develop phase, the team designed a blueprint for the kind of patient experience they were seeking to create, which was prototyped in order to understand what would work (or not), where opportunities to combine or improve elements would be, and what resources and infrastructure were likely to be needed to deliver the service. The main aims were: to ensure that patients were given access to an MS service that was tailored to their individual needs during the different stages of their life; and that people who have just been diagnosed with MS were given a clear referral into a community-based service to help them live better with their condition, build the capacity to self manage and plan for the future.

In the Delivery phase, the Live|work team detailed the touch points indicated in the blueprint, to deliver the service experience, such as websites, and various communication tools. The service was expected to improve care, quality of life and outcomes for patients and reduce the number of patients resorting to hospital treatment.

Service Outcomes: ENable is the service outcome of this process, a new community neurological rehabilitation and enablement team, which integrates the Ealing Primary Care Trust and the London Borough of Ealing Social services, with a multidisciplinary team (Physiotherapist, Occupational Therapist, Speech & Language Therapist, Counsellor, MS Nurse Specialist, Clinical Psychologist) accessed by a single point of referral and contact.

Findings from design case studies

User-centred and experience based approaches: all the design projects started with a 'discovery phase' which applies ethnographically inspired methodologies (like interviews, observations, shadowing, cultural probes, etc.) to produce an in-depth understanding of people's behaviours, emotions and relationship with their disease and with the service itself.

Collaborative and multidisciplinary design: all design processes engaged a wide array of people both as sources of information and as co-designers of the solution. Processes are designed to support different levels of engagement using various kinds of design materials (pen portraits, profiles, storyboards, blueprints, idea sketches, use cases, etc.); these materials work as 'boundary objects' among people with different backgrounds and perspectives.

Iterative and emergent process: the four phases of Discovery, Define, Develop and Implement are, in practice, constantly repeated in the process of refining and developing the initial insights and ideas. Designers alternate field studies and co-design sessions with work in their studios to conduct an iterative process of verification and refinement of their initial insights and ideas.

Visualisations and Prototyping: designers use different kinds of visualisations to help interpret and share information, making intangible experiences tangible, representing complex

systems, connecting the project with real people and practices, providing materials to co-design and test service ideas and processes in advance. This enhances collaboration and reduces the risk of failure when the service is implemented.

Organisational and Behavioural change: most projects aimed to change the behaviour of participants to encourage them to better take care of their health, while simultaneously transforming organisations to deliver more supportive and efficient solutions. Being service co-produced Service Design needs to be centred on the community of co-creation, understanding the problem from the perspectives of the different actors involved and uncovering eventual deep assumptions that shape their practices and lifestyles.

Service platforms: often design processes, aimed at generating more collaborative solutions and helping people take better care of their health, result in the broad definition of a 'platform', meaning a system of support that people can use in various ways depending on their needs and conditions.

Engagement and co-creation: all projects engaged patients and their representatives in design activities mainly during workshops but also as active researchers of their own context. Through iterative processes patients were also invited to test and experiment with ideas and prototypes of the solutions giving feedback and participating in the set up of the final platform.

Final Considerations – Practice Based Commissioning and Design

Our research and literature on PBC suggest that most of the difficulties for effective GP commissioning are related to structures, mechanisms and professional practices that resist and conflict with collaborative and integrated modes of commissioning and delivering services. PBC has managed to achieve some good results where these barriers were overcome, where there was greater stakeholder engagement, and where the purchasing power of the PBC groups was strong enough to prevail over internal conflicts of interest. Many of the conflicts encountered were between commissioning consortia and the PCTs, but low motivation and engagement of ‘rank and file’ GPs, hospital consultants and key local organisations also contributed to difficulties encountered in the development and implementation of service redesigns.

‘Many of the barriers are about relationships, and it’s important we address those obstacles from the start. It’s encouraging that the areas with greatest engagement brought the most significant service changes.’ (Pulse Today 2010)

In many cases the local significance and overall effectiveness

of PBC projects and interventions have not yet been fully appreciated or demonstrated. Many interventions are driven by the need to reduce expenditure and seem to be focused mainly on addressing excessive referrals and prescribing. While this is necessary in the difficult economic climate, few systemic interventions are evident which attempt to create new models of care, missing the potential for wider, organisational efficiency gains. In addition patient knowledge is often limited to data analysis or the involvement of disease specific patient groups, while effective engagement of the general public has not been fully developed and integrated into commissioning processes.

As suggested by these insights, PBC has initiated a cultural shift toward a more collaborative, integrated and community centred commissioning of care, but it will need significant infrastructural changes and further experimentation to reduce barriers to collaboration, enhance integration of provision and properly engage with the public. Within this transformation, design can provide support and tools at different levels:

Support to set up collaborative frameworks: Scenario building activities and mapping exercises provide useful structures

and tools to facilitate collaborations and to think in a more holistic way. Also simulation activities, like the imaginary voucher cards, help release imagination to go beyond existing constraints and create long-term visions. These kinds of scenario workshops can facilitate the generation of a common vision for the future and highlights gaps and existing obstacles for collaboration. Also using a variety of design methods and visualisations allows participants to interact through mediating or 'boundary' objects, breaking down hierarchical and disciplinary barriers.

Evidence-based approach integrated with experience-based approaches. A more holistic perspective of the local healthcare landscape can be acquired when available data and examples of best practice are interpreted in the local context, and combined with in-depth exploration of the patients' specific experiences of using healthcare services. Observational and ethnographic studies in particular can help provide specific insights, uncovering personal stories behind the data.

Patient engagement and iterative design: Through iterative processes patients can be invited to test and experiment with ideas and prototypes of the solutions giving feedback and participating to the set up of the final platform. In some cases patients can become a key part in the delivery system, creating their own solution and using the service platform based on their needs and specific interests and motivations. Visualisation and prototyping are vitally important as they can help test solutions at different stages: by means of quick (or low-tech) mock-ups of partially developed solutions, to experience

prototypes and small-scale pilot projects at later stages.

Integrated and community based care: Design projects, aimed at generating more integrated and collaborative solutions, often result in the development of a 'platform', meaning a 'system of support' that people can use in various ways depending on their needs and conditions. A platform can be a physical or virtual space that people and service providers can access depending on their needs. High accessibility of these kinds of platforms and integration within community services and facilities enables healthcare to reach out to different kinds of communities.

Integrated care at the same time, requires unique access, based on a common platform where service providers should be able to share diagnoses, patients' pathways and easily reach various kinds of patients. These platforms are also objects of design processes, but they need to consider the appropriation and adaptation of professionals to new health systems. Instead of top-down solutions, service design outcomes should be elaborated in terms of use scenarios and design principles (instead of strict procedures and blueprints) to enable service providers to start using them and adapt them to their needs.

Finally integrated and community based care requires a shift from co-design to co-creation, meaning a consideration of all project participants not only as part of the design process, but also part of the solution. Generating ideas and solutions that are then co-created by the same group of partners (included the patients), can have potentially transformative impacts; An increase in participation can lead to more appropriate and accessible services, while increasing social capital and people's self confidence and health-enhancing attitudes (Popay, 2006).

Final Recommendations – Recommendations for GP commissioning

The proposals in the Health White Paper for enhanced responsibility for GP commissioning consortia and the quality focus of the new provider remuneration systems (DoH 2010a), is intended to 'liberate' GPs from the control and potential blockage of PCTs and reduce conflicting interests with the acute services. It has been recognised, however, that the major organisational changes involved may also create a vacuum of competencies and supporting frameworks that needs to be adequately filled and rebuilt. We consider this transition period as an occasion to re-think GP commissioning from a wider perspective.

Instead of focusing exclusively on GP responsibility for commissioning, we think the focus should be on the broader communities that could be involved in commissioning (communities of co-creation) as an integral part of the consortia or federations, and not only as a point of reference for individual projects.

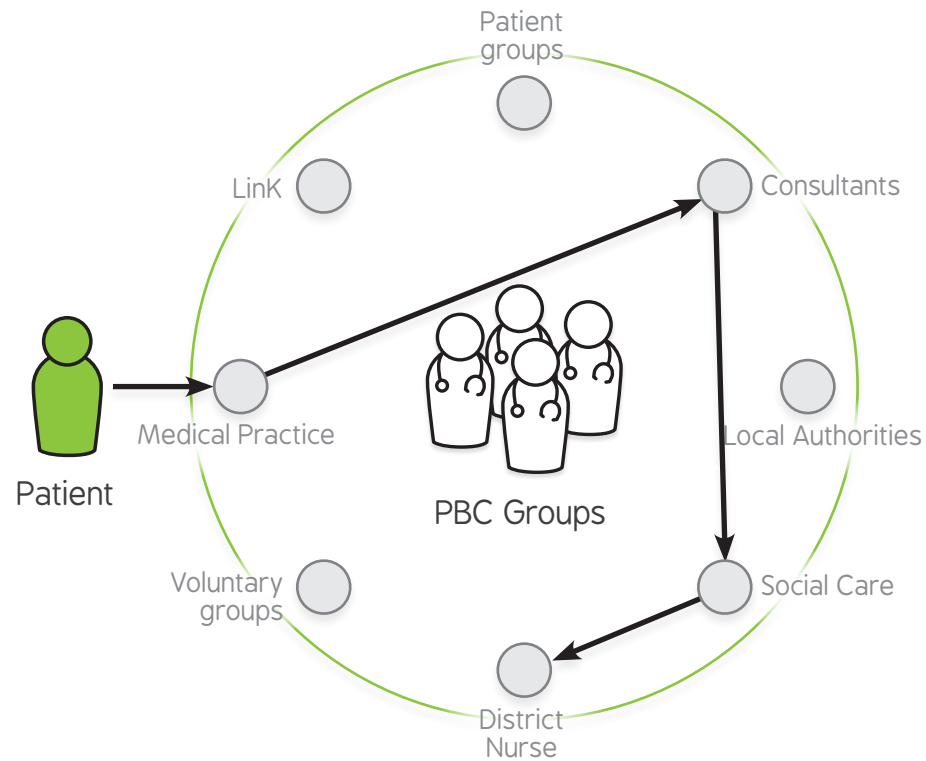
In addition the narrow focus on redesign of individual disease pathways might profit from an expanded approach involving development of a wider 'scenario for change' that considers health and wellbeing at its centre.

We recommend a shift from a 'GP centred commissioning' to 'community centred commissioning' that recognises the key role of GP consortia as facilitators (together with local authorities) of commissioning networks, but focuses on co-creation as main strategy for service innovation.

This proposal goes beyond the idea of a Local Clinical Partnership (Nuffield Trust, 2009) that engages doctors together with secondary care doctors, nurses and pharmacists, as 'community centred commissioning' considers also third sector agencies and representatives of the population as active members of the commissioning group. In this way it is closer to the proposal of 'locality' commissioning that requires 'robust models for how PBC might support integration across health and social care systems at a locality level' (Edwards et al. 2007; Appleby et al 2010). Also it resonates with the idea of a 'participatory fluid' and 'whole system' approach to innovation.

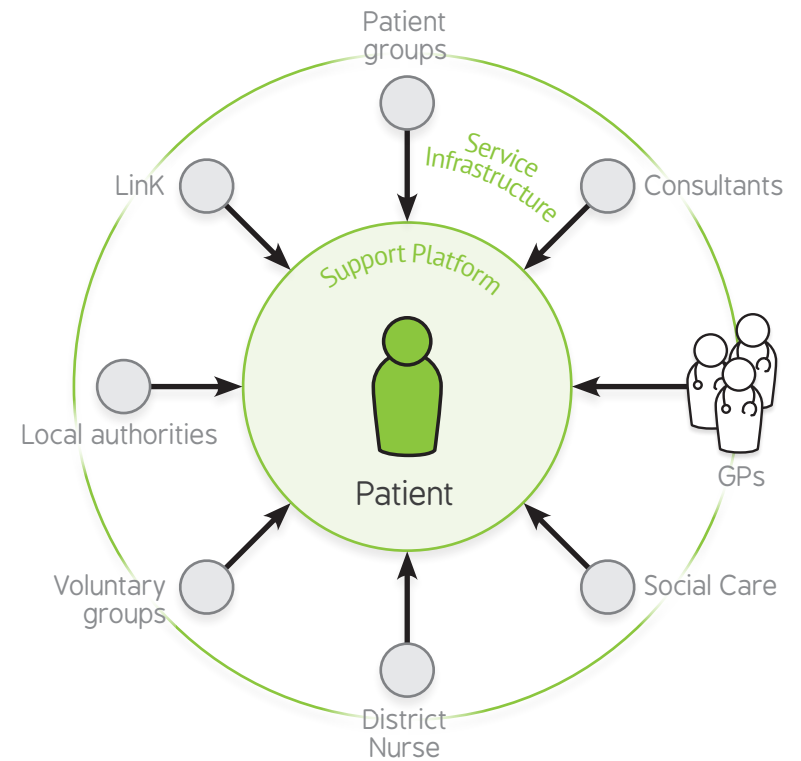
The NHS Institute for Innovation and Improvement has similarly reported on the importance of setting up a 'compact', which is 'a local agreement that pro-actively shapes the relationship between clinical commissioners and partners organisations' (NHSi, 2010: 4). This partnership and commissioning community would then provide the basis for individual co-design projects and teams.

Integrated Care Pathway



GP Centred
Commissioning

Integrated Care



Community Centred
Commissioning

Key principles of Community Centred Commissioning

Community-centred Commissioning is a concept aimed at shifting the attention from GP groups only to the wider community that needs to actively contribute to ideation of new service models. We think this shift can be enhanced by developing partnerships that are driven by reflections on future scenarios and development of a common vision.

1. A Scenario driven partnership:

A series of scenario building events should guide the creation and consolidation of a partnership agreement or compact. A scenario for the future could be built and agreed upon as a collaborative effort and visualised in a way to be accessible and meaningful to the local communities, to allow appropriation, contribution of comments, and modifications. Making the aims and vision of a project or strategy tangible by using service scenarios as manifestations of the wider vision may help all stakeholders from the various organisations, (particularly citizens and patients), to evaluate the relevance and potential impact on their life and work and allow active comment.

Tools: Scenario building, collective storytelling, visualisation of scenarios, generative prototyping, storyboarding,

2. A culture of collaboration and engagement

Creating the conditions and activities that cultivate a culture of collaboration and engagement is fundamental for a community-centred commissioning to work. The emphasis is therefore not only on developing external 'mechanisms of involvement', but also on implementing internal 'mechanisms of change' within each individual organisation (Anderson, Florin, Gillam and Mountford 2002:55). This comes from the awareness that for any transformation to be sustainable and effective in the long term, there needs to be a change of cultures and attitudes, building trust and facilitating on-going constructive dialogue.

Creating spaces and times for meaningful interactions between stakeholders can facilitate the construction of a shared understanding of existing assets in the territory, and the formulation of an agreed vision for change. Engaging and creating the initial local networks of organisations and citizens requires a collaborative effort but offers the additional potential benefit that each organisation can provide a resource for research into local needs and people's life stories. This type of 'heedful interrelating' (Weick and Roberts 1993; Dougherty and Takacs 2004) increases support for convergence among stakeholders with potentially conflicting interests within individual projects.

Tools: collaborative mapping exercises (relationship maps; stakeholders maps; service maps); speed dating; storytelling, mapping social determinants of health; ethnographic methods; cultural probes; participatory appraisal; design games; crowd sourcing; web blogs and forums.

3. Building collective capabilities

The focus on the training and support of GPs to enable effective commissioning should be extended beyond business management skills to include modes for public engagement, and the use of creative

and co-design tools and techniques. All commissioning partners, and those involved in any 'compact' should receive the same training as well as training in understanding the principles and processes of commissioning. This training process should be built into the programme for the set up of the commissioning partnerships. The commissioning approach and process should be clearly communicated and transparent to all commissioning partners and the general public to generate and encourage trust and commitment.

4. Enhance imagination and systemic thinking

Re-design with a 'whole system' approach requires the capacity to go beyond existing barriers and individual organisations and pathways, to imagine possible futures that connect individual organisations and services. Data analysis, DoH guidance and patients' experiences can be used as the foundation to enable identification of key issues for potential projects and to provide a springboard for brainstorming and idea generation activities. Creative and generative tools can then build upon these to enhance imagination of possible futures, while mapping and visualising exercises and tools can enhance systemic thinking.

Tools: generative tools; brainstorming; creative tools and techniques



Scenario Building

What are scenarios?

“Scenarios are vivid descriptions of plausible futures” (Lindgren and Bandhold, 2003: 22). They depict how the world will function depending on how key selected uncertainties concerning a focal question will play out. They work as inspirations for generating ideas and as filters through which ideas, projects and strategies can be developed and evaluated.

Why are they useful for GP commissioning?

As we highlighted from our research findings, most of the difficulties for effective GP commissioning are related to resistance to collaborative and integrated modes of commissioning and delivering services. There is the need to move beyond individual pathways redesign often driven by individual interests, and develop locality based strategies that guide more systemic commissioning initiatives. These are necessarily complex initiatives that require multidisciplinary and multistakeholders processes as well as the ability to challenge existing assumptions and expectations.

Scenario building can help GP commissioning for various reasons ((Lindgren and Bandhold, 2003; Van Der Heijden, 2005):

- it stimulates divergent thinking: scenario building helps to open up existing mental models and resulting expectations, challenging assumptions about the present and the future;

- scenarios work as reflection tools: they help people to think through more effectively ideas generated through strategic conversations;

- scenarios are an effective communicative format: scenarios allow diverse views to be considered, facilitate conversations by making the impact of plausible futures more tangible.

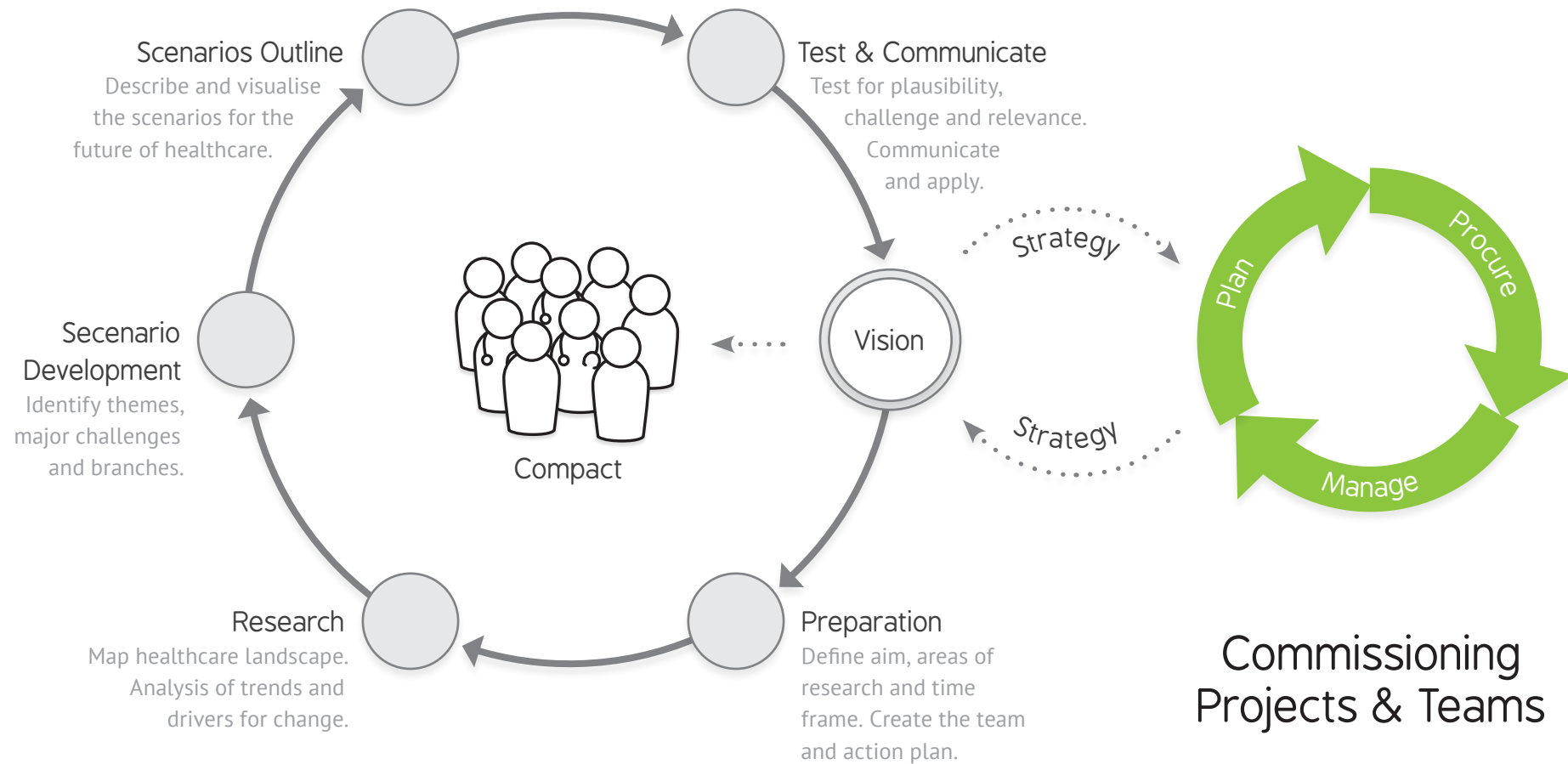
- enhance collaborations and convergence: scenarios can help diverse groups to converge their understanding and visions for the future.

Scenario building process

Scenario building can be a long process, between 6 months and 1 year, if it involves a high level of stakeholders participation. An example of a long scenario building process is the one developed by NHS North West (2008).

Scenario building can also be a shorter process, that uses existing research into trends and change drivers, scenarios and expert facilitation to reflect on and experiment with plausible futures and their potential impacts on healthcare and commissioning choices.

The key steps of a traditional scenario building process are, as summarised in the graph: preparation, research, scenario development, scenarios outline, test and communication, planning.



Scenario Building for the
future of healthcare

Co-creation teams for Community Centred Commissioning

Co-creation projects and initiatives emerge as part of the community centred commissioning vision and take advantage of opportunities for new synergies and collaborations. Co-creation processes require an active participation of patients and stakeholders and an open and iterative process. Even if phases and outcome are pre-defined, the process should be based on iterative cycles of experimentation alternating field studies and data collection with designing and experimenting.

Discovery phase:

All the design projects should start with a 'discovery phase', which applies ethnographically inspired methodologies (like interviews, observations, shadowing, cultural probes, etc.) to deeply understand people's behaviours, emotions and relationship with their disease and with the service itself. Focusing on their stories and observing service contexts and processes provides direct and useful insights that help uncover what the real 'problem' is behind what data or clinicians might suggest as an initial hypothesis.

Tools for engagement:

Design processes have the capacity to support different

levels of engagement using various kinds of design materials and visualisations (pen portraits, profiles, storyboards, blueprints, idea sketches, use cases, etc.); these materials work as 'boundary objects' among people with different backgrounds, languages and perspectives. Creating 'hands on' activities supports imagination and collaborative processes.

Iterative process:

alternate field studies and co-design sessions help to develop an iterative process of verification and refinement of initial insights and ideas. This allows for a constant contact and engagement with the people that will have to actually use or deliver the solution, but also for an ongoing testing process before the service will be actually implemented. At the same time problems and briefs are not strictly defined at the beginning, but gradually framed as the collaborative design process evolves.

Visualising and prototyping:

different kinds of visualisations can be used to help interpret and share information, making intangible experiences tangible, representing complex systems, connect the project with real people and practices, provide materials to co-design and test service ideas and processes in advance. This enhances collaboration and reduces risk of failure when the service is implemented. In particular quick mock-ups of part of solutions, experience prototypes and later pilot projects are all used to iteratively test ideas with staff and patients.

Patient engagement:

patients and their representatives should be engaged in design activities not only during workshops but also as active researchers in their own context. Through iterative processes patients can be invited to test and experiment with ideas and prototypes of the solutions, giving feedback and participating in the set up of the final platform. Patients should be seen as key participants in the service system, co-creating their own solutions and being able to use the service in a way that meets their needs, specific interests and motivations. This requires recognising services more broadly as platforms and support systems rather than specific delivery systems.



Annexes

Abbreviations

DES Directed Enhanced Service
 LES Local Enhanced Service
 PBC Practice Based Commissioning
 PEC Professional Executive Committee
 QOF Quality and Outcomes Framework
 SHA Strategic Health Area
 PCT Primary Care Trust
 NICE National Institute of Clinical Excellence
 MSLC Maternity Services Liaison Committee
 JSNA Joint Strategic Needs Assessment
 PID Project Initiation Document
 TIA Transient Ischemic Attack

Glossary

Human-centred Design: describes a design approach that focuses on human well-being, human rights and human dignity. This design approach emphasises participatory methods and co-development with people to inquire into relevant systems (i.e., social, organisational, environmental, cultural) and to arrive at useful, usable, desirable outcomes. In the context of public services, fairness and justice are among the desirable outcomes.

Participatory Design (PD): Originally PD was mainly concerned with workplace controversies relating to the introduction of information technology and worker's rights. It aimed at supporting workers' participation in design decision-making. These included tools and techniques such as collaborative work with mock-ups, prototypes and scenarios. Nowadays PD has moved out of workplace contexts to start working in public spaces and everyday life with the intent to 'democratise innovation' in the public sphere (Björgvinsson et al., 2010).

Service Design: is a new design field originated in the '90s that applies ethnographic and creative methods to explore people's experiences and lifestyles and re-imagine service delivery models and service concepts. Recently service designers have started to collaborate with service organisations and communities with the intent to build long lasting capacities for innovation and change. Participatory Design principles and tools have been devoted to bring users and various stakeholders into processes of transformation of public services.

Design Tools

Ethnographic tools

Observations: designers spend considerable time observing design contexts (which could be a waiting area in a hospital) or people's behaviours and lifestyles. In this they are inspired by ethnographic approaches and principles to field studies. Observation can vary in terms of level of immersion and participation of the observer to the life of the 'observed' community. "Participant observation" refers to a learning process happening through direct exposure and involvement in the daily life and routines of the research setting (Schensul et al. 1999). As an example people could experience service provisions personally, or engage with local communities over a long period of time. "Observation" is always influenced by personal interpretative frameworks and researchers should carefully reflect on what they bring into the field.

Interviews: Interviews can be open-ended and exploratory at the beginning of a research process, and then gradually become more structured once the researchers have gained a sufficient overview of the situation. Designers often conduct 'contextual interviews', meaning that they talk with the informants in the place where they live or work as a way to elicit direct references to the materials around. Also designers often use 'probes' to support the conversations. These could be 'generative tools' (see below) to openly enhance people's imagination and memories or various materials collected during field studies to ask feedback and opinions.

Shadowing: A specific mode of ethnographic observation is

called 'shadowing' which refers to the practice of following a person in his/her daily routine, to gain a rich understanding of his/her practice. This is generally conducted using a video camera allowing for fine recollection of details.

Pen portraits: Field studies are often used to inform the elaboration of users or stakeholders' descriptions. These can be abstracted descriptions of 'typical' users generally called 'persona' or representations of real people; these kinds of portraits or profiles are used to guide and evaluate design processes; they can be short or detailed ones, using visualisations like storyboards to better represent the personality and lifestyle.

Use cases: Use Cases are descriptions/visualisations of how different users might use a service. They generally combine a short description of a user with a storyboard of the main interactions with service based in his/her needs. This tool is generally used to help develop the service idea imagining how different potential service users might interact with the supplier.

Cultural Probes: cultural probes are packages of materials, such as cards, maps, disposable cameras and diaries to obtain inspirational responses from user communities. These packages are left with the communities with brief instructions. Cards can use evocative images and ask general questions; maps can help explore attitudes and habits toward users' environments; cameras can be used to collect visual material and build diaries or stories. These packages are designed to gather "inspirational data", to stimulate designers' imaginations rather than define a set of problems (Gaver et al., 1999).

Generative tools

Generative tools help creating a shared design language that designers/researchers and stakeholders use to communicate visually and directly with each other. The design language is generative in the sense that with it, people can express an infinite number of ideas (e.g. dreams, insights, opportunities, etc.) through a limited set of stimulus items. Generative tools are generally made up of toolkits.

“A toolkit usually contains a background on which to work, together with a large number of simple and ambiguous components that can be arranged and juxtaposed in a variety of ways. The components cover a range of representational types: from literal to abstract. The background might be defined by a boundary such as a circle, a line, or a square. Or it might be blank, so that it can be defined and described by the participant. The visual components are quite diverse, as they range from photographs to sketches to colored paper cut in shapes to three-dimensional forms covered with Velcro material” (Sanders, 2000: 4)

Idea Sketches: It is a simple tool or format to visualise initial ideas as a sketch or an image. These ideas can represent completely new service solutions, improvements in the interactions or in individual touchpoints. They can suggest the appearance and functioning of the proposal and add simple notes to better understand the nature of the problem and of the solutions.

Mapping tools

Blueprinting: “A blueprint is a picture or a map that accurately portrays the service system so that the different people involved in providing it can understand and deal with it objectively regardless of their roles or their individual points of view [...] A blueprint visually displays the service by simultaneously depicting the process of service delivery, the points of customer contact, the roles of customers and employees, and the visible elements of the service” (Zeithaml and Bitner, 2000: 206).

Service mapping: service mapping can take different forms and names. Designers create ‘service system’ maps or ‘service ecologies’ maps, visualising who is involved and how in the service delivery, representing their reciprocal interactions and resources. These maps help design teams to get a holistic understanding of service contexts, visualising unnoticed links or enhancing systemic thinking.

Timelines of events: timeline of events are visualisations of sequence of actions or events that characterise a service provision or an experience. They can be represented as storyboards and provide some information on what happened and suggestions on potential improvements. Other names for these visualisations are: ‘storyboard’ or ‘Customer journey’. They can be used both to represent existing stories or new imagined scenarios.

Touchpoints: they are the visible evidences of a service, like people, products, places and information. Their design and visualisations are part of a service design process and they are often developed as mock-ups to quickly prototype service interactions.

Design games

The game metaphor provides ‘a familiar, relaxed, and relatively egalitarian atmosphere within which the stakeholders can combine their diverse backgrounds to develop new solutions and to meet one another’s needs’ (Muller et al. 1994). Games generally imply a set of negotiated rules and the use of tangible game pieces (cards, photos, video clips, 3D cardboard models), that support each participant to take design moves. They can be used to explore existing situations, staging possible futures, or negotiate organisational settings. Design games are considered powerful tools for organisational change, as they uncover concerns and assumptions, while facilitating the building up of a common understanding and shared vision; in this way games can enable participants to become ‘change agents’ (Jacucci et al., 2007).

Conversation cards: conversation cards are examples of design games used to enhance creative thinking and collaboration. Well-known example is the set of cards developed by the design studio IDEO (<http://www.ideo.com/work/method-cards>) that are 51 cards representing diverse ways design teams can investigate and understand people they are designing for. Another example are the Touchpoint cards developed by Simon Clatworthy for the project AT-ONE (<http://www.service-innovation.org/>). These cards visualise different kinds of touchpoints to help design teams to imagine new ways of service delivery or evaluate their existing ones.

Scenario Building

“A scenario is a story that describes a possible future. It identifies some significant events, the main actors and

their motivations, and it conveys how the world functions. Building and using scenarios can help people explore what the future might look like and the likely challenges of living in it. [...] Scenarios are intended to form a basis for strategic conversation—they are a method for considering potential implications of and possible responses to different events. They provide their users with a common language and concepts for thinking and talking about current events, and a shared basis for exploring future uncertainties and making more successful decisions.” (Shell International, 2003: 8).

Prototyping

Service or experience prototypes: A service prototype is a simulation of a service experience. These simulations can range from being informal ‘roleplay’ style conversations, to more detailed full-scale recreations involving active user-participation, props, and physical touchpoints. [...] Service prototypes can generate a far deeper understanding of a service than is possible with written or visual descriptions.” (Stickdorn and Schneider, 2010: 192).

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