The question of architecture

Introduction

The pathfinder is aiming to generate three kinds of benefit in order to deliver step-change improvements in orthotics:

- Level I - defining current demand and realigning product/service protocols to it
- Level II - re-organising referral protocols and configuration of clinics to improve delivered health care within existing catchments
- Level III - extending organisation of hubs-and-spokes to include re-organisation of catchments within PCTs

The pathfinders have so far established that the scale of level II benefits are significantly greater than Level I benefits, because of the role of the clinic within the larger Primary, Acute and Long Term care contexts. It is expected that this will continue to be true for Level III benefits, although these will not be examined until the end of the pathfinder process. The question addressed by this paper is how these different levels of benefit are to be achieved on a larger scale across the NHS.

The Business Solutions approach

The original proposal to the Purchasing and Supplies Agency (PASA) set out three stages to the overall process of achieving NHS-wide benefits, based on a "dual approach"in order to engage both NHS Trusts & PASA roles, using workshops to engage the full spectrum of knowledge of participants, and developing flexible tools which would be applicable in a broad range of NHS supply situations. The 3 stages were:

- Pilot – establishing analyses and tools, proving to PASA that these worked, and building familiarisation.
- Pathfinder – establishing processes for introduction and review of changes, proving with PASA that the intervention process worked, and building know-how about managing interventions.
- Rollout – scaling up the intervention to support PASA in intervening across a wider range of product groups and a larger number of Trusts.

The particular challenge identified in achieving this was that good practice needed to integrate clinicians and procurers, and therefore:

- Supply strategy development needed to be able to address the 'value' of processes in a way that applied to internal NHS (Trust) processes as well as to their external upstream supply processes.
- This meant developing formulations of 'value' from the point of view of the patient-taxpayer as well as from a supplier perspective. This implied a more complex approach to 'value' as it applied to supply networks themselves and their organisation in relation to the patient-taxpayer.
- This in turn implied PASA driving procurement from the needs of NHS Trust internal processes, rather than from requirements defined at the aggregated level of the NHS (i.e. 'intelligent purchasing').

What, then, is being learnt from the pathfinders about how to deliver step-change benefits, and what does this imply for how the 'roll-out' stage should be approached?

Pathfinder learning so far

Fundamentally the nature of the changes being made are not incremental – they are step-changes that

- transform patient care potentially from the patient's first contact with primary care, changing the nature of the referral pathways, and making them joined up;
- propose change both inside and outside the Orthotic Clinic in the way treatments are delivered and care pathways are organised; and
- need to be clinically led by orthotists in relation to other clinicians, while affecting all aspects of the operation and positioning of the Clinic within the context of Acute and Primary Care Trusts.

This is within a current situation in which the need for the service is growing due to an ageing population – albeit with little data to support this; in which Orthotists themselves are not generally regarded as clinical colleagues – so Orthotics is not currently credible in taking a clinical lead; and in which there is a lack of trust in companies supplying orthotic services – the dominant Trust attitude being one of cost reduction.

On top of this, there are significant obstacles to implementation within Trusts, in that neither orthotists nor their fellow clinicians have time to think or plan; generally there is no clinical, patient, or management information available to support analysis of referral and care pathways; the speed of effecting change through changing the supporting infrastructures, purchasing procedures, IT services and staffing is very slow; and, again, the attitude of finance managers is often only to reduce costs.

This environment has led to great differences in the practices in Orthotics services today across different Trusts. Clinics operate in anything from bespoke premises to cupboards; clinicians themselves work in anything from dedicated teams to fragmented pools of temporary locums; service responses may be being dictated by appliance officers; and clinics may be reporting through lines of accountability to secretaries or senior nurses.

The result is that strong backing is needed to support the implementation of change, both from a clear sponsor within the Trust and through the provision of external support to manage the transition itself (currently provided by the Modernisation Agency). This means not only the resource and skilled support needed to utilise and tailor pathfinder lessons to the specifics of the situation in each new Trust, but also specific IT support needed to train and strengthen reporting systems to make these changes sustainable.

Strong backing is also needed at the National level in the form of Professional support from BAPO and other clinical bodies (e.g Orthopaedics, Physiotherapists), and from the Department of Health to confirm the need for step-change policy and to provide support for delivering a step change agenda. This means National level support for the resources involved in managing the 'surge' of demand created by the step-change itself, for the Orthotist / Orthopaedic clinicians' thinking time needed in the initial design of the step-change, for the external experienced support for the clinicians and as a means of transferring learning, and for the costs of managing the step change process.

All this adds up to the conclusion that a proactive, demand-driven bottom-up approach is needed to achieving step-change; and that a top-down approach will not

work, based on encouraging Trusts to make step-changes through implementing published best practice guidelines. But what leads to this conclusion?

The question of architecture

"Architecture" is a way of thinking about the whole organisation of processes, skills, resources and accountabilities in relation to particular kinds of activity. Thus, using the physical metaphor of the architecture of a building, a building's architecture has an effect on what it is easy and difficult to do within that building. When applied to the context to care and referral pathways, it refers to those aspects of the Trust infrastructure and organisation that determine the nature of those pathways.

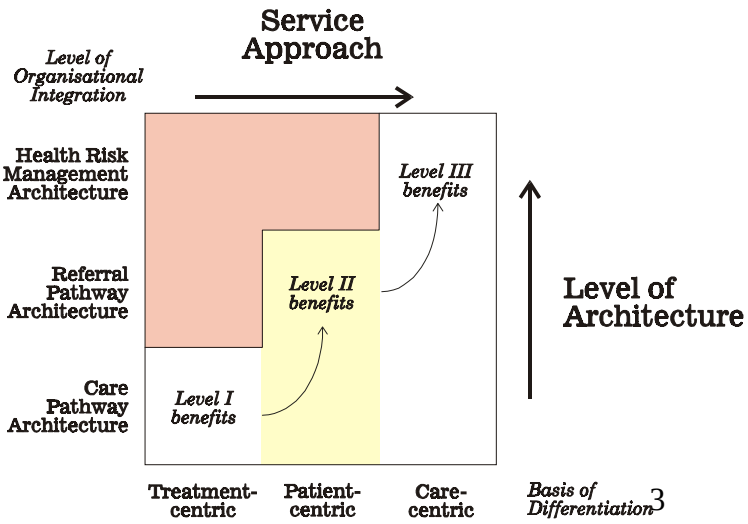
The traditional approach to improving patient care is to focus on the patient journey through a succession of care pathways relating to the patient's need for treatment. For well-defined patient conditions, this means optimising and aligning the process steps along the care pathway. These improvements affect the *care pathway architecture* within which treatments can be offered. Level I benefits are achieved by changing the care pathway architecture of the Orthotics Clinic, through such things as implementing clinical delegation and treatment protocols.

The pathfinder projects make a fundamental separation between care pathways and referral pathways. Care pathways define the way treatments are provided, while referral pathways define the way patients are enabled to find the treatments that they need for their particular condition. The *referral pathway architecture* is affected by the way care is funded – affecting the way the funding of clinics relates to the way patients need to be treated, and the way clinicians themselves are able to make use of each others' specialisms in how a patient's treatment needs are defined. Level II benefits are achieved by changing the referral pathway architecture governing the way patients reach the Orthotics Clinic, including such things as direct referral and universal review processes.

Finally, some of the conditions experienced by patients can be reduced in their effects if their emergence is anticipated. Thus the screening of diabetic patients or of children with special needs can reduce the risk of later conditions arising. The *health risk management architecture* created by the Primary Care Trusts governs the way these risks can be anticipated.

In the diagram below, each of these architectures depends on the excellence of the architecture at the level below it. Thus without improvements in care pathways, improvements in referral pathways cannot be supported. Equally, without greater precision in the way referral pathways respond to patients, they cannot support more proactive approaches to managing health risk. In other words, the levels of benefit progressively build on each other as the architectures are progressively developed:

- being treatment-centric requires excellence in the care pathways

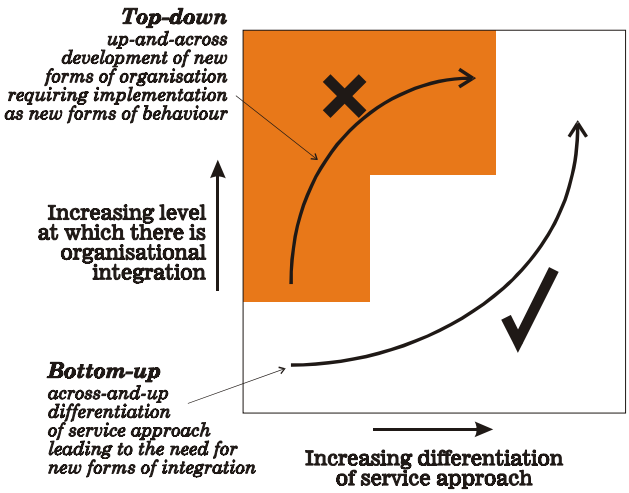


- being patient-centric requires clinical teaming built on mutual respect for treatment excellence; and
- being care-centric requires innovation in the way care is delivered into patients' lives that must be supported by a patient-centric approach to treatment.

So how is architecture to be intervened on to achieve these benefits?

Bottom-up versus Top-down

We have asserted that a proactive, demand-driven bottom-up approach is needed to achieving step-change; and that a top-down approach, based on encouraging Trusts to make step-changes through implementing published best practice guidelines, will not work. We can now consider this in terms of this diagram, in which moving 'across' to the right involves responding increasingly to the particular needs of the individual patient, and moving 'up' involves changing the organisation of the architectures within which this responsiveness can be made affordable and practicable on a sustainable basis.



- **top-down**, in which new architectures are designed by top management, and then 'implemented' through imposing step-changes on the way clinicians can use them to respond to patients. This is the 'command-and-control' approach to change, which, to be successful has to be successful at anticipating the full complexity of behaviours involved in responding to patients.
- **bottom-up**, in which the clinicians are encouraged to develop greater responsiveness in the way they meet patients' needs, and then provided with the means of altering the architectures within which these changes can be made sustainable. This is an approach to change, which, to be successful has to be prepared to work bottom-up with the full complexity of the situation 'on the ground'.

Managing to change

To deliver bottom-up change, three things are needed:

- Sponsorship for the changes needed, both at the Trust level and the National level, in order to create a context within which change can take place;
- Demand-led focus on the need for change driven by the specific needs of the patient; and
- Resource support enabling change arising from the demand-led focus to happen, both in terms of funding the transition, providing the expertise to work out how to effect the change, and ensuring that the changes made can be sustained.

Sponsoring leadership that manages the balance between the last two of these in support of bottom-up change is what makes the difference, by enabling the change to be achieved in a way that is specific to a Trust's situation.