Redesigning health care

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Redesigning health care

Radical redesign is a way to radically improve

A decade or so ago car manufacturers completely transformed the way they made motor cars: they stopped stockpiling components and supplied them “just in time”; they drastically reduced the types of components such as subframes and engines; they worked closely with their suppliers on quality and timeliness instead of beating them down on price; and they eliminated waste by making all workers responsible for quality, not just inspectors. As a result new models took less time to develop, their quality improved, and cars could be made to order for each customer. At the same time productivity improved and costs fell. Since then people in health care have realised that their service has a long way to go to match the performance of other manufacturing and service industries. Report after report, from country after country, has documented the size of the gap between the best evidence based care that could be delivered to patients and the care they actually receive. Health systems fail to provide treatments that are known to work, persist in using treatments that don’t work, enforce delays, and tolerate high levels of error. Healthcare leaders are now recognising, as car manufacturers did, that the healthcare system needs radically redesigning.

Such redesign of an important part of the healthcare system—clinical office practice (in UK terms ambulatory care by mainly primary care physicians)—was the focus of a meeting in Atlanta earlier this month. Though the meeting was run by the Boston-based Institute for Health Improvement (and all the participating practices were using its methods), not all the successes were American. The UK’s primary healthcare collaborative (which now includes about 20% of English practices) also showed impressive improvements in patient access and evidence based care. The organisations that have been taking part in the IHI’s “Idealised design of clinical office practices” project range from community health centres to academic medical centres and have shown improvements in patient satisfaction, staff satisfaction, revenues and reduced costs, and also in clinical outcomes. They have made these improvements using the familiar methods of quality improvement—understanding the problem, identifying possible changes, testing those changes to see whether the change is an improvement, and then incorporating that change and moving on to try another. Quality practitioners are strong on data, because it’s crucial to know whether a change has improved things, but the key is pragmatism, using “good enough,” easy to get data. So for example, they emphasise measuring small representative samples, combining quantitative and qualitative data, and building data collection into daily work. Using these methods some practices have, for example, seen their proportions of diabetic patients who have had their eyes examined rise from 65% to 85% and their glycosylated haemoglobin measured from 47% to 80%. And among the first wave practices in the UK collaborative the percentage prescribing aspirin for over 80% of their patients with coronary heart disease has increased from 23% last July to 50% this April. That means, pointed out John Oldham, head of the primary care collaborative, “that there are people walking around today who wouldn’t have been if the teams hadn’t done the work.”

Don Berwick, president of IHI, explained that it had chosen clinical office practice because it’s the heart of health care, where doctors and patients meet. The vision is the patient’s statement: “They give me exactly the help I want (and need) exactly when I want (and need it) … while maintaining and improving a joyful work environment and a financially viable organisation.” The point of such a goal, said Berwick, is that it is “psychotic”: it will not be achieved simply by tinkering, the system has to be redesigned (see box). As with many visions, it packs a lot of meaning into an almost banal statement.

Unpacking it involves working on access, interaction, reliability, and vitality—and the improvements in access are perhaps the most immediately striking. The target is to give patients an appointment the day they ring up—and many of the providers in the IHI project, together with many of the practices in the UK collaborative, have almost achieved that aim. For example, 16 primary care sites in Cambridge, Massachusetts, reduced the number of days for a new appointment from 4.3 in 1999 to 1.8 in 2001. Seven English practices reduced it from 8 days to 2 days over five months.

Mark Murray, who has led the work on access for the IHI, explained that the underlying aim was to “do today’s work today, not next month.” He pointed out that most demand is predictable—the waiting time has probably been stable for years, and its pattern is largely predictable. Once that is understood, it’s a question of working off the backlog, matching capacity to demand, reducing the number of appointment types (having different types with different queues lengthens overall waiting), and trying to do more within each consultation. Work can also be managed in other
Implementing national guidelines at local level

Changes in clinicians’ behaviour in primary care need to be reflected in secondary care

Both internationally and nationally, the introduction of clinical guidelines is seen as a means of improving healthcare outcomes and reducing costs. In the NHS primary care professionals, hospital trusts, and health authorities are becoming increasingly involved in disseminating, implementing, and evaluating local clinical guidelines. Though evaluations of the most effective strategies by which to implement guidelines have been undertaken, few studies have evaluated the impact of such guidelines on both patient outcomes and health service costs.

Two evaluations of similar sets of clinical guidelines on the management of infertile couples (one of them in this week's BMJ) have now shown improvement in general practitioners' performance. Following the use of the guidelines their performance in obtaining the clinical history and performing appropriate examination and investigations before referring patients to hospital had improved (p 1282). Compared with the earlier study in Aberdeen, the Glasgow study reported this week showed a more modest improvement in the proportion of referrals that had been appropriately managed. This difference in findings between the two studies seems to reinforce the importance of taking local factors into account when developing and implementing guidelines. Local factors suggested in the Glasgow study include the larger number of referral centres and a greater number of couples where partners were registered with different general practitioners, thereby making investigations more problematic.

Transforming health care

<table>
<thead>
<tr>
<th>Old rules</th>
<th>New rules</th>
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</thead>
<tbody>
<tr>
<td>Patient often doesn't see own doctor</td>
<td>Patient nearly always sees own doctor</td>
</tr>
<tr>
<td>Patient comes cold to consultation</td>
<td>Patient is helped to prepare for visit</td>
</tr>
<tr>
<td>Appointment slots filled weeks ahead prior</td>
<td>Most slots open at start of each day</td>
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<tr>
<td>See a single patient</td>
<td>Group visits</td>
</tr>
<tr>
<td>Face to face care</td>
<td>Email, phone, fax, and web</td>
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<tr>
<td>Demand is patient driven</td>
<td>Demand can be shaped by doctors</td>
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<tr>
<td>More capacity needs more resources</td>
<td>Capacity increased by reducing waste,</td>
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<td>improving efficiency</td>
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Jane Smith  deputy editor, BMJ

4 National Primary Care Development Team. www.doh.gov.uk/about/ nphplan/who/modagency/01.html
7 www.improvingchroniccare.org
9 www.ihi.org/pursuingperfection/pressrelease.asp