The X factor

What is the secret behind a high-performance cancer system?

→ Anna Wagstaff

How can cancer services deliver top-quality, affordable care to aging populations in an era of fast-changing treatments and escalating costs? Five countries with something to offer and something to learn met to compare notes.

ould you rather be treated for cancer in the US, which spends 17% of gross domestic product on healthcare, or in Canada (10% of GDP), Germany (11%), France (10%) or the UK (8.5%)?

That is the question answered at an informal meeting in London in June, by a roomful of people set on improving cancer services in these five countries.

Votes were widely distributed, with France topping the poll by a small margin. The US – the only country that can boast an average waiting time of six hours from a positive breast scan to excision – came further down the list.

Each system has its strengths and its weaknesses. If accessing latest treatments and techniques was the priority, the US had to be the system of choice, with France the leading contender in Europe. For those who valued most the right to choose where to be treated – the US, France and Germany scored highly, though none offer patients enough information to make an informed choice. If

quality control and transparency comes first, Canada would be a good choice, with a strong infrastructure for reporting and analysing key quality data. Germany scores well if you look primarily at centres of excellence. If you look for consistency in standards and performance across the system, then the UK, with cancer networks built around minimum volumes and specialist multidisciplinary teams, would be a good bet.

Waiting times, integration between different parts of the care system and expense will also have influenced the poll. Those who voted for the US will have assumed they were not one of the 45 million who have no health insurance.

THE FIVE SYSTEMS

These five cancer systems have all recognised that aspects of their systems need improving. Each is trying to find ways to deliver top-quality, affordable care to aging populations at a time when treatments are changing fast and the cost of new therapies is escalating.

The five systems vary widely in culture, organisation and funding mechanisms.

At one end of the spectrum, the UK has a publicly provided health system and a 'top down' command and control approach. This meant that when Prime Minister Tony Blair made a commitment to improve Britain's cancer care, it was possible to move quite quickly to a system in which all patients are referred to specialist centres where care is planned by 1,400 multidisciplinary teams (MDTs), each with a minimum volume of patients and working to standardised practice guidelines. Not for nothing is the UK's national cancer director dubbed the 'Cancer Tzar'.

But the Tzar himself, Mike Richards, told the meeting that the top down approach has limitations. It can push through change, but it is less effective at reducing waiting times, or at ensuring 100% attendance at MDT meetings, adherence to guidelines or a grass-roots culture of monitoring and improvement. The UK's principal interest was to find ways to enhance the performance of its restructured system.

Responsibility for ensuring cost-effectiveness in the UK lies with the National Institute for Health and Clinical Excel-



lence (NICE), which makes recommendations on whether new therapies offer sufficient additional benefit to justify reimbursement, and also lays down practice guidelines.

In the US, by contrast, healthcare is seen as a consumer good, and the role of the state is limited largely to promoting competition in a system driven by consumer choice. It is quick to embrace new therapies; in some areas (like that sixhour wait time) it out-performs anything in Europe, and many of its 61 comprehensive cancer centres are world class. These centres, however, treat fewer than one in ten American cancer patients. Nine in ten are treated in a wide variety of settings, with a relatively low adherence to guidelines, mimimal feedback on quality, and varying outcomes.

The big issue for the US is cost-effectiveness. Because healthcare is not socially funded, there are no constraints on spend-

ing other than the ability to afford insurance. Consumer choice is not effective at pushing up standards, because there is no authority responsible for collecting quality data. Surgeons, paid on a fee-perservice basis, have an incentive to opt for surgery, radiotherapists have an incentive to break therapies into short sessions – up to five times more than the evidence warrants. Medical oncologists make around 50% of their income in profit mark-up from the drugs they 'retail' to their patients. There is a high level of off-label use – an investigation by the largest health insurer revealed that 12% of patients given Herceptin (trastuzumab) had never been given a HER2+ test, or had tested negative.

In the absence of any federal agency responsible for driving up standards, the American Society of Clinical Oncology is promoting a system of voluntary self-reporting. Clinics joining the Quality Oncology Practice Initiative (QOPI) are

required to select a sample of cases from the previous six months, and report on a variety of measures, including adequacy of documentation, chemotherapy planning and pain control, with other measures specific to the type of cancer. QOPI enables clinics to assess their performance, compare themselves with other practices, identify shortcomings and monitor improvements. It was rolled out nationally in March 2006, with an enthusiastic early take up. However, getting beyond 10% of practices may require incentives, possibly by health insurance companies, and external validation.

With spending on cancer rising at 13% a year, medical insurance premiums rising at 9%, incomes rising at 3% and almost one in five Americans unable to afford health insurance, one key thing the Americans were looking for from this meeting was a way to impose rational constraints.

The Canadian, French and German systems lie between these two extremes. The Canadian system was described as "like the UK but Federal" – hospital-based care is provided by a public health service, largely funded by taxation, and the system operates under tight spending constraints.

Cancer care hit the political agenda in the early part of this decade when lengthening waiting lists led to a steady flow of patients crossing the border to pay for treatment in the US, sparking a crisis of confidence. Bill Evans described how Cancer Care Ontario focused on developing a system for gathering data on key quality indicators, which were used to provide feedback to hospitals and clinicians, and to monitor improvements. It aimed to introduce transparency into the system with a view to rebuilding public

Surgeons paid on a fee-per-service basis have an incentive to opt for surgery

KEY COMPONENTS OF A HIGH-PERFORMANCE SYSTEM

- A strong political will to overcome resistance to structural changes and costeffectiveness measures
- Engaging clinicians in the development and implementation of guidelines, and 'selfassessment' schemes like QOPI
- Ensuring that every patient has care planned at a multidisciplinary meeting with investment in infrastructure, such as videoconferencing
- Encouraging a strong patient voice to promote services geared to patients priorities, such as transparency and a smooth passage between different parts of the care system
- Collecting good data on performance indicators including staging and diagnosis, adherence to guidelines, pain and symptom management – to inform clinicians and give patients informed choice
- Aligning incentives with key quality objectives. Paying according to key performance indicators is one way; promoting competition on the basis of informed patient choice is another
- Avoiding adverse incentives, such as fee per procedure. Imposing minimum volumes can also provide an incentive to overtreat. (Having to justify an intervention at a multidisciplinary hearing can be an effective counterbalance)
- Developing IT systems capable of sharing information, scheduling and tracking patients throughout their cancer journey

confidence and encouraging patients to play a role in getting the best from their service. Though still limited in scope, the data published on their website www.cancercare.on.ca/qualityindex2007/ is thorough and user-friendly.

"We want a greater degree of openness by providing information on current best practices and engaging patients in making good decisions for themselves," said Evans. "It is also good to raise public awareness of the performance of the healthcare system. It puts everyone on notice of where we are and where we need to make improvements."

With a system based largely on salaries rather than fee-per-service, adherence to guidelines is strong. A robust approach to evaluating the cost-effectiveness of new therapies and devices helps restrain spending. For instance, Ontario does not reimburse for Avastin (bevacizumab), and is even considering whether PET scans add sufficient value to justify the cost.

The French and German systems are

closer to that of the US, in that both are relatively fragmented with a strong element of private provision (which came as a surprise to the US contingent). There are, however, important differences. In France and Germany, healthcare is seen as a social responsibility, and most of the funding comes either from state run or social (non-profit) insurance schemes. Dealing with the rising cost of cancer care by offering worse treatment for those less able to pay is not publicly acceptable.

Germany recently set up a federal body for evaluating new therapies,

called IOWiG (Institut für Qualität und Wirtschaftlichkeit), which caused ructions amongst clinicians. However, the trend towards greater scrutiny of the cost-effectiveness of new treatments seems likely to continue.

France prides itself in promoting cost-effectiveness by

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focusing on effectiveness, paying a premium for truly innovative drugs and encouraging research to find out how to use available therapies to greatest effect. The PHARE trial, looking at whether Herceptin is equally effective used adjuvantly for six months as for a year could save the health budget millions.

Scepticism about state intervention in civic life, so strong in US culture, is not reflected in France or Germany, giving scope for governments to take a lead. When French President Jacques Chirac made cancer one of his presidential themes, he helped to push through comprehensive legislation giving patients a right to information, psychosocial support and even access to mortgages. A national cancer institute, INCa, was given dual responsibility for clinical quality and safety as well as clinical research. Regional cancer networks must ensure that every cancer patient's care is planned at a multidisciplinary board, regardless of where care is delivered. Rules on minimum volumes have been introduced, though these are currently set quite low.

French cancer networks provide an example of how far it is possible to restructure a cancer service in which care provision remains fragmented, being spread between 20 comprehensive cancer centres, a sprinkling of university hospitals, and around 700 public district hospitals and 1,500 private clinics, with almost 50% of surgery done by the private sector.

In Germany, cancer has not become a political priority, which may indicate

a lack of major problems – or a lack of data on what is happening beyond the prestigious university hospitals.

A mark of quality. QOPI is a system of voluntary selfreporting being promoted by ASCO to help US clinics improve their own performance

Getting everything right is a complex business requiring a range of different pressures and incentives

Professional bodies have promoted systems of accreditation as a way of pointing patients towards better care, and as an incentive for clinics to fulfil minimum quality criteria. But accreditation is not mandatory, and the system is confusing because so many bodies run accreditation schemes.

Recent reforms have tried to improve efficiency by tackling the separation of hospital and ambulatory care sectors reducing duplication of tests, improving communication, ensuring treatments are carried out in the most suitable, costeffective settings, and improving the patient experience. Legislative changes have made it possible for cancer services to be provided within 'centres for integrated oncology' (CIOs), incorporating providers from all parts of the patient's care from diagnostics through therapy and aftercare – whether that be hospice care or rehabilitation. Having a single structure makes it easier to develop joint guidelines and shared information systems. Because the CIO also incorporates payers, the system allows insurers to make a single payment, based on stage of the disease, to cover all the costs of treatment, leaving it up to the practitioners to decide precisely how to distribute the funds.

A separate initiative on disease management programmes introduced regulations for care targets, drugs, quality management and documentation for a number of diseases, although breast cancer is the only cancer currently included. Early data indicate an improvement in the quality of care, but there is resistance from some clinicians, who find it limits their therapeutic options and fear it will slow the introduction of new treatments.

There are some financial incentives for setting up CIOs and working within a disease management programme, but neither is compulsory. It is up to clinicians and health service managers to drive change, institution by institution. This means that, where they are adopted, staff are likely to be committed to making them work. The downside is that patients treated at clinics with no great tradition of innovation and quality monitoring are unlikely to benefit.

The importance of finding out what is happening across cancer care in the country, as a precondition to pulling up standards, was a message the German delegation found particularly helpful.

In fact, everyone took something useful home from the meeting.

- For the Americans, the key issue was the need to ratchet down expectations and use comparative effectiveness data to reduce costs. "Whether we can import that into the US because of cultural differences is still the open question," said Eric Schneider of the Harvard School of Public Health.
- For Franz Kohlhuber, head of project funding at **German** Cancer Aid, the key message was the importance of reliable data. "When you see data from other countries and how it is used it becomes obvious how badly it is needed. Maybe we have to spend money on this first."
- For the **UK**, it was a question of stimulating improvements by moving from data about process to data about outcomes. "Most of our data are structure data: 'Do MDTs meet, do they follow guidelines…?' We would like output data as well, the sort of quality index data the Canadians are gathering. Data for embar-

rassment and choice is the key," said the national cancer director, Mike Richards.

- Helping foster a grassroots culture of monitoring and improving quality was a concern for the **Canadians**. "We are probably guilty at times of pushing too many things down on to the practitioners in the community. But we need to engage them in guideline development and in the decision making for changes in how care is delivered and so on," said Evans of Cancer Care Ontario.
- Laurent Borella, from the **French** INCa, was also looking for a greater variety of incentives, financial, political and patient pressure. "Maybe we have to work on both sides of the problem. Public and legal schemes like Britain and France; but also data on efficiency and outcomes to moderate the payments system for hospitals depending on their outcomes."

The different experiences of the five countries shows that getting everything right is a complex business, requiring a range of different pressures and incentives. "We can no longer focus only on conventional surveillance indicators of performance," said Terry Sullivan, CEO of Cancer Care Ontario and convenor of the five country meeting. "It seems clear from this exchange of views that three broad levers are essential: good use of performance measurement, reporting and incentives; real engagement of key practice leaders and patient groups; and alignment of institutional, political and clinical leadership. Countries can learn a lot from one another."

The meeting was financed by a grant from the Commonwealth Fund. A symposium looking at these issues and drawing on the London meeting will be hosted by the European School of Oncology at the World Cancer Conference, Geneva, in 2008.