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Cancer Services Forum

Cancer Services Forum is a publication aimed at PCO commissioners and their teams, cancer network management teams, service managers in cancer centres and cancer units, clinicians, pharmacists, nurses and other cancer care professionals. The pace of change in the planning, commissioning and delivery of UK cancer services can be overwhelming—the aim of *Cancer Services Forum* is to communicate expert opinion on the implications of cancer policy and service initiatives on a regular basis, frequently and in a timely fashion.

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Dear Colleagues,

Bob Dylan's song "The times, they are a changin'" seems apt at the moment. A few years ago, primary care's involvement in many cancer meetings was frequently minimal and on occasions a token gesture. All of that seems to have changed recently, spurred along by the Cancer Reform Strategy, World Class Commissioning and, hot off the press, the Darzi review. Now, when I sit in cancer meetings with colleagues from secondary and tertiary care, primary care has never been mentioned so much. This is a welcome change, but one that brings major responsibilities for commissioning services, wherever they may be.
The recently produced Cancer Commissioning Toolkit will aid commissioners in making informed decisions about the services that they commission. Darzi points us to ensuring that services are high quality and as local as possible, whilst World Class Commissioning ensures that this approach is safe and leads to a reduction in health inequalities.

This edition of *Cancer Services Forum* highlights two areas that commissioning will have to tackle—the availability of drugs, and where services for chemotherapy may best be provided. There are many views, all founded on giving patients the best care possible; time will show us the answers.
These are indeed changing times.

Dr Ian Watson,
National GP Cancer Lead, Saddleworth Medical Practice

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Time to stop hiding behind the skirts of NICE—the UK Renal Cell Carcinoma Expert Group

Barry Hancock, John Anderson , Tim Eisen, Martin Gore, Robert Hawkins, Paul Nathan, Poulam Patel, Alastair Ritchie, John Wagstaff

Introduction

In an era of evidence-based medicine, treatment choices should be clear cut. Our economy, however, precludes such an idealistic philosophy. Naive notions of provision of 'best-available care' are hence replaced, in the UK NHS at least, with complex mechanisms to ensure equality of care within the constraints of available funding.

The impact of NICE on new drug uptake

The National Institute for Health and Clinical Excellence (NICE) was established in 1999 to meet the need to standardise healthcare across England and Wales and, later, Northern Ireland. The institute's remit is to provide national guidance on treatments and care, based on the best available clinical and cost-effectiveness evidence, in order to abolish discrepancies in prescribing nationwide. Its current level of success—moderate!

While prescribing of those drugs positively appraised by NICE has become more uniform,[1] the backlog of new treatments yet to be considered, or even considered for referral by the Department of Health, renders the UK a country slow to formally introduce potentially life-saving drugs compared with the rest of Europe and the USA; in cancer at least, this slow uptake may go part of the way to explaining our still relatively poor position in the international league table for cancer survival rates.[2] Furthermore, while NICE's ability to review and recommend new treatments and technologies is potentially limitless, the amount of money available to honour the promise to make these treatments available within a 3-month window to all who need them is finite. In the not too distant future, the model will need to be revised.

Use of drugs prior to NICE appraisal

In the meantime, what of those new drugs that are not yet NICE appraised? In the absence of guidance, every local funding authority is individually responsible for establishing the criteria that they will use to determine whether a drug not approved by NICE is available in their patch. It is of importance however, that clinicians are involved in the decisions made about drug availability pre-NICE. To that end, strategic health authorities and primary care organisations cannot withhold funding for treatments solely on the grounds that guidance from NICE is unavailable or yet to be published; an open dialogue must be maintained between those treating patients and those responsible for funding that treatment.

With primary care trusts (PCTs) bowing under the financial burden of meeting the costs of those drugs that have already received a positive opinion, many will not consider non-NICE approved treatments for routine funding. It then becomes extremely difficult to obtain funding for these drugs—some PCTs allocate a budget every year from which requests for funding can be met; others allocate money on a case-by-case/exceptional-case basis. Frustratingly, exact information about who does what is not centrally collected, and the onus is on the clinician who wants to use a non-NICE approved drug to take the time to make a case, on behalf of their patient, to present to

the commissioners via their directorate, or to put together a business case for inclusion in the local development plan, depending on local protocol. Such varying approaches to a common problem inevitably result in the unpredictable and disparate prescribing patterns (and the associated inequity of spend on cancer drugs) that it was postulated NICE would obviate. A mechanism of communication, or if not that, transparency, and hence reduced discrepancy between trusts, would surely represent a step forward. Going further, is the possibility of a lead group of PCTs working together to establish strict guidelines for the national limited use of particular drugs prior to NICE appraisal so ridiculous? Importantly, as the number of new drugs flooding onto the market continues to rise year on year, PCTs will need to be increasingly creative in delivering solutions—be that through disinvestment where appropriate, increased focus on preventions or community-based care or otherwise—for their funding.

The problem of the 'postcode lottery' in healthcare, it appears, has not been solved by NICE. Worryingly, the presence of NICE also stands to accelerate the development of a two-tier healthcare system, where well informed patients who can afford to pay gain access to new treatments prior to NICE approval, while those dependent on the NHS are forced to wait for effective treatments to jump the regulatory hurdles. As well as geographical discrepancies in prescribing, a degree of discrepancy in process, according to disease, is also apparent—the stories of two drugs illustrate this point well (though they possibly represent extreme cases); the first for breast cancer—a 'sexy' disease backed by high-profile lobby groups—and the second for renal cell carcinoma.

Sunitinib and sorafenib uptake

Lapatinib (Tyverb, GlaxoSmithKline), an oral tyrosine kinase inhibitor for the treatment of breast cancer, was placed on the NICE assessment list before a licence was granted. Originally due to be reviewed in October 2007, the NICE assessment process then had to be postponed because the UK licence has taken longer to be granted than expected (UK approval now granted in June 2008). Contrast this scenario with that of the oral targeted agents sorafenib (Nexavar, Bayer) and sunitinib (Sutent, Pfizer). These oral drugs were licensed over the summer of 2006 by the European Medicines Evaluation Agency for use throughout the EU for the treatment of advanced or metastatic renal cell carcinoma. Their licensing represents excellent news, since their clinical effectiveness far outweighs that of alternative treatments (namely interferon alpha and interleukin 2),[3–9] which are more difficult to administer and make only a small impression on the course of the disease.[10] Both have been adopted as standards of care in many countries worldwide. However, without NICE endorsement (not expected until 2009—after the review of

lapatinib will have taken place), uptake in the UK of these two novel drugs has been poor for the reasons stated above. The pressure on clinicians to prescribe sorafenib and sunitinib will continue to grow, and, with no effective alternative treatment options available, arguments against their use will be increasingly difficult to muster or, indeed, defend. As such, those treating renal cell cancer are compelled to fight for access to sorafenib and sunitinib for their patients. With approximately 6,600 patients a year developing kidney cancer in the UK, and half of those either presenting with or going on to develop metastatic disease, this is quite an undertaking.[11]

The UK Renal Cell Carcinoma Expert Group's recommendations

The UK Renal Cell Carcinoma Expert Group recommends that sunitinib and sorafenib should be made available for the treatment of appropriate patients with metastatic renal cell carcinoma. Such endorsement, along with the evidence base for the drugs and active petitioning of the government by patient lobbying groups, will mean that those who can afford to pay will pay, while those who cannot will continue to receive drugs that are known to be relatively less effective—a way needs to be found to expedite availability of these treatment options, and others like them, in the NHS before the injustices of postcode prescribing and two-tier healthcare provision damage the confidence of the public. Their understanding is that funding for an important therapeutic option is being restricted because of bureaucracy.

Future prospects

There are no immediate solutions to the problems outlined above, and a step-wise approach is postulated to be the most appropriate. In terms of improving the timeliness of NICE assessment of drugs, the recommendation made in the *Cancer Reform Strategy*[12] at the end of 2007, and echoed by the House of Commons Select Committee earlier this year, is to be welcomed. They call for NICE to publish guidance for the use of all new drugs in time for their launch. Along with a drive by NICE to encourage disinvestment into technologies that are no longer cost effective and the institute's perceived heightened interest in risk-sharing strategies, optimism about the system slowly begins to return.

The government, and those responsible for prioritising spend at a local level, should not hide behind the skirts of NICE. It needs to stand back and recognise that, while it is an effective framework for a solution to the problem of post-code prescribing and inequalities in healthcare provision, the institute and the way that it works must continually evolve, in line with the changing healthcare environment and the increase in cost and pace of introduction of new therapeutic options. Otherwise, NICE will find itself at the heart of the very problems that it was established to solve.

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To comment on this article please click here.

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Chemotherapy delivery: challenges for the future

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Introduction

As a result of the rising incidence of cancer and the expanding range of treatments available, UK cancer services are working under growing pressure.[1,2] In this article I will discuss national and local strategies for coping with the demand for cancer care, looking specifically at the issues of patient capacity and the drive to deliver cancer treatments nearer to patients' homes. I will also reflect on examples of practices that have had a positive impact on service delivery.

The size of the challenge

It is estimated that 1 million people alive now in the UK have been diagnosed with cancer, and that a further 250,000 people a year will develop a malignant condition.[1] The incidence of cancer is rising—the overall rate has increased by 31% since the 1970s, but mortality has fallen by 12% during the same time period.[2] Moreover, as the population ages, the numbers diagnosed with cancer will increase.[1]

Knowledge about cancer is also on the increase, bringing greater ability to provide effective treatments—curative interventions and those that slow disease progression or mitigate its effects. Patients with cancer are now offered multiple interventions that were not possible just a few years ago. However, these new treatments are often in addition to, rather than a replacement for, existing options, and they are given over a prolonged period of time, again increasing the pressure on cancer services. The Commission for Health Improvement has estimated that more than 50% of people diagnosed with cancer will be given chemotherapy,[3] a number that is expected to increase in the near future.[2] All of these factors place additional demands on already overstretched services.

A survey of 42 hospitals, published in 2003, found a huge increase in the use of intravenous chemotherapy over the previous 3 years. The average increase was 200%, with some hospitals reporting a 500% rise. Unsurprisingly, this increase has had a significant impact on the pressures faced by the cancer care workforce.[2]

Current chemotherapy pathways

The exact details of how individuals progress through an outpatient chemotherapy clinic depend on the specific treatments being administered, but there are some distinct steps in the typical patient pathway (Figure 1).

The pathway summarised in Figure 1 is time-consuming and requires patients and their families to be in the hospital for up to 8 hours.

Many cancer services rely on outdated systems that do not address issues of current pressing concern, such as capacity, delays in starting potentially curative treatments or meeting patients' wishes for treatment delivery closer to their homes.

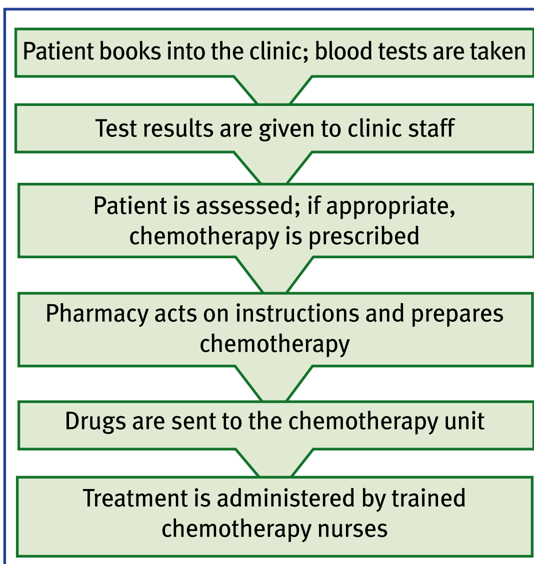

Figure 1: *Typical pathway through outpatient chemotherapy*

Scheduling of chemotherapy

Staff and patients in our clinics say that problems with the scheduling of chemotherapy are a major contributory factor to poor service delivery. Indeed, many of the systems designed to enable nurses to schedule chemotherapy are prone to error, awkward to use and limited in the information they display.[4]

More efficient scheduling of chemotherapy appointments is one of the aims of the Chemotherapy Oncology Planning Resource Tool (C-PORT), which has been designed by the Pharmaceutical Oncology Initiative Partnership (POIP) in association with the Cancer Action Team and the NHS.[5] The benefits of C-PORT became clear when it was piloted in a small number of cancer networks in 2005, and the system is now being rolled out to 34 other cancer networks throughout the UK. C-PORT is a simulator that allows networks to model how different drug regimens, patient flows, resource levels and unit organisation can affect the chemotherapy unit. For example, it can forecast how each individual patient will experience care, how long they will wait and how much care they will receive. It can be used to recreate real life situations such as equipment breakdown or absenteeism to see how they will affect treatment. It can also be used to compare differences at local, regional and national level allowing comparisons between NHS trusts.

Capacity issues

Moving cancer treatments into the community setting, when clinically appropriate, can reduce demands on specialist centres[2] as well as improving patient and family experiences. Delivery of chemotherapy in the community is not a new concept; the *NHS Cancer Plan*[6] and the NHS *Manual of Cancer Service Standards*[7] both recognised that initiatives were needed to address the emerging issues of providing oncology treatments in more efficient and effective ways.

There is a distinct lack of research into the delivery of chemotherapy outside of traditional settings. However, investigators have identified that some fundamental issues need to be addressed when considering the delivery of cytotoxic treatments in the community.[8–10] For example, appropriate infrastructures must be put in place,[8] effective communication is essential between primary and

secondary care, and there is a need to prioritise the education of all those involved in the delivery of oncology treatments.[10]

The issues highlighted above mirror those discussed in the *Cancer Reform Strategy* of 2007.[11] There is now a need to deliver these reforms and monitor their effectiveness.

There are many examples of chemotherapy being delivered outside of specialist cancer units, for example, treatment in haematology units, and the outreach services that most cancer centres offer to district general hospitals within their geographical locations. Several oral treatment formulations are now available for patients with cancer, for example, certain chemotherapy agents, bisphosphonates and monoclonal antibodies, enabling administration in local settings, including patients' homes. Some patients in the west of England now even have access to a mobile chemotherapy unit (Panel 1).[12] There can be reluctance to deliver certain intravenous chemotherapy agents, for example,

Image reproduced courtesy of Hope for Tomorrow

- The UK's first mobile chemotherapy unit is funded entirely by charitable contributions and run by the oncology team at Gloucestershire Hospitals NHS Foundation Trust
- The purpose is to reduce the amount of travelling for patients
- Treatments are delivered by specialist chemotherapy nurses, and all patients receive some of their treatments in hospital
- The unit began treating patients in Cirencester and Ross-on-Wye in June 2007, and there are hopes that it will eventually travel further afield, throughout Gloucestershire, Herefordshire and Worcestershire

Panel 1: *Chemotherapy on the move*[12]

docetaxel (Taxotere™), outside of the specialist setting. However, no such restrictions exist in the private sector, where well run, structured services are being delivered in patients' homes by specialist chemotherapy nurses. This policy suggests that consultant oncologists who treat private patients are confident of the safe delivery of Taxotere and other treatments in the home. Clearly some questions need to be asked:

- Why is Taxotere considered safe to use in the community in the private sector but not in the NHS?
- Is there an educational issue for NHS outreach chemotherapy nurses in the community setting?

Nevertheless, there is a need for caution when seeking solutions to capacity issues and trying to comply with government initiatives. It is important to make sure the safety and efficacy of treatments are not compromised by use of novel treatment settings. For example, some authors suggest that oral and intravenous chemotherapy require

similar levels of care, and that community-based treatment may require greater attention to patient education and involvement.[13]

More localised care could also have implications for cancer centres themselves. For example, there is a risk that the deployment of chemotherapy staff in the community could create skill-mix problems in the specialist base. The overall impact of community initiatives will be monitored with interest.

The national agenda

The National Chemotherapy Advisory Group (NCAG) is considering all aspects of chemotherapy, using a care pathway approach (i.e. assessment, decision making, prescribing, dispensing, delivery, reassessment and management of complications),[11] and its report is due soon. It is expected to call for new models of chemotherapy delivery.

Meanwhile, the *Cancer Reform Strategy* sets out a range of ways in which service models for cancer can be improved,[11] based on two key principles:

- Care should be delivered locally wherever possible to maximise patient convenience
- Services should be centralised where necessary to improve outcomes

The strategy also highlights the treatment safety concerns expressed by the National Patient Safety Agency (NSPA), and stresses the important role for specialist nurses in delivering the national recommendations on chemotherapy. (See Panel 2 for an outline of a successful breast cancer clinic run by a specialist nurse and specialist pharmacist.[14])

Full implementation of the Working Time Directive[16] in the NHS will mean that more full-time equivalent staff will be needed to provide the same level of capacity as before. It is therefore imperative that extended roles for nurses and pharmacists become a part of the normal specialist training for these professionals.

Meeting the challenges

The *Cancer Reform Strategy* is ambitious. However,

- A specialist nurse/pharmacist breast cancer clinic has been running at Velindre Cancer Centre in Cardiff since 2005
- Both lead practitioners have prescribing qualifications (one independent and one supplementary) that allow them to prescribe under the supervision of the consultant oncologist
- An audit of the service has shown a 30% reduction in waiting times and higher levels of patient satisfaction, compared with the medic-led team, and the medical team has more time than before to deal with more complex cases[15]
- The clinic requires no additional funding; the centre is simply using the expertise and skills of its staff to improve patient experiences and deliver treatments in a more effective way
- All the staff involved have expressed a higher level of job satisfaction as a result of their extended practice

Panel 2: *A specialist nurse/pharmacist clinic*[14]

it has been written in consultation with all stakeholders, which may improve the likelihood that some of its plans will be delivered.

As a specialist breast oncology nurse, I feel the profession has to rise to the current challenges, and deliver a high-quality service to patients. We need to:

- Address the issues of funding and affordability in an open and honest way, but also look at new ways of delivering care within our current structures and resources
- Learn from the many outstanding examples of good practice in the oncology setting—in the UK and in other parts of the world
- Support, motivate and educate the workforce
- Forge strong partnerships between primary and secondary care and be willing to learn from each other

In this way, we can deliver cancer services that not only give patients the most effective treatment for their cancer, but also choose methods and settings that are acceptable to them.

Conclusions

I have described some of the challenges that face professionals working in oncology. The rise in cancer incidence and the emergence of newer and targeted treatments mean there is now a need to address how to deliver the best and most effective treatments to patients using the resources allocated. There are many obstacles to overcome, but all of us who work in the 21st century health service can contribute to finding—and implementing—the solutions. These are exciting times indeed.

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To comment on this article please click here.

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