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Improving outcomes – a practical guide

After 25 years of trying to improve the way we organise and deliver cancer care we now have a fairly clear idea about what changes are needed to get the best patient outcomes. Finding ways to make those changes happen at every level and in every country remains a challenge. **Anna Wagstaff** asked key figures from across Europe for their advice.

If you want to make a big difference to the quality of patient care and outcomes for large numbers of patients, you need to look beyond your own individual practice, particularly when many different specialists and services are involved in a complex pattern of care for each patient.

This argument convinced a mid-career medical oncologist and researcher, with a special interest in measuring quality of life, to take responsibility for defining a set of principles that marked the beginning of a transformation in the quality of cancer care delivered across England and Wales, with a resonance well beyond the UK.

The year was 1993, the oncologist was Peter Selby, and the man who convinced him was Kenneth Calman, then Chief Medical Officer for England. The principles – drawn up by a panel of highly experienced and dedicated cancer specialists – were set out in what became known as the Calman–Hine report (1995).

The report drew on evidence generated in a number of countries and on early epidemiological studies exploring the link between outcomes and caseload in tricky, high-risk cancer surgeries, as well as studies on psycho-oncology and quality of life, screening and early diagnosis.

Its unique and lasting contribution was to flip the focus away from the perspective of health professionals towards the perspective of the patient. Calman–Hine developed the concept of cancer care and cancer services as an integrated patient-centred package, with contributions from specialists in multiple disciplines and professions working as a team, delivered across primary, secondary and tertiary settings, and centred on the needs of each individual patient with

systematic monitoring of treatments and outcomes.

A series of Improving Outcomes Guidance translated the Calman–Hine principles into service delivery guidelines for the more common cancers, specifying what should be involved in diagnostics, treatment and care, who should deliver it, and how.

Then in 2000, England published the world's first comprehensive national cancer plan (drawn up by Mike Richards, the world's first national cancer director), which addressed wider issues of organisation and structure, identifying regional cancer networks as the key to integrating care between primary, district hospital and specialist centres, so that no treatment would be delivered in a setting lacking appropriate experience and expertise.

In terms of defining what should be done, England appeared to be ahead of the curve. But turning that vision into reality took a lot longer than Selby had expected, and remains to this day a work in progress.

“I was relatively inexperienced, and I thought that once the report had been endorsed by the government, change might come quickly,” says Selby. “It doesn't surprise me now, because I'm old and wizened and I realise that bringing about change is a process of being grindingly relentless over a long period of time.”

A European story

This is not just a British story. At the time Kenneth Calman commissioned his report, policy makers, public health professionals and clinical leaders across Europe were looking at how to address the escalating complexity of cancer diagnosis and

treatment, with growing demands for patient centred care and more effective oversight of the quality of care.

It wasn't long before Denmark and France published their own comprehensive national cancer plans, followed by other countries, and backed in some cases with the staff and budget to oversee their implementation. Many of these plans are now in their third or fourth iteration.

In 2009, the European Partnership for Action Against Cancer (EPAAC) became the first in a series of European 'Joint Actions' on cancer control that sought to share best practice on the development and implementation of national cancer plans as well as on issues from prevention to screening, cancer registries and benchmarking, psycho-oncology and survivorship. The publications arising from these Joint Actions are all published on the EPAAC and CanCon sites. The most recent Joint Action – iPAAC – was launched in April 2018.

In 2017, ECCO launched a European clinical collaboration to define the essential requirements for delivering safe, high-quality, patient centred care in different cancer types, focusing on what is required at the service–patient interface.

Measuring the impact

There can be little doubt that these efforts have contributed over time to the improvements in survival shown across the board by cancer registries, which have themselves been important drivers of improvement by the mere fact of revealing survival differences between countries and regions.

How much of the improvement is due to better technologies – drugs, imaging and radiotherapy equipment – and how much to changes in the

Policy-led change: improving early diagnosis

Since the mid 2000s, Denmark has been making significant progress in diagnosing cancers quicker.

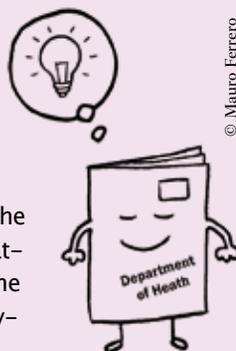
Why? Comparative data showed that delayed diagnosis was a contributing factor to poorer cancer outcomes recorded for Denmark – and the UK – compared to countries with similar resources and health systems.

How? The Danish government, through its national cancer plan, classified “potential cancer” as a medical emergency. It introduced a three-pronged strategy, comprising:

- New diagnostic pathways to speed up referrals for patients who show specific organ-related symptoms;
- Diagnostic centres where GPs can refer patients with suspicious but non-specific symptoms, such as weight loss or night sweats, to identify the cause;
- New options for GPs to access diagnostic tools such as CTs and ultrasound scans without having to refer their patients to hospital, to speed up a “yes/no” answer where symptoms are assessed as “low risk but not no risk”.

Aim? The goal is to reduce the time from first suspicion of cancer to the start of treatment, with the aim of improving outcomes.

Impact? A study of the impact on cancer prognosis indicates that the prognosis of symptomatic cancer patients diagnosed through a primary care route has improved across the time the new referral pathways were introduced, and that the expedited referral contributed to that improvement (*BMC Cancer* 2017, 17:627). A study comparing waiting times and outcomes for patients diagnosed with glottal cancer, where delays in diagnosis are known to be an important factor in prognosis, found that those diagnosed after the new referral system was implemented were diagnosed earlier and had significantly lower adjusted HR of disease-specific mortality (*Eur J Cancer* 2016, 59:46–56).



way care is organised and delivered is a matter of controversy. It may not even be a meaningful distinction, because one thing we have learnt – although this understanding has itself been poorly disseminated – is that realising the value of new drugs and equipment depends heavily on learning how to use them to best effect, and then spreading that knowledge effectively throughout the system.

Another thing we have learnt is that, despite encouraging signs 10–15 years ago of a narrowing of the

survival gap across Europe, disparities in outcomes remain stubbornly entrenched, as highlighted by the European Cancer Patient Coalition among others (eg bit.ly/ECPC_disparities). These translate into tens of thousands of needless deaths and long-term physical, emotional and functional damage every year. Much of this could be avoided if health systems were quicker at implementing comprehensively documented changes that have been shown to make a difference.

Making it happen

There are no league tables documenting disparities in the speed and efficiency with which healthcare systems innovate and improve the quality of service, but these differences clearly exist. This was starkly demonstrated in the 1980s onwards, by the differential speed of uptake of a surgical technique for rectal cancer that had been conclusively shown to have a dramatic impact on the rate of recurrence (from around 30% of cases down to 3.5% or lower) and consequently on both reoperations and survival.

Total mesorectal excision (TME) was developed in the mid-1980s by a British surgeon, Bill Heald, in partnership with pathologist Phil Quirke and radiologist Gina Brown. The Swedes and the Norwegians called in Heald and his team to train their clinicians, and rolled out the new technique, so that by the late 1990s almost every patient who might benefit from the technique in those countries received it.

The UK, by contrast, was in the slow stream. In 2000, Bill Heald had to resort to a media campaign to draw attention to the fact that Scandinavian patients were benefiting from a procedure that was still not delivered as standard across the UK. Indeed, as Selby comments, “even today, Phil Quirke is running a charity-funded programme for improving uptake of appropriate surgical techniques including TME, 30 years after Bill Heald and 25 years after Sweden.”

When, in 2008, a programme to roll out TME was launched in Spain, they called it ‘Vikingo’, in honour not of the country that was so key to the development and teaching of the technique, but the countries that had made it routinely available to patients.

What's the Viking secret?

Peter Naredi, past-president of ECCO, and a specialist in liver and pancreatic cancer surgery, has spent much of his career leading efforts to improve outcomes across Europe. He believes that a strong sense of collective responsibility and leadership within the profession in his native Sweden have been key factors for success.

"The system is all of us, working in a certain environment, with certain financial capacity, with certain kinds of regulations. So if we want to change the system, it's us."

In Sweden it was the clinicians and not the government that started the clinical cancer registries, says Naredi. "We saw different outcomes and quite big differences in complications and we wanted to be able to compare treatments and outcomes between regions."

Their motivation was not to show up the best and the worst performers, so much as to use the data to work out what factors were associated with better or worse outcomes. They began by listing 54 indicators, but soon realised it would take a clinician half an hour to complete each form, so agreed on a shorter version that could be completed in under 10 minutes.

"The basis for changing a system is that there must be an incentive – something worthwhile for those who actually do that work. I think that is the red thread through all the system change in things that I have been involved in. You are not alone. You do it with colleagues."

The same principles, he says, have been key to the success of European professional initiatives such as EURECCA, the European Registry of Cancer Care, which was started in 2007 as an ECCO/ESSO initiative to

improve the quality of cancer care by data registration, feedback, improvement plans and sharing knowledge.

Naredi was initially sceptical about whether valid conclusions could be drawn from pan-European comparisons, because there is no complete alignment between countries about which treatment and outcome data are recorded. He learnt that, through a process of structured discussion, such as the Delphi process, it is possible to reach a robust consensus even if the data are not perfect.

The profession is key

One of the notable improvements in patient care arising from these consensus-building discussions has been a dramatic drop in unnecessary adjuvant chemotherapy for stage II colorectal cancer. A comparison of countries with widely differing rates of adjuvant chemo use in this group of patients showed no differences in outcomes. "Again the profession is key here," says Naredi, "even if we have different views on what indicators we use."

More recently, Naredi has been a prime mover behind an ECCO initiative to build a European pan-professional consensus around the Essential Requirements for Quality Cancer Care, in terms of how the diagnosis, treatment and care of patients with specific cancers should be organised and delivered.

"When we sit together and write these documents, we open eyes about what others consider absolutely necessary, and what we may consider not so important. And then we come to a consensus. It's about decreasing your own role as an independent speciality and looking at what you can do together."

Naredi accepts, however, that there are limits to what can be achieved

through professional consensus, and that governments have a role and a responsibility for improving safety and quality. As he points out, while clinical cancer registries were started in Sweden by the professions, government later stepped in to make gathering and publishing of data on treatment and outcomes compulsory, and that data became crucial to generate the political will needed to drive sometimes painful changes to the structure of cancer services.

"By making the numbers public, it became rather evident that the best outcomes are at high-volume hospitals. So this drove concentration of care to larger units, and the smaller units had to start collaborating with the larger hospitals, for instance with the video multidisciplinary team meetings that we have in all regions nowadays."

We're not all Vikings

What works in some countries may be less effective in others. In Germany, for instance, professional associations may have acted as a brake on improving outcomes because they stand accused of putting their own self-interests first, rather than collaborating.

So says Johannes Bruns, head of the powerful German Cancer Society, DKG, which since the early 2000s has been leading efforts to promote a truly multidisciplinary approach to care, driven by guidelines and backed up with a system for benchmarking and critical review of performance and outcomes.

"The whole problem in our health-care system is that the main drivers within our system of self administration are the sickness funds and doctors associations. They decide. Only through legislation are you able to

establish good ideas like psycho-oncology, registries, certification, specialist centres. Without that, they all want to work in their own self-interest, so nothing changes.”

Each professional society feels responsible for its own step in the pathway of diagnosis, treatment and care, says Bruns, “The sum of all the steps makes the results for the patient, and nobody is looking at how to organise that... Nobody feels responsible in our system.”

Changing that attitude, he feels is key to improving patient care – the question is how? “You can organise it like in Sweden, a few big centres, organised like a hospital, and everyone with cancer goes there. But in a system like Germany, with 80 million people, 500,000 cancer patients a year, how do you organise this process?”

The strategy adopted by Bruns and the DKG has been to focus relentlessly on multidisciplinary teams (MDTs) as the only basis for clinical decision making. “This is where the doctors have to talk about what they want to do. That is the best quality assurance intervention we have. In oncology no single doctor should decide on anything alone.”

MDT decision-making, he argues, ensures that decisions on the treatment and care of every patient are informed by input from at least the core specialisms. It also helps to identify individual team members who routinely flout guidelines, and MDTs should act as ‘learning organisations’, that build review of decisions and outcomes into their routine practice. “If something goes wrong, or something bad happens, you have to talk critically about what happened. Every time, the whole team must look at that.”

Although Bruns believes that only legislation reaches every part of the health system, the DKG has relied

on a voluntary approach to changing practice, in order to bring the medical profession on board. They started defining guidelines for the organisation and delivery of breast cancer in 2003, followed by colorectal and then prostate cancer.

In 2008 they turned their attention to promoting organ-based cancer units, such as specialist breast centres, through an accreditation process that used a set of criteria including MDT decision making, adhering to guidelines, minimum caseloads (as a measure of competence), involvement of a defined set of specialist roles, and gathering, reporting and reviewing key treatment and outcomes indicators.

“We are now covering more than 1,400 organ-specific cancer centres, including regional networks, and nearly 120 cancer centres where a variety of tumour entities are treated,” says Bruns. Evidence that patients are reaping the benefit comes from comparing treatment and outcome data from centres inside and outside of the accreditation system. Under recent legislation all cancer centres have to report selected treatment and outcome data to cancer registries, set up on a regional basis.

Competition vs collaboration

Improving patient care is something all good doctors want to do, says Bruns, but he says that the way the German healthcare system works means it is easier to get money if you don’t work together. He accepts that things are better than 20 years ago, “when surgeons and radiotherapists in the same hospital would compete against one another for money.” That changed with the introduction of a system where the payment was given by ‘disease reference group’ rather than

for individual interventions, and Bruns would like to see further changes, with payment at the cancer network level.

However, competing for patients is the single biggest incentive that drives centres to seek accreditation, and to keep standards high for fear of losing it. There are too many hospitals and too many surgeons in Germany, says Bruns, and most patients want to be treated in centres that are accredited.

Collaborative learning and sharing best practice can suffer under a competitive system. If the annual audit of an accredited centre highlights persistent problems, the DKG can offer to ask someone from another centre to visit. “We find they are not very happy to bring someone in from another hospital,” says Bruns. “They worry that if word gets out that there are problems in their hospital, then cancer patients won’t go there anymore. So there is a conflict of interests, and they don’t feel they are in a situation to talk about their own professional problems.”

To get around this, the DKG tried inviting doctors who had recently retired, but were no longer attached to a hospital, and more recently they have tried, with some success, to partner doctors from hospitals located in different regions of Germany.

“It’s easier to talk about their problems with people not near the neighbourhood. We arrange these kinds of meetings because more people come along and will say, for instance, ‘I have a problem with infections after a particular procedure. What do you do differently? Tell me what I can change.’”

Might this fear of being open also compromise the openness of discussions within MDTs? That’s a possibility, says Bruns. So far, audits have focused on the proportion of patients who were discussed at the MDT, and who was present at the meetings. The question of the quality of the com-

Physician-led change: Improving recovery after surgery



In the 1990s, Danish surgeon Henrik Kehlet led efforts to find how to minimise the stress and trauma of major surgery for colorectal surgery and put patients on a faster more effective road to recovery.

Why? Practice regarding preoperative fasting, postoperative anaesthesia, nasogastric tubes for feeding, and advice on bed rest versus mobilisation were based on traditional wisdom rather than evidence.

How? Kehlet and collaborators developed a multidisciplinary protocol for peri- and postoperative care of patients undergoing colorectal surgery, which became known as the Enhanced Recovery After Surgery (ERAS) protocol. The protocol includes talking to patients and families about what to expect following an operation and how they can help speed up their recovery. The key ERAS principles and collaborative, multidisciplinary approaches have been used to develop similar protocols for other surgical procedures.

Aim? The focus is on stress reduction and a return to function, to recover more quickly from major surgery and avoid the medium-term adverse effects of conventional postoperative care, such as fatigue and a decline in nutritional status.

Impact? The advantages of ERAS protocols for speeding recovery, reducing anxiety and enabling patients to leave hospital earlier have been reported widely, and vary from one surgical procedure to another. One study on the impact of introducing the ERAS protocol for patients undergoing colorectal surgery in Alberta, Canada, reports that patients treated pre-ERAS stayed in hospital for a median of 1.5 days longer than those treated using the ERAS protocol; their risks of developing at least one complication were more than 10% higher, and they were 70% more likely to be readmitted within 30 days (*World J Surg* 2016, 40:1092-103). The net cost savings attributable to guideline implementation ranged between US\$ 2,806 and US\$ 5,898 per patient.

The international ERAS society (<http://erassociety.org/>) reviews and updates the protocols. (See also TED talk by Olle Ljungqvist at bit.ly/2JfONqZ)

munication – for example regarding leadership, working atmosphere, and conflict management – is an issue the DKG intends to focus on more closely over the next two years.

Collaboration: who's in and who's out?

The quality of team work is a particular issue when it comes to maximising the contribution that all specialists make to improving outcomes says Lena Sharp, President of the European Oncology Nursing Society. EONS is currently completing a year-long RECaN project, examining the evidence about the impact of nursing on patient outcomes and experiences.

There is a huge variation in the status and training of cancer nurses

across Europe, says Sharp. She argues that one of the most effective ways to improve outcomes would be to invest in specialist nurses, train them and integrate them as equal members of multidisciplinary teams.

Specialist nursing makes a contribution to survival as well as quality of life and patient experiences, by monitoring complex treatments and looking for signs that could kill a patient, says Sharp. “Caring for patients is a distinct competence. We sit at the bedside with the patient to do these treatments, we work 24/7 close to the patient, and we have the competence like no one else when it comes to symptom management and self-management.”

She emphasises the contributions that patients, families and carers, make to outcomes, and points out

that it is primarily nurses who facilitate this, by communicating with patients and answering their questions. “If you feel as a patient that you have an important role yourself, you are more adherent to the treatment, you are more involved in the rehabilitation process, you are more involved with lifestyle issues after treatment than if you leave it up to the health-care professionals to fix you.”

Sharp was shocked to hear that nurses at one hospital included in the RECaN study were explicitly told never to question what a doctor orders, says or does. “Even if it is obvious to the nurse that a mistake had been made, they are told not to speak up.”

Even in her native Sweden, widely seen as a relatively equal society, similar signals are often given, though not

Nurse-led change: improving symptom management

In the early 2000s, a group of specialist nurses began developing an Advanced Symptom Management System (ASyMS) to allow safe and effective monitoring of the side-effects of chemotherapy in patients' own homes.

Why? Patients were increasingly being given more treatment for chemotherapy on an outpatient basis. This meant they had to manage most of the side-effects of their treatments at home, and know when to contact health professionals if any of the symptoms were of concern.

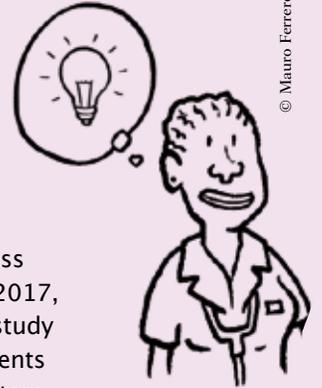
How? Patients are given a mobile phone with the ASyMS software and are shown how to use it to report, daily, on their experience of symptoms relevant to them, graded for severity and for how distressing they are.

This data is analysed by an evidence-based algorithm that triggers one of three responses. For less severe symptoms, patients will receive appropriate self-care advice on their mobile phone. Where symptoms may require intervention by a healthcare professional, clinicians will receive an alert: amber for symptoms that are mild to moderate, but may have persisted; red for oncologic emergencies that need rapid input from clinicians at hospital.

The aim? The overall aim is to reduce symptom burden, improve quality of life and enable patients to stay at

home. Managing symptoms in real time can help minimise them or prevent them from progressing and possibly requiring hospitalisation.

Impact? ASyMS is nearing the end of a five-year trial called eSMART, which involves more than 1,000 patients across five countries (*BMJ Open* 2017, 7:e015016). A smaller study has already shown that patients believed the ASyMS system improved management of their symptoms and they felt reassured that they were being monitored at home. Health professionals also reported they found the system beneficial (*Clin Effect Nurs* 2005, 9:202-10). A 2009 study concluded that "the ASyMS system can support the management of symptoms in patients with breast, lung and colorectal cancer receiving chemotherapy... the system could provide a more accurate reflection of chemotherapy-related toxicity and ... a better means of monitoring toxicity in clinical practice with the potential to decrease chemotherapy-related morbidity," (*Support Care Cancer* 2009, 17: 437-44).



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so openly. "There are places in Sweden where senior medical professionals are still seen to be as close to God as you can get."

Nurses, she stresses, are often as 'guilty' as the medical professions in accepting such a passive role. "Even if there is a simple change that obviously would make a positive difference, they always worry: I'm not sure I'm allowed to do that. Is this included in my role? Can I make this decision?"

Research conducted by one of Sharp's PhD students showed that handovers between nursing shifts on the ward were more effective if they were conducted in front of the patient – not least because it means that the patient can be assured that the incoming shift is aware of their

needs and concerns. And yet, says Sharp, even the nurses who had been involved in developing and testing the model still doubted whether they had the right to implement the changes.

At the annual EONS-ESO oncology nursing masterclasses, Sharp's session focuses on teaching participants how and why to speak up when they feel there is a problem, or that things could be done better, but as she points, out, there is a limit to what can be achieved by training nurses if the rest of the team aren't listening.

"In the focus group interviews we did in Germany, we saw they have given up a bit. They say, 'nobody is going to listen anyway so there is no point in speaking.' They are not allowed to have nurse-led services,

for instance, as we have in most other European countries. It is a system that has a negative impact on nursing and other groups, and that makes it harder to change practice."

Sharp believes politicians at national and European level should take a lead in changing this culture. "There is a lot that could be done from a political point of view to change the system." The RECaN case studies made her aware of the power that national cancer plans have in forcing systems to change, and she argues for a clause that simply states that all people managing cancer care should be appropriately educated. At a recent meeting at the European Parliament, EONS highlighted the lack of incentives for nurses to go

through specialist training.

“Management can help by including nurses on the boards of larger hospitals, and encouraging professional development by non-medical groups.” As Sharpe points out, nurses who take up a research role rarely have the option to continue with their clinical work, which divorces efforts to improve practice from the everyday life of the clinic.

There is also a time problem. Trying new and possibly more efficient ways to do things, developing the evidence and implementing changes in practice, all take time, and nurses don't have any. While Sharp warns against using this as an excuse, staff shortages and working conditions are serious problems, she says.

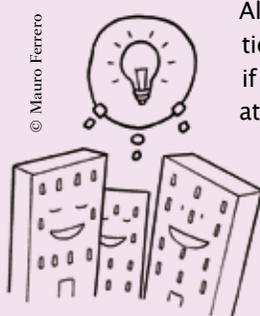
Learning from one another

Experiences in the UK, Sweden, Germany, and the RECaN study countries demonstrate that European health services differ significantly in organisation, funding and culture. That doesn't mean that European countries cannot learn from one another about improving cancer outcomes. In fact, says Josep M Borrás, Director of the cancer plan for the Catalan region in Spain, this diversity probably offers a particularly rich environment for learning.

Borrás has been learning from Europe for more than 20 years. An epidemiologist by background, he joined the management of the Catalan Institute of Oncology in the late 1990s, and immediately started looking around to see what other countries were doing that could be of value.

“The Calman–Hine report was very important for us to see the importance of specialisation in cancer treatment and trying to organise the pathway of

A culture of change: Is yours a learning organisation?



All organisations do better if they are good at learning and innovating.

This applies as much to health services as to commercial corporations.

In May 2008, the Harvard Business Review published a stripped-down description of the building blocks of a learning organisation, which were summarised as:

- **A supportive environment:** Psychological safety, Appreciation of differences, Openness to

new ideas, Time for reflection;

- **Concrete learning processes and practices:** Experimentation, Information collection, Analysis, Education and training, Information transfer;

- **Leadership that reinforces learning.**

The article gives a link to an online survey that can be filled out by individuals or entire departments, to rate the organisation they work in. These scores can be used to benchmark against other units, departments or hospitals, or against the Harvard Business School's own benchmark score.

<https://hbr.org/2008/03/is-yours-a-learning-organization>

patients across the whole care system to improve the results. The concept of networks, for instance, fits very well in the regional organisation in healthcare that we had in Catalonia at that time.”

Earlier work on a needs assessment of the region's radiotherapy capacity introduced him to the work of Dutch epidemiologist Jan Willem Coebergh, which highlighted the importance of specialisation in surgery, the need for data and population-based cancer registries, and the value of clinical audit.

When the pan-European clinical audit/registry EURECCA (spearheaded by a Dutch surgeon) was launched in 2007 – starting with rectal cancer – Borrás was keen to promote participation. He went on to play a leading role, with Tit Albreht from Slovenia and others, in the European Joint Actions on cancer, which he says were particularly valuable “from the perspective of networking, and from a practical

and focused perspective.”

One of the aims of the third Joint Action on cancer, launched in April 2018, he says, is to assess the extent to which the research and policy recommendations generated by earlier Joint Actions, including national cancer plans, have been adopted and implemented – all of which comes back to the thorny question of translating cancer plans into cancer practice.

Champions for change

In the 25 years since Calman–Hine was published, Peter Selby says the European cancer community has done a great job in building a consensus around policy recommendations for cancer plans and best practice in various aspects of cancer care delivery.

He believes it is now time to focus on building competence and skills within the professional community to champion improvements in their own

hospitals and wider cancer services. He is addressing, in particular, newly appointed consultants at the same stage of their career as he was when Kenneth Calman came knocking on his door.

His message is: “There are various things you can do. You might do clinical trials. Excellent. You might become a medical director. Excellent. You might run a lab. Also excellent. But you might set out your stall to make sure that the patterns of practice in your patch are the best that they can be. And that is probably the mechanism that will save more lives through your efforts than anything else.”

Closing the gap between the worst and the best in Europe, or within a country or a region, is not primarily a question of resources – though resources certainly come into it, Selby insists. “Many of the things we are talking about are really not expensive, because we are talking about quite simple improvements in practice that are far from guaranteed to cost more, and might, if planned carefully, cost less.”

There are countries in Europe, he says, who insist there is no money to invest in radiotherapy, yet waste vast sums by delivering all chemotherapy treatments on an inpatient basis, with patients being admitted a day before for tests, remaining there for the days of treatment and staying a further day to be checked out before going home.

“That’s a crazily expensive way of delivering those treatments. If you make that change you have money to buy your radiotherapy equipment. And it’s nothing to do with expensive smart innovations. It’s about learning from other countries about how to do things more efficiently.”

Improving early diagnosis is

another example where better practice is cheaper, says Selby. “Expensive non-curative treatments are not great value by contrast. Access to scanning and endoscopy will determine whether you make an early diagnosis or not, and access is still slow or non-existent in many countries in Europe.”

Delays in diagnosis have been shown to account in large part for the relatively poor survival of patients in the UK and Denmark compared to similar patients in similarly resourced health services, and Selby commends the work done in Denmark to address the problem through reconfiguring the service to allow direct access to investigations (see Policy-led change box, p 6).

A collaborative approach to learning

Naredi, as a cancer surgeon, singles out another Danish innovation – ERAS (Enhanced Recovery After Surgery) protocols – to show how relatively simple and cheap changes can improve outcomes and make big savings. “If you document what you are doing, and inform patients what to expect of this hospital stay, and how they can help to mobilise after surgery, for example, it significantly decreases the number of complications and shortens hospital time,” says Naredi (see Physician-led change box, p 9).

Originally developed for use with patients undergoing colorectal surgery, ERAS protocols have now been developed for many other operations, which are being continuously tested and updated. The ERAS Society, says Naredi is a great example of a collaborative approach to learning and spreading best practice.

The use of collaborative learning, documenting and comparing outcomes, and critical reviews that involve everyone who plays a role in care could determine which countries with poorer cancer outcomes succeed in closing the gap with the best.

Borras says that one of the key lessons from working to improve outcomes in Catalonia and at a European level is that you cannot cut and paste from cancer plans in other countries, especially because resources and priorities are not the same.

“People need to think carefully about their own reality. What can they realistically do in practical terms to improve the situation?”

Are the radiologists and pathologists present in team meetings? Do you have the technical capacity to fix problems with the radiotherapy equipment you’ve just invested in? “The best thing they can do is learn from what they are doing. Learn from their outcomes and the outcomes of other teams, look at the interaction between specialities and how that can be improved.” It is often very simple practical things that make the biggest gains in outcomes, he says.

Selby points out that we know what those things are because they’ve been documented, often repeatedly, replicating knowledge that is already out there. “What is needed now is to apply all this knowledge to the different realities across Europe.”

That is why he is calling on mid-career cancer professionals to become ‘champions for change’ – and calling for a change in focus from defining what should happen to equipping these champions with the knowledge and skill to make sure that it actually does.

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