A minimum acceptable standard of care for every patient

Anna Wagstaff

A great deal is already known about why cancer patients do better in some countries or some parts of a country than in others. But how can that knowledge be transmitted to the people who have the power to act, in a way they can quickly and easily understand?

Maximising survival and minimising the side-effects, the long-term effects and the impact of the disease and its treatment on patients' quality of life are what good cancer care is all about. But when funds are limited, and diagnostic or management tools are expensive, distinctions must be made between what is essential and what is desirable, with a view to ensuring that every citizen diagnosed with cancer has access to the basic essentials of care. This is the philosophy behind one of the latest EUROCHIP projects, which has been piloting a new approach to closing the survival gaps between the best and the worst in Europe.

The idea is simple. First, select a disease setting. Priority should be given to those with curative potential and those affecting large populations – low-risk childhood ALL (acute lymphoblastic leukaemia) and early and advanced breast cancer were selected for the pilot studies. Next, ask a group of experts to agree on the gold-standard evidence-based protocol for diagnosing and managing the disease. Then, separate out the 'minimum requirements for acceptable treatment' from the 'additional [desirable] tools' – things that might, for instance, offer an extra little bit of certainty, or make the patient feel less unwell.

This list of minimum requirements will represent the basic standard of treatment that every cancer patient in Europe should have the right to expect. It can be scanned to identify which elements are affordable even in the poorest areas in Europe, and which are sufficiently costly to pose a problem where health budgets are very tight. By narrowing the focus onto diagnostic and management tools that are both essential and potentially unaffordable, it becomes possible to concentrate efforts on problem areas and look for alternative options that are more affordable but equally effective (if perhaps less desirable), or explore cheaper ways of getting access to essential tools – greater sharing of expensive diagnostic testing facilities, for example.

This pilot project, one of many initiatives of the European Cancer Health Indicator Project (EUROCHIP) programme run from the Istituto Nazionale dei Tumori in Milan, focuses on reducing inequalities in cancer incidence and cancer care across Europe. (EUROCHIP's work on improving cervical cancer screening in six countries was profiled in the May–June 2011 issue of *Cancer World*.) The pilot tackles an aspect of cancer control that almost all of Europe's richer countries are now struggling with, and that is even more essential for the poorer ones: cost–effectiveness, how to do the best for cancer patients with the money available.

Where this approach differs from that of existing bodies set up to perform health

COMITATO MARIA LETIZIA VERGA/ATTILIO ROSSETTI

We can do this. Not all ALL patients can receive the same level of care as this young girl at the San Gerardo Hospital in Monza, Italy, but Momcilo Jankovic, pictured here, hopes that simple messages designed to address the main factors behind variations in survival will ensure greater access to minimum acceptable standards of care across Europe

technology assessment (HTA) and value-for-money analyses, such as the UK's NICE (National Institute for Health and Clinical Excellence) and Sweden's Dental and Pharmaceutical Benefits Agency, is that rather than taking costs and benefits as its starting point, it tries to identify where cost constraints could be a significant factor explaining why patients do so much worse in some countries or regions than in others. And it tries to suggest solutions.

Goal oriented

For Andrea Micheli, the EUROCHIP leader, this project is all about results on the ground, and that means it is heavily geared toward Europe's political leaders. "The problem is that individual specialists know what has to be done, but this is not information known to politicians. What EUROCHIP does is to extract from these people some key proposals and to pass them on to the politicians. We need to send simple messages to the European Commission: in this way we can quickly improve the situation in poorer countries."

Childhood ALL was an obvious choice for a pilot study. Thanks to decades of cooperative clinical studies by paediatric oncologists in the US and Europe (notably Germany), childhood ALL is now curable in around 80% of cases. Yet many children continue to die unnecessarily in some countries and regions of Europe. Furthermore, the high level of collaboration in this area means that, while many questions remain to be answered, there is a strong consensus over the current gold-standard protocol for managing the disease.

The rationale behind choosing breast cancer, both early and advanced, for the other pilot studies was that it is the most common cancer among women in Europe, and the number of new cases is growing.

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"In this case, new drugs are proposed, and differences in survival may be related to the availability of these drugs or to other things," says Micheli.

A CHANCE TO HELP

Momcilo Jankovic, a paediatric oncologist at San Gerardo Hospital in Monza, Italy, was delighted to be asked to participate in the ALL pilot, alongside Kathy Pritchard-Jones, professor of paediatric oncology at University College London and Nick Goulden, consultant haematologist at Great Ormond Street Children's Hospital, London. "When they asked me to cooperate to define what the child needs in order to be treated according to local resources and to reduce the cost of this treatment, I thought, this is not widely reported in the literature, so it seemed to be a very good opportunity to help with my experience."

Jankovic's experience in this field is considerable. Not only does he have a long track record treating young ALL patients – including collaborating in international clinical studies led by the Italian Association of Paediatric Haematology and Oncology (AIEOP) and the Berlin-Frankfurt-Munich (BFM) ALL group – but he also has experience helping improve results in countries where costs pose a real problem, including a collaboration with Nicaraguan paediatric oncologists, which raised survival rates for childhood ALL from 10% to an impressive 50%.

Closer to home, Jankovic and his colleagues also built up a long-term collaboration with doctors in Serbia after years of isolation during the Balkan war left them trailing behind much of Europe. He mentions, as one important outcome, the interest and support these paediatric oncologists received from the politicians once they saw what was being achieved. "The government looked at the results they obtained and wanted to promote a national network. They now pay for equipment, and they pay for doctors to attend meetings or to visit outside the country. They are much more positive about responding to the request of doctors."

Jankovic hopes that the EUROCHIP project will help achieve similar improvements across Europe.

A BRIDGE TO POLITICIANS

Micheli describes the project as essentially an intellectual exercise, "using a methodology derived from our experience over 10 years" to facilitate discussion between experts coming from different fields, to extract key messages, check whether these are widely accepted by others, and then pass them on to the people who can deliver change. "We are trying to build a bridge and to find a common language with the politicians."

In the ALL pilot, as well as Jankovic and his fellow physicians, the group of experts included researchers, epidemiologists, health economists and health technology analysts. The final report has yet to be written and validated among a wider group of experts, but findings so far indicate that the cost of providing therapies is less of an issue than the cost of tests that can guide physicians in tailoring treatments. The only exception to this may be PEG-asparaginase, a less toxic, but more expensive, variation of L-asparaginase. However, as affordable methods exist for managing the side-effects of the unpegylated version, PEG-asparaginase was put under the 'desirable' rather than the 'minimum requirement' heading.

More important, perhaps, are the methods used to stratify patients into risk levels as a guide to treatment, key among which are measurements of minimal residual disease, showing how well the patient has responded to the initial induction treatment (day 33) and the second induction treatment (day 72). The gold standard here is using quantitative PCR (polymerase chain reaction). "This is a very expensive methodology and is not possible to adopt in every country," says Jankovic. However, PCR was listed under the heading 'desirable', because an alternative method for measuring minimal residual disease does exist, in the form of cytofluorometry. Though less accurate than PCR, the team considered it to be an 'acceptable' alternative. While it is cheaper than PCR, cytofluorometry equipment nonetheless requires a hefty investment, and it was therefore flagged as a 'minimum requirement where cost constraints could limit access'.

PART EVIDENCE PART EXPERIENCE

As Micheli readily admits, the approach taken in this EUROCHIP project draws as much on the experience of the experts as it does on hard peer-reviewed evidence. This is partly a matter of necessity, as evidence on the cost–effectiveness of specific procedures or therapies in the context of a particular indication is often hard to come by. A thorough search of the literature on cost–effectiveness/cost–utility/cost–benefit/cost minimisation analyses of the ALL diagnostic/management tools flagged up as potentially unaffordable showed how little there is out there – at least in the academic literature. In the case of child-

SIOPE/NURDOR

Survivors. Miloš, Ajla and Hena are among the many young ALL patients to have benefited from an initiative to ensure all children have access to minimum acceptable treatment, which was spearheaded by Serbian paediatric oncologists in collaboration with a group of Italian specialists

hood ALL, the treatment protocol is so widely accepted that there may be few calls to carry out such analyses.

"Basically we still don't have the evidence in terms of the literature, economic statistics and data, so we must go on the basis of experience," says Annalisa Trama, one of the epidemiologists involved in the ALL pilot study. But that experience, she argues, offers some crucial insights that will probably form the basis of the main recommendations of the pilot study.

She cites, in particular, reports by participating oncologists of visits to hospitals where children being treated for ALL were not losing their hair. "This is almost impossible if children get the appropriate dose of chemotherapy. And it raised the question of to what extent children were really receiving the dose recommended by the protocol." In some cases, children were being treated in general haematology departments, and sharing wards with adults.

As a result of this discussion, says Trama, the experts group started looking at whether, and to what extent, issues of organisation – "how these well-known drugs and other interventions are actually provided" – might be responsible for the observed variations in survival. "In the case of ALL, we are not talking about a very expensive treatment. There are a few techniques that are important and are expensive, but these alone cannot really explain the difference we see in survival. So we said, probably this is an issue of quality and accessibility of these treatments." That said, she adds, there are important cost implications in improving organisation and delivery of care through greater use of referrals to specialist centres, linked in to national and European networks, and this needs to be explicit in any recommendations coming out of the pilot.

Micheli is conscious of the need for any set of recommendations to carry the backing of the leading voices in the field, and he will be circulating a draft of the final report to bodies such as ECCO, ESMO (Europe's medical oncologists), SIOPE (Europe's paediatric oncologists) and the European Leukaemia Network for their comments and endorsement.

Whatever the specific recommendations may be on ALL and on early and advanced breast cancer, Micheli hopes to send three simple messages to the Commission about closing cancer survival gaps across Europe.

- Studies exploring the relationship between costs and outcomes for specific cancer indications can help identify and address the key issues that lie behind variations in survival between countries, to help ensure that all Europe's cancer patients have access to the minimum requirements for acceptable treatment.
- To facilitate such studies, member states should be encouraged to gather and share information relating to the costs and benefits of technologies used in specific cancer indications.
- EU funding should be made available specifically for studies that explore the relation between cancer costs and cancer outcomes in the next call for proposals for public health or medical cancer science research.

Jankovic, who has seen the way the Serbian government responded to the evidence of improved survival when their young ALL patients were treated effectively in accordance with minimum requirements, endorses Micheli's messages. "If we give the Commission the correct information, they can help different countries achieve these minimum requirements. So I believe in this type of study, which is based on evidence for some aspects and experience for others. In this way we can offer the authorities a way to ensure patients can be adequately treated at the lowest cost."

Details of this and other EUROCHIP projects can be found at www.tumori.net/eurochip/