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The expanded BreastCheck and cervical cancer screening programmes are promised to be expert-driven

Sheila O'Kelly

Screening service to reach gold standard

THE BACKLOG IN PROCESSING cervical cancer smear tests has caused anxiety among women and frustration in the medical profession. But now the recently formed National Cancer Screening Service (NCSS) board is rolling out a 'gold standard' nationwide screening service.

Until recently, smear tests have been processed in HSE-run or funded hospitals. From January 1, 2008, the NCSS will take control and be fully responsible for the quality of this process.

"Labs in HSE hospitals won't necessarily be providing the service in the future if they can't produce the results. We will do what we can to help them meet the criteria, but the board's fundamental obligation is not to the labs but to the women," said Tony O'Brien, chief executive officer of the National Cancer Screening Service.

"While the programme was still with the HSE, they had an equal degree of concern about this lab situation," he said.

Since January, the HSE has been outsourcing some of the smear tests to laboratories in the US and this was having

a significant effect on the backlogs.

"They will have reduced that backlog by mid-summer, but it is already apparent that labs whose backlogs have been outsourced are now developing fresh backlogs. This says that we have a more fundamental problem.

"For the number of smears that the national programme will generate, around the 300,000 mark, you don't need a whole plethora of labs. You need a limited number of quality assured labs with the sufficient resources to turn the results around on a consistent basis."

"From January 2008, there will be a direct linkage between the amount of work that we expect a lab to do and the amount of resources that they have to do it. That in turn will be reflected in very clear performance parameters. We will enter into ironclad contracts with very specific performance requirements with labs," said Mr O'Brien.

Cervical cancer vaccines

In relation to the new HPV vaccines coming on to the market, Mr O'Brien said it

was not a choice between the vaccines and screening.

"Even if the entire population availed of the HPV vaccines it would not eradicate cervical cancer," he said.

"The vaccine is not a magic bullet and we need to take a balanced approach. From the screening point of view, we need to ensure that we have a first-class screening programme. It should run in tandem with any vaccine programme should it be decided that one should be rolled out."

NCSS

The National Cancer Screening Service was formed when the government decided to broaden the terms of reference of the former National Breast Screening Board that was responsible for the extremely successful BreastCheck programme. The new NCSS also includes the Irish Cervical Screening Programme which has been based in the mid-western area, and other potential cancer screening programmes.

However, no matter how good any population-based screening programme was, it would not pick up every possible cancer,





Tony O'Brien, chief executive officer of the National Cancer Screening Service

said Mr O'Brien. It was inevitable that eventually a cancer would be missed that might with hindsight have been detected.

"There is no foolproof methodology for early detection," said Mr O'Brien.

"In terms of false positives, the statistics show that BreastCheck has a very low benign open biopsy rate and in a sense that is our false-positive rate."

Colorectal screening

Colorectal cancer is the second most common cancer in Ireland and in April this year the NCSS set up an Expert Group on Colorectal Screening which will present an interim report in November this year and a final report in April 2008.

"There is significant international evidence of the benefits of a colorectal screening programme," said Mr O'Brien. "The Irish programme is at a much earlier stage."

When the expert group has produced its final report, the NCSS would give its proposals to government on what was needed to deliver an appropriately targeted screening programme that was population-based, on the one hand, and

high-risk targeted on the other.

They colorectal screening expert group was examining the appropriate:

- Age range
- Screening methodology
- Screening interval.

The colorectal screening programme would need a significant funding commitment. Mr O'Brien said it was heartening that all the major political parties had made very significant commitments to cancer screening in the recent general election campaign. There seemed to be a level of consensus, because of the evidence base supporting it.

There were other disease bases that may over time lend themselves to cancer screening. One of the other functions of the board was to monitor emerging evidence in relation to that, and it could also initiate policy discussion.

"We would be equally resistant to fanciful notions of screening if the evidence doesn't support it," said Mr O'Brien.

Cervical cancer

The NCSS is expanding the Cervical

Screening programme so that women all around the country aged 25-44 will be offered a free smear test every three years. And up to the age of 60 at five-yearly intervals.

"There is considerable public concern, quite rightly, about the interval between a woman having a smear test and her doctor and herself receiving that result. Up to now it's been unpredictable, variable, and in all cases long. That adds up to a recipe of total unacceptability that inevitably affects people's perceptions of the value of having smear tests.

"The programmes in the midwest, Limerick, Clare, and Tipperary North, were not in a position to provide confidence and this has inevitably affected their ability to take part in the programme.

"Their attendance rates in the first five-year cycle were in the low 60s. The evidence shows clearly that you need 80% or more. So that is not a model that can be replicated nationally."

The NCSS promises women that they will not have to wait more than four weeks for the results of their test.

"That means a fundamental change in the relationship between the programme and the laboratory service," said Mr O'Brien. "We need to create a gold standard national cervical screening programme that nobody would ever want to bypass. It would be everybody's first choice."

BreastCheck

BreastCheck currently provided screening to women in the northeast, east, midlands and parts of the south-east of the country through two static units (the Eccles Screening Unit adjacent to the Mater Misericordiae University Hospital and the Merrion Screening Unit adjacent to St Vincent's University Hospital) and six mobile units.

In 2005, 78,945 women were invited for screening by BreastCheck and 59,443 women attended appointments.

BreastCheck is expanding the service nationally to offer screening to all eligible women throughout the southern and western regions of the country. The screening programme will be extended nationwide and the expansion is scheduled to begin by the end of autumn.

A Southern screening unit is being built in Cork, on the campus of South Infirmary Victoria Hospital and a Western screening unit will be located on the campus of University College Hospital, Galway. These units, together with seven mobile units will provide screening to the rest of the country.

Following national expansion of the breast-screening programme the upper

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age limit will be extended to women aged 69, in accordance with the European Council's recommendation.

Raising the age limit was a matter for government policy rather than programme policy, said Mr O'Brien. There was significant evidence that the greatest benefit was deliverable to the population aged 50 to 64.

"So until we satisfy the need to screen that population we can't look above. The next cohort is 65 to 70 so we are hopeful that we would be awarded the required level of resources once we have completed the national extension. In terms of the new facilities that we are putting into Cork and Galway, we have already future-proofed them to take account of that in terms of space and so on.

"It does require a significant increase in resources because it means an extra three rounds of screening which is an extra 35 per cent increase in workload for the programme. Currently there are eight rounds of screening so it is a significant increase."

Breast Imaging training centre

The expansion of BreastCheck was dependent on critical skill sets from expert staff.

"The volume of service that you can provide is directly related to the scope and the extent of the staff that you have. The programme will always be susceptible to the supply of staff, which is one of the reasons we have established the national radiographic training centre called Breast Imaging.

"It provides postgraduate conversion courses for radiologists. A number of years ago we put in place a specialist registrar programme in BreastCheck. Many of those who started out with us some years ago are now sufficiently qualified that they have taken up some of the consultant appointments in the west and in the south," said Mr O'Brien.

However, Ireland did not have enough radiographers and breast screening was highly dependent on radiography.

"Unfortunately we compete with the existing x-ray departments and inevitably do some damage to those. We recruit internationally, we recruit expats from wherever they went to try and tempt them to come back again. And we convert as many staff to mammography as we can. It's a never-ending battle to keep the unit staffed and it's always a balance to be struck with the efficiency of the unit," said Mr O'Brien.

The National Cancer Screening Service had service agreements with each individual hospital. There were clear performance criteria built into every step.

All of the public resources allocated to the complete screening process were under the control of the NCSS.

"That's what the creation of the National Cancer Screening Service board was all about – bringing very clear accountability to all the individual components.

Reduce mortality by 20%

BreastCheck has been extremely successful and the NCSS hopes to reduce mortality from breast cancer by at least 20% as it rolls out the expanded service.

"We are talking about breast cancers that would be less than 5mm, totally impalpable, being picked up. The initial assessment is straightforward dual-view mammography which is double-read by two radiologists who have a particular expertise in screening breast cancer.

"If there is any cause for suspicion, the woman will be recalled for assessment which might involve additional views mammographically or ultrasound. In a limited number of cases it may involve biopsy fine-needle aspiration to confirm the diagnosis," Mr O'Brien said.

Multidisciplinary team

Approximately 5% of all women called by BreastCheck are subsequently called for reassessment. Staff are employed directly by the BreastCheck programme. This includes radiologists, histopathologists and the surgeons who work as a combined team. They all have specific expertise related to small breast cancers and screen-detected breast cancers.

"At no point is the BreastCheck judgment dependent on a single physician. This enables BreastCheck to deliver on quality. That is the primary reason the BreastCheck programme has been so successful and performs alongside the best in the world in terms of its pickup rate and outcomes. It also takes its definition of screening right up to the end of primary treatment," said Mr O'Brien.

"In the UK the screening programme, only goes up to point of diagnosis and it doesn't provide the hospital admission and surgery which is all part of the multidisciplinary team," he added.

Guarantees to women

BreastCheck gives women seven days' notice of an appointment; within 21 days they have the results – when they may be called back for reassessment; within a couple of weeks of that they know whether or not they need surgery.

"The most important thing at that point is that the woman who knows she needs surgery will have it as rapidly as possible. So there is a three-week standard from that point to admission for surgery.

"Not every woman will want to proceed that quickly because sometimes she wants to spend more time considering her options. But our system is organised that in most cases we can provide this.

"If we couldn't promise these things it would inevitably suppress attendance rates. Attendance rates are critical. While we are delivering benefits to individuals our fundamental purpose is to deliver benefits to the population as a whole."

Uptake rates

Mr O'Brien said population screening programmes were a bit like a product: "We have to have 75% market share and of that we have to have 90% repeat business. We must have a caring, sensitive, professional but ultimately a fairly commercial approach to a free service. But we have to be very conscious of our performance and satisfy the means and expectations of our clients or our customers. That is one of the fundamentals of the way we organise and the way we market," he said.

Medical gatekeepers' central role

"We know that there is a percentage of the population resistant. BreastCheck is up around 75 per cent, but the other 25 per cent don't come for a variety of reasons. There are certain geographical issues, certain social status issues, educational attainment issues, and of course fundamentally there are a fear issues. People are afraid of what they might find out.

"But those who are gatekeepers to health services such as general practitioners and practice nurses in particular have a documented ability to influence people's perceptions of screening programmes. And a well-placed word here, or an appropriate question there, can make the difference between someone accepting a breast check or not.

"The challenge for us is to make sure that those gatekeepers have sufficient knowledge of and confidence in the screening programme so that they will be prepared to do that," said Mr O'Brien.

BreastCheck attendance was not evenly distributed and there were pockets of particularly high attendance and pockets of lower attendance. It was not widely surprising to anyone that those pockets of poor attendance are related to social disadvantage.

"What always surprises me is that among the 25 per cent who don't attend is a small proportion who choose to go and pay privately. There is absolutely no need. We have the finest breast clinicians in the world. They are as good as anybody else in the world. It's one of the few health services where you can say that you couldn't buy it better privately if you tried," he said.