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Do NICE's recommendations for disinvestment add up?

Over the past 10 years NICE has identified over 800 clinical interventions for potential disinvestment. But **Sarah Garner** and **Peter Littlejohns** report that although disinvestment will increase efficiency and quality, the opportunity for cash saving is unlikely to meet the necessary targets

The current financial climate requires all healthcare systems to find ways of controlling costs without cutting quality of care. One tool in the armamentarium is disinvestment: "The processes of (partially or completely) withdrawing health resources from existing healthcare practices, procedures, technologies, or pharmaceuticals that are deemed to deliver little or no health gain for their cost, and thus do not represent efficient health resource allocation."[1]

Since 1999 the National Institute for Health and Clinical Excellence (NICE) has been supporting the NHS by identifying "low value" activities that could be stopped—for example, because they are not clinically effective (and therefore not cost effective), have a poor risk-benefit profile, or are not supported by adequate evidence. We summarise NICE's experience with disinvestment, describe current initiatives, and highlight issues that will be relevant to everyone facing the same challenges.

NICE and disinvestment

NICE was established in 1999, primarily to ensure consistent NHS access to clinically and cost effective pharmaceuticals and medical technologies. The only mandatory aspect about NICE guidance is that local NHS bodies must fund technologies that NICE has approved within three months. NICE has recommended use either for the entire licensed population or a subgroup in over 83% of technologies it has appraised. However, NICE's remit does not include taking account of the budget impact or the affordability of its recommendations. Concerns were raised that NICE's recommendations were increasing costs and diverting resources away from other, perhaps more cost effective, local priorities.[2]

In 2002 the UK'S Health Select Committee drew attention to the need to maximise efficiency and abandon ineffective interventions.[3] In 2005, the chief medical officer, Liam Donaldson, highlighted that unnecessary tonsillectomies and hysterectomies cost the NHS £21m (€24m; $34m) a year and recommended that NICE "should be asked to issue guidance to the NHS on disinvestment, away from established interventions that are no longer appropriate or effective, or do not provide value for money."[4]

The health minister, Andy Burnham, took up this advice, and in 2006 NICE began a pilot ineffective treatments programme through the technology appraisal programme.[5-7] The pilot aimed to identify individual low value interventions which if stopped would save over £1m each.

The pilot identified many problems and it was also ascertained that in fact NICE was already producing many "do not do" recommendations through its existing guidance processes—over 200 in 2006. After a series of scoping workshops in early 2007,[6] NICE concluded that a designated technology appraisal programme was not warranted. There were few identifiable candidates for total disinvestment and so the emphasis should be placed on better targeting. Sponsors of the affected technologies, and some professional stakeholders, were concerned that once an intervention was named as a candidate for disinvestment, views about its use would be prejudiced, regardless of the final recommendation. Finally, the lack of national usage data made it virtually impossible to guarantee the £1m savings because use of alternative interventions would inevitably be associated with costs. A resource intensive modelling exercise would be needed to estimate cost effectiveness, and in most cases a lack of data necessitated multiple assumptions in these models.

The pilot identified clinical guidelines as the best way to identify candidates for disinvestment. The methods used in developing the guidelines ensure that the whole clinical pathway is considered and allow consensus methods to be used when evidence is insufficient. Two short clinical guidelines resulted from the pilot recommending surgical management in only a subgroup of children with otitis media with effusion[8] and delayed prescribing of antibiotics for self limiting respiratory tract infections in adults and children in primary care.[9]

NICE continued to identify disinvestment opportunities through its existing programmes.[10] It published monthly "recommendation reminders," reiterating existing guidance against use of interventions with an accompanying costing template.[11] It also commissioned an annual report from the Cochrane Collaboration to identify all the reviews that had concluded an intervention was not recommended or should be used only in research. The topics were fed into NICE's topic selection system, and the

The "do not do" recommendations have been compiled into a database that is searchable by clinical specialty, and another page highlights guidance that, if fully implemented, would save the NHS money

weighting in the selection criteria was increased for topics that "relate to one or more interventions from which the NHS could disinvest without detriment to cost-effective patient care."[12] Despite this activity and the lack of specific disinvestment targets, pressure on NICE continued.[13 14]

The current financial pressure on the NHS makes cost savings even more essential. The Department of Health launched its Quality, Productivity and Prevention (QIPP) programme with the expectation that every aspect of the delivery of healthcare would be reviewed to identify savings while maintaining quality. NHS Evidence was designated as the national portal for highlighting national and local quality and productivity projects that had shown healthcare quality improvements that also saved money (www.library.nhs.uk/qipp/). NICE reviewed existing products and held an NHS engagement workshop to identify further opportunities to support the NHS.[15] It emerged that many attendees were unaware of NICE's "do not do" guidance or the recommendation reminders.

Promoting disinvestment

To help improve accessibility to its information on disinvestment, NICE has introduced a range of products that can be accessed on its website.[16] The "do not do" recommendations have been compiled into a database that is searchable by clinical specialty, and another page highlights guidance that, if fully implemented, would save the NHS money. Reducing inappropriate referrals is another method of increasing efficiency, so a second searchable database was created that pulls together all of NICE's recommendations on referring to secondary care.

Of the 424 potential disinvestment topics identified from Cochrane reviews and internal selection processes, many could not be considered priorities for NICE national guidance—for example, because they did not fall within NICE's remit (vaccinations) or estimates of usage suggested they did not warrant the expense of producing a NICE guideline or technology appraisal given other competing priorities. Other topics had a very narrow focus, were for an off-label use, or for unlicensed drugs. Nevertheless, taken together disinvestment in these interventions could contribute to efforts to save money and improve the quality of healthcare. NICE already had guidance on about a fifth of the 424 suggestions—for example, removal of wisdom teeth.

Working with the UK Cochrane Centre, NICE has developed summaries of newly published Cochrane reviews that conclude that interventions should not be used or could not be recommended (box). These are published on the NHS Evidence website to encourage local exploration and implementation.

Successful disinvestment

There is general agreement that stretched health services budgets should not be used to fund low value services. However international experience has shown that identifying and removing those services can be problematic and controversial.[17-19] For example, NICE's recommendation that dental patients should not receive antibiotic prophylaxis against infective endocarditis continues to generate debate.[20] Multisector support, including political and professional, is therefore necessary.

NICE's experience is that there are few obvious candidates for total disinvestment; antibiotics and diagnostics predominate. Many suggestions for total disinvestment are based on a "social judgment" about whether it is appropriate for the NHS to fund the intervention rather than evidence of poor clinical or cost effectiveness—for example, cosmetic surgery or orthodontics. Many entries in the "do not do" database relate to inappropriate use of technologies—for example, avoiding phosphodiesterase type 5 (PDE5) inhibitors in patients treated with nitrates or nicorandil because this can lead to dangerously low blood pressure. Others relate to "experimental" use of technologies outside their indications and evidence base—for example, monoamine oxidase inhibitors, glucocorticoids, mineralocorticoids, and dexamphetamine for chronic fatigue syndrome/myalgic encephalomyelitis.

Opponents of a total disinvestment approach highlight the methodological flaws of using average estimates of effect drawn from populations; they argue that an intervention may be beneficial for an individual patient and should be an option, even if a last resort. An alternative strategy is optimal targeting: identifying subgroups in which an intervention is most clinically and cost effective. For example grommets, widely cited as a disinvestment candidate,[1] were evaluated as part of the 2006 pilot. NICE guidance ultimately identified a subgroup of patients in whom they may be a viable option.[9]

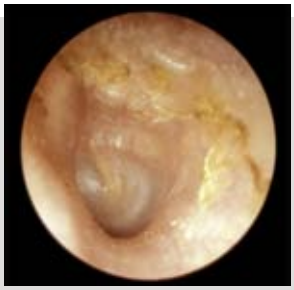
Disinvestment is part of a broader agenda to improve efficiency and quality focusing on public health and prevention and ensuring that patients receive the right care at the right time in the right way. Although this approach releases resources in the long term, it may entail investment in the short term. It is very important to make the distinction between improving the efficiency of care and saving money. Disinvestment may also necessitate increased use of an alternative or re-engineering of the clinical pathway. Such decisions should be supported by rigorous evaluations (including modelling) of the costs and consequences of different courses of action.

NICE's experience is that its advisory bodies tend to require more information and less uncertainty before they say no, particularly if decisions

Cochrane product and quality summary on antihistamines for otitis media

Implications for practice section of Cochrane review stated:

- "Because we found no benefit for any of the studied interventions for any of the outcomes measured and we found harm from the side effects of the interventions, we recommend that practitioners not use antihistamines, decongestants or antihistamine/decongestant combinations to treat otitis media with effusion in children."



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NICE summary of review conclusions

- The use of antihistamines, decongestants, or a combination of both in otitis media with effusion (OME) was not found to be of benefit for any short or long term outcomes including resolution of the fluid, hearing problems, or the necessity of additional referral to specialists. Further, using these medications causes side effects, such as gastrointestinal upset, irritability, drowsiness or dizziness in approximately 10% of patients. Therefore, antihistamines, decongestants or antihistamine and decongestant combinations are not recommended treatments for OME.

NICE comment

- Not using antihistamines, decongestants or a combination of both in otitis media with effusion is likely to improve the quality of patient care by reducing side effects and will result in productivity savings by avoiding unnecessary treatment.

are likely to be controversial. This evidence is often not available for older treatments that were introduced before the current standards of evidence based medicine. Generally there is an absence of evidence, particularly for subgroups, rather than evidence of no effect or of harm. Methods such as consensus techniques, integrating the evidence from systematic reviews with social values and preferences, and prospective data collection may be required to reach a disinvestment decision. A transparent stakeholder engagement and consultation process is crucial. Ideally, in the absence of evidence, the necessary research would be undertaken.

Currently the biggest challenge to the NHS Quality and Productivity agenda is a lack of detailed NHS data on usage. Although data are available on drug use in primary care, they are not indication specific and there is no equivalent freely available dataset for secondary care. In many cases, activity datasets such as Hospital Episode Statistics lack the necessary precision. Customised data collection for each disinvestment candidate would be prohibitively expensive with current resources and could exceed national spend on the actual disinvestment candidate. Lack of data also makes it difficult to track implementation, and there is no mandate for the NHS to implement NICE's "do not do" guidance.

Without data, it is also difficult to identify the subgroups necessary to fully understand variation in care and therefore determine realistic potential savings. Claims of NHS wastage cannot currently be verified or refuted; anecdotal evidence from NHS clinicians indicated that in many cases the candidate interventions were already not being used in the NHS. However, current evidence suggests that disinvestment is unlikely to achieve the huge savings required to meet tightened NHS budgets.

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FROM BMJ BLOGS **Fiona Pathiraja**

Putting a price on safety

It's the first week of August and in the NHS that can only mean one thing. Changeover has arrived and thousands of newly qualified doctors are let loose on the wards.

For decades, patients and doctors alike have joked that it is best to avoid a hospital stay in August. Lately, this myth has been gathering evidence, with suggestions of increased mortality around the changeover period.[1] While the evidence is by no means conclusive, the trend shouldn't be ignored.

In an era of targets, safety, and patient centred care, it is strange that the NHS has failed to tackle the changeover issue. The solution seems simple enough. New doctors need an efficient corporate trust induction that welcomes them to both the trust and the NHS.[2] Induction needs to be delivered alongside high quality ward based shadowing that comprehensively covers vital first day competencies.

Some improvements in safety, quality, and confidence of new doctors have been shown with paid shadowing and induction periods.[3] At present, this doesn't happen uniformly across the country. A significant proportion of foundation year 1 doctors are starting jobs in unfamiliar hospitals, without a handover of patients and with no understanding of the ward.

As with most things, the issue can be distilled down to money. Paying 7000 new doctors for a week of shadowing and induction before starting their jobs is a hard sell in difficult times. But with more evidence trickling in to support a national shadowing period, I don't think we can put a price on safety.

In the words of a newly qualified friend who started this week: "I'm running around like a headless chicken, trying in vain to be resourceful, annoying the nurses by asking them everything and praying that no one gets really sick without the registrar being around." Not really the best advert for safety, is it?

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