Target diagnosis rates are misleading and unethical

After the practice level targets for dementia come targets for six other conditions. But the data they are based on are flawed, and this approach incentivises potentially harmful overdiagnosis, says **Martin Brunet**

Recently, I "undiagnosed" a patient's diabetes. It wasn't easy: we are so unused to removing a patient's diagnosis that we don't even have a proper word for it, and to completely expunge a diagnostic label from the medical notes seems to require the computing equivalent of a can of engine grease.

My patient, however, had changed his lifestyle such that he no longer fulfilled the diagnostic criteria for diabetes. Deleting the diagnosis was the right thing to do and would reduce his health anxiety, along with his insurance premiums and the need for check-ups—so why should this action damage my practice's profile?

The reason is that general practices are now subject to target rates for diagnoses, a new phenomenon that is central to NHS England's dementia policy, and each clinical commissioning group and general practice in England was set a target at the end of 2013. In raising concerns about this policy last April in *The BMJ*[1] I said that, if we failed to challenge the ethical basis of this approach, we risked replicating this strategy in other clinical areas. This has now happened.

Diagnosis rates

NHS England recently updated its General Practice Outcome Standards[2] and the Primary Care Web Tool,[3] an interactive website detailing practice level data on 29 separate indicators including the diagnosis rates for seven clinical areas: diabetes, atrial fibrillation, coronary heart disease, asthma, chronic obstructive pulmonary disease, dementia, and depression. Every practice in England has been given a set diagnosis rate for each condition, estimated from practice data and the expected prevalence. Practices have been ranked in order, and those in the lowest fifth will flag a "level 1 trigger," while those in the lowest 5% will flag a "level 2 trigger." Such triggers will be "an indication of areas that may require improvement."

The intention is to exert pressure on GPs to increase diagnosis rates, but we should question the principles behind such a policy. Firstly, are the data robust enough to estimate the ideal practice level diagnosis rates accurately? Secondly, while such a strategy may be appealing at a population level, what are the ethical implications for individual patients?

The scientific basis for practice level diagnosis rates is problematic. Error prone national estimates of prevalence are used, and these

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Targets in healthcare always threaten to undermine trust in the doctor-patient relationship

are usually presented as indisputable fact. For instance, the estimate of national dementia prevalence derives from the Delphi consensus report on dementia in the United Kingdom; the 2014 version of this report gives the prevalence in over 65s as 7.1%, with no estimate of error.[4] The data on diabetes are exceptional because they do come with error ranges: the prevalence of diabetes in my region in 2014 is 6.9%, with the true figure lying at 5-10%.[5] That this error range is nearly as great as the estimate should cause concern: my practice was given a diagnosis rate of 79%, but the real prevalence of diabetes may be anywhere from 55% to 110%.

Moreover, applying national prevalence data to an individual practice introduces errors of scale. Much of the variation among practices will result from true differences in prevalence because of local demographics such as rurality, ethnicity, and deprivation. We can try to account for such factors, but they will always be imperfect, and practices may be under pressure to "improve" diagnosis rates that are actually far better than the data suggest.

Another concern about target rates for diagnosis is their ethical implications for individual patient care. For instance, in attempts to improve their data, practices may inadvertently introduce screening by the back door, even though the UK National Screening Committee does not recommend screening in any of the clinical areas in question. For atrial fibrillation, for example, the committee concludes that "screening is not recommended as it is not clear that those identified as at risk through screening would benefit from early diagnosis."[6] Such unofficial, ad hoc screening could do more harm than good through overdiagnosis, misdiagnosis, and the diversion of resources away from people with symptoms.

Targets in healthcare always threaten to undermine trust in the doctor-patient relationship. Mechanisms such as exception reporting in the Quality and Outcomes Framework mitigate this risk, because they enable the doctor to exempt individual patients from a health target on the grounds of patient choice. But the diagnostic process is unique, in that exemption from a diagnostic label is not possible; it is a product of the doctor's judgment and therefore extremely difficult for the patient to challenge.

Trust and competing interests

As a result, patients need to trust that their doctor will act solely in their best interests, unencumbered by competing interests. It was the recognition of this fundamental, ethical principle that led to a public outcry at the news that GPs would receive a direct payment of £55 for each case of dementia they diagnosed.[7] The ethical principles are no different if the pressure to diagnose is out of concern for a practice's diagnosis rates rather than for direct financial gain.

NHS England needs to hear a clear message from doctors and patients that setting targets for diagnosis is problematic, unscientific, and unethical. Instead, it needs to trust doctors and their patients to know when to seek a diagnosis.

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Competing interests: I have received income from publishers including *Pulse*, *Prescriber*, and the *Guardian*, for writing and speaking. A full declaration is available at www.whopaysthisdoctor.org.
Not commissioned; not externally peer reviewed.
References are in the version on thebmj.com.
Cite this as: *BMJ* 2014;349:g7235

TOO MUCH MEDICINE

thebmj.com/too much medicine

The *BMJ*'s Too Much Medicine campaign aims to highlight the threat to human health posed by overdiagnosis and the waste of resources on unnecessary care.

NO HOLDS BARRED Margaret McCartney

Does the GMC deserve its current powers?

The General Medical Council recently published its consultation on "how we deal with concerns about doctors."[1] It wants "serious" sanctions on doctors who have "failed to raise concerns where there is a reason to believe a colleague's fitness to practise is impaired" or "where a patient is not receiving basic care." It wants to force doctors to apologise for mistakes and aims to apply sanctions for previous, rectified errors, to "maintain public confidence" in the profession. But it sounds more like a plea for confidence from the public—or from politicians.

Any doctor can be clever, kind, dedicated and still screw up, the GMC admits.[2] What should matter is how we react. Humiliation and punishment do not encourage the open discussion of individual failures that is necessary for systematic safety improvements.

The GMC also wants more control of doctors' personal lives: it already said that they should not be anonymous on social media.[2] This recommendation is absurd (do we really want to give the GMC the right to the registration number of every doctor who wants to make any comment on health?), as is its wish for more power to sanction any behaviour that "may undermine public confidence in doctors." But who decides what "public confidence" is? Why shouldn't we be allowed to spend our off-duty weekends drinking, swearing, and dancing on tables?

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Is the GMC worthy of its current powers? It has instigated a non-evidence based screening test for doctors (revalidation) while acting too slowly on concerns. The whistleblower Peter Wilmshurst reported several cases of medical misconduct but has alleged repeated delays in investigations. Is it acceptable that investigations have taken years?[3]

A quick Google search confirms dozens of GMC registered doctors claiming non-evidenced and expensive interventions, such as vitamin infusions for hangovers, milk thistle for cancer, and tests for "adrenal stress." Sick doctors have reported being traumatised by GMC investigations,[4] and we await its report into suggestions that this has led to suicide.

A few doctors truly are bad; but, if you listen, people will tell you who they are. Of similar concern is where good doctors are put under bad pressure. Where are the "serious" sanctions for managers who don't hire enough staff or for politicians who create constantly distracting boxes to tick?

Underfunding of mental health and cuts to social care have increased the primary care workload. GPs cannot safely see 40 or 50 patients a day and not slip up. If the GMC can't recognise this, we need a regulator that can.

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Competing interests and references are in the version on thebmj.com.

Cite this as: *BMJ* 2014;349:g5959

BMJ BLOG OF THE WEEK Tom Jefferson and Peter Doshi

Menus needed at the European Medicine Agency restaurant

Left: Tom Jefferson, reviewer, Cochrane Acute Respiratory Infections Group
Right: Peter Doshi, assistant professor, Department of Pharmaceutical Health Services Research, University of Maryland School of Pharmacy, and associate editor at *The BMJ*

It's hard to imagine a restaurant without a menu, for how would we know what to order without one? But when it comes to selecting documents on the safety and effectiveness of drugs, there has been no menu.

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On 24 November 2014, the European Medicines Agency (EMA) released a new "Guide on access to unpublished documents." The guide follows in the steps of several other policy documents, charting the revolution from a closed shop to what has become the most liberal experiment in regulatory data sharing on the planet.

The six page guide is written clearly, as you would expect from a document for "anyone" interested, and tells you how to apply for documents held by the EMA.

Readers of the guide are warned that the release of large and complex documents may take place in batches over a long time. This certainly has been our experience and presents a serious problem for independent researchers who work on deadlines. We applied for clinical study reports from trials of a global public health intervention, and we've yet to see more than 10% of the text six months after the ball got rolling.

Gone, it seems, are the good old days of data requests. On 10 January 2011, we requested around 20 clinical study reports on Tamiflu. By the end of May, the EMA had sent us 25 000 pages of unredacted text. One presumes that the EMA's workload has exploded since those early days. But is this the case? We await increased transparency on the to-ing and fro-ing with the marketing authorisation holders, to understand more precisely what happens as one waits. Where are the delays occurring? How can the system become more efficient?

As we await answers to these questions, we think it's time to address an equally serious problem: the lack of a menu. For, while we applaud the EMA's efforts to provide a guide that makes requesting documents easier, we are concerned that the guide does not tell us what's on the menu at the EMA restaurant. For hungry people this is a bit of a problem, but even more so for the restaurateur.

If I am very hungry and a little fussy, I'll say, "Bring me anything that can fill my stomach!" But if I don't like what I get, I'll say, "Not this, bring me something I can eat . . . " and this sort of thing will go on until by trial and error my dinner will be to my liking. If restaurants were run like this they'd go bust, as the waiters and chef would spend all their time trying to guess what I want.

Even worse is the EMA's contention that you can just apply with the name of a compound, and if you have no further clue but are generally interested in the topic, the EMA will advise you on which documents—according to the EMA—are the right ones for you.

So let's have a list of holdings by marketing authorisation application, with the dates and types of documents held included. And while you are at it, please explain what's in each document in plain language so that "everyone" can order the right dish.

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