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TAKING STOCK

Rammya Mathew: The true cost of unnecessary investigations

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In UK general practice we're very fortunate to have easy access to diagnostic investigations. I often think back to the time I spent on a medical elective in rural Bolivia and recall how challenging it was to practise medicine confidently without the reassurance of corroborating blood tests and other investigations, which we mostly take for granted in the UK.

But nowadays I also lament how many investigations we're doing as a matter of routine or simply because guidelines say we should.[1] I question how many of these investigations result in any benefit to the patient, and I worry about the adverse impact of many of these routine tests on the overall quality of care we provide at a population level. Many of the tests we've become accustomed to carrying out are generating more work and eroding much needed capacity in primary care. They eat into our appointments and often necessitate more tests, more explanation, and ongoing follow-up, without any change in outcome for our patients.[2]

For instance, the vast majority of patients with hypertension will have an annual blood test to monitor their renal function. Lo and behold, some of the samples haemolyse en route, or there's a falsely elevated potassium result (I deal with a handful of these every week). The blood test then needs repeating at least once, possibly twice.

Then there are the patients we prescribe statins, who have their lipids checked annually, even though many aren't even taking their statin or won't have their medication up-titrated regardless of what their blood tests show. And what about the swathes of patients with mildly abnormal liver function tests who usually go on to be labelled as having non-alcoholic fatty liver disease and then need annual follow-up, just in case they're in the small minority of patients who go on to develop liver fibrosis?

On top of this are all of the incidental abnormal findings that need actioning, such as the mildly elevated thyroid stimulating hormone that you need to discuss with the patient and then continue to monitor, even if you don't initiate any treatment. Or the borderline haemoglobin result, which is probably anaemia of chronic disease but which, at the very least, requires a thorough review of the notes before concluding so.

I'm now asking myself, am I better off spending my morning talking to patients about their cholesterol still being high or their thyroid stimulating hormone being just outside the normal range? Or should we be more judicious with our use of routine tests, so that we can free up some of this time to provide better access to general practice, give patients with mental health problems the support they need, and provide more holistic care for patients with multimorbidity?

Many of the routine testing intervals seem to have been decided arbitrarily, or they're supported by guidelines that consider outcomes only for a particular patient group[3]—but in primary care we're tasked with balancing the needs of our entire population. At a time when we're so short of capacity in general practice we need to move away from low value care, and this feels like a good place to start.

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1 Watson J, Hamilton F, Bailey S, Mounce L, Hamilton W. Clinical implications of increased testing in primary care. *BMJ* 2019;364:l175. doi: 10.1136/bmj.l175 pmid: 30647088
2 O'Sullivan JW, Stevens S, Hobbs FDR, etal. Temporal trends in use of tests in UK primary care, 2000-15: retrospective analysis of 250 million tests. *BMJ* 2018;363:k4666. doi: 10.1136/bmj.k4666 pmid: 30487169
3 Elwenspoek MMC, Patel R, Watson JC, Whiting P. Are guidelines for monitoring chronic disease in primary care evidence based? *BMJ* 2019;365:l2319. doi: 10.1136/bmj.l2319 pmid: 31196976