

get to help us identify who's more at risk than the next person.

QOF encouraged us to identify chronic kidney disease (CKD), and now overburdened by its commonness, we are at risk of throwing away all we have achieved. Few diagnoses are predictably associated with such a dramatic increase in cardiovascular risk and none are so easily identified by a cheap and easily available blood test.^{2,3} The clustering of vascular pathologies with diabetes and hypertension makes this burden of disease the greatest challenge for the next generation of patients and doctors.

We investigated the reassurance given by NICE, that the previous decade's CKD QOF initiative had improved the identification and management of CKD. In a practice population of 10 264, 9% of adults aged ≥18 years had a diagnosis of CKD on repeated testing. Despite this remarkable prevalence (usual estimates 3–6%), a total of 75% of these patients with CKD were unaware of the diagnosis, and in more than 25% both GP and patients were unaware of the condition. The results demonstrated that this lack of awareness was not limited to those with mild renal compromise but applied to one-third of patients with CKD stage 4. Our short intervention, either by phone or letter, significantly improved attainment of NICE (health indicator and education) criteria but also identified the continued confusion between CKD and lower urinary tract symptoms.

It's time to remember why we estimated renal function in the first place. In a world of uncertainty, this is information for free. When associated with hypertension, diabetes, proteinuria, and vascular disease — pause — look again and feel confident that CKD means something. The lower the number the higher the risk.^{2,3}

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REFERENCES

1. Jones R. After Achilles. *Br J Gen Pract* 2016; DOI: doi: 10.3399/bjgp16X683869. <http://bjgp.org/content/66/644/115>.

2. Go AS, Chertow GM, Fan D, *et al*. Chronic kidney disease and the risks of death, cardiovascular events, and hospitalization. *N Engl J Med* 2004; **351**(13): 1296–1305.

3. Quinn MP, Cardwell CR, Kee F, *et al*. The finding of reduced estimated glomerular filtration rate is associated with increased mortality in a large UK population. *Nephrol Dial Transplant* 2011; **26**(3): 875–880. DOI: 10.1093/ndt/gfq505.

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Interpretation of electrocardiograms in primary care

The recently published article by Begg and colleagues, 'Electrocardiogram interpretation and arrhythmia management: a primary and secondary care survey',¹ found that within primary care there was substantial error in the interpretation of electrocardiograms (ECGs) by healthcare professionals (HCPs), predominately comprising GPs, than secondary care cardiologists. Moreover, one-third of HCPs felt uncomfortable with interpreting ECGs. Begg and colleagues discuss the implications of unsafe ECG analysis and the wider impact on clinical practice. One proposed solution to this may be analysis of ECGs remotely by secondary care specialists.¹

Another recent survey determined the views of HCPs in primary care about screening for atrial fibrillation (AF).² There were similar findings between both surveys such as access to and interpretation of ECGs within practices. Taggar and colleagues also reported enthusiasm by GPs and nurses to up-skill in ECG interpretation.² These findings suggest that alternative models to improve accuracy of ECG interpretation warrant consideration, such as the development of validated, evidence-based ECG training programmes for primary care HCPs. The model suggested by Begg and colleagues could still be delivered within primary care using the hub and spoke/confederated working, with hub practices having the role of up-skilled ECG interpretation.

To minimise the increased burden on existing resources within primary or secondary care there is the potential to triage ECGs, referring only ECGs that are identified as abnormal. A systematic review compared the accuracy of different methods for interpreting 12-lead ECGs for AF diagnosis.³ Compared with ECGs interpreted

by trained cardiac specialists, automated software analysis had greater specificity for AF diagnosis than other HCPs.³ Automated software therefore has the potential to be used as a triage tool to correctly identify normal ECGs that do not require further analysis; ECGs identified as abnormal would warrant further interpretation by a trained professional.

There is growing evidence suggesting that skills of primary care HCPs for interpreting 12-lead ECGs needs improving; there are a number of approaches to achieve this that warrant further investigation and evaluation.

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REFERENCES

1. Begg G, Willan K, Tyndall K, *et al*. Electrocardiogram interpretation and arrhythmia management: a primary and secondary care survey. *Br J Gen Pract* 2016; DOI: 10.3399/bjgp16X684781. <http://bjgp.org/content/66/646/e291>.
2. Taggar JS, Coleman T, Lewis S, Jones M. Screening for atrial fibrillation — a cross-sectional survey of healthcare professionals in primary care. *PLoS One* 2016; **11**(4): e0152086. DOI: 10.1371/journal.pone.0152086.
3. Taggar JS, Coleman T, Lewis S, *et al*. Accuracy of methods for diagnosing atrial fibrillation using 12-lead ECG: a systematic review and meta-analysis. *Int J Cardiol* 2015; **184**: 175–183. DOI: 10.1016/j.ijcard.2015.02.014.

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Correction

In June 2016 Research by Prins A, Hemke F, Pols J, Moll van Charante EP. Diagnosing dementia in Dutch general practice: a qualitative study of GPs' practices and views. *Br J Gen Pract* 2016; DOI: 10.3399/bjgp16X685237, the authors' affiliations were shown incorrectly, and should have been: A Prins, MD, GP, Department of General Practice, Academic Medical Center, University of Amsterdam; F Hemke, MD, GP trainee, Department of General Practice, Academic Medical Center, University of Amsterdam; EP Moll van Charante, MD, PhD, senior researcher, Department of General Practice, Academic Medical Center, University of Amsterdam, Amsterdam, the Netherlands. J Pols, PhD, Socrates professor, Department of Anthropology, University of Amsterdam and associate professor, Section of Medical Ethics, Department of General Practice, Academic Medical Centre, University of Amsterdam, Amsterdam, The Netherlands. The online version has been corrected. We apologise for this error. DOI: 10.3399/bjgp16X686305