

Understanding the prevalence of long-term conditions

Mike Pringle MD FRCP
Emeritus Professor
of General Practice,
University of Nottingham,
United Kingdom

Everybody from the individual general practitioner to the Minister for Health has an interest in knowing the prevalence of major medical conditions. A practice cannot understand how well it detects disease without looking at both prevalence and incidence data; nor audit its care without knowing whose records to examine. Commissioners of services need to understand the need for those services. Planners and policy makers need to be able to monitor health needs and population health.

Prevalence is, therefore, everybody's business. Although some tolerance in the precision of prevalence estimations is acceptable, they need to be sufficiently robust to allow for effective decision making.

medical conditions that will influence their operative risks, post-operative care and pace of recovery. By understanding the rates of these we will be able to model the types of care to commission a decade ahead.

If the recording of major diagnoses and their associated risks in the general practice record could be complete, accurate and electronic, then the problem would be solved. However, 2008 unpublished data in PRIMIS+ (a unit of the University of Nottingham funded by the NHS to promote data quality in general practice) shows that, for the 3181 general practices uploading data quality audits on multiple occasions, 90.4% of all disease-specific drugs (in 27 drug-diagnosis pairs) had an appropriate diagnosis in the records.

If we are to plan ahead, we need good historical trend data in common disease prevalence and the ability to project forward, based on expected changes in demographics and life expectancy...

Yet prevalence rates alone are not enough. If we are to plan ahead, we need good historical trend data in common disease prevalence and the ability to project forward, based on expected changes in demographics and life expectancy. We also need to understand comorbidity. Diabetes is an important condition in itself, but it is also associated with many of the important conditions of our time—obesity, ischaemic heart disease, renal failure, retinopathy, neurological problems and so on.

This level of recording is strikingly similar to that found by Thornley et al.¹ They have shown that using other data sources such as community prescriptions, hospital attendances and investigations improves the accuracy of prevalence estimates. These complex methods will remain valuable until one clinical record—inevitably that in general practice—becomes sufficiently high quality and available to be relied on alone.

References

1. Thornley S, Wright C, Marshall R, et al. Can the prevalence of diagnosed diabetes be estimated from linked national health records? The validity of a method applied in New Zealand. *J Prim Health Care*. 2011;3(4):262–268.

CORRESPONDENCE TO:
Mike Pringle
mikepringle@
btinternet.com

It is not only those comorbidities that naturally cluster that interest us. For example, people who require a hip replacement will also have major