

Contrary to the view that 'using time as a diagnostic tool' is 'sloppy and idle' and that general practice has 'floundered' as a result of such unhelpful phrases, we consider that general practice has struggled to provide a robust evidence base to confirm or refute the value of time as a diagnostic strategy [1]. One of the most important diagnostic tasks performed by the GP is discriminating between the majority of patients with minor, usually self-limiting, illness and the minority with serious disease. This was illustrated by a cohort of 2690 adults presenting with lower respiratory tract infections of whom 92% had recovered within 3 weeks and only 1.1% were hospitalized, none of whom died [2].

In 2013 we proposed the hypothesis that the opportunity afforded by reviewing a patient over time substantially increases the total gain in certainty when making a diagnosis in low-prevalence settings (the 'time-efficiency principle') such as general practice [3]. We argued that this approach safely and efficiently reduces the number of patients who need to be investigated in order to make a correct diagnosis for a single person. We predicted that the time efficiency principle operates most effectively at low prevalence, typically up to 10%. It has since been noted as a widely used strategy in primary care. The Lancet oncology commission on primary care noted that adequate diagnosis requires time for symptoms to evolve – emphasising that whilst symptoms are common, cancer is rare [4]. The time-efficiency principle has also been noted as an effective strategy for sifting common symptoms such as headache [5].

What is required now is for the time-efficiency principle to be robustly evaluated, preferably by focusing on prospective studies. It is vital that we advocate the optimum number of consultations before referral rather than a simple view that quicker is always better [6]. This may help us to understand why GPs continue to use these strategies and thus lessen over-diagnosis, despite Government-led calls for more referrals and investigations. GPs need academic and College support to tolerate uncertainty appropriately, aided by their discerning and continuing use of time effectively and thus efficiently.

1 Jones R. After Achilles. *Br J Gen Pract* 2016;**66**:115. doi:10.3399/bjgp16X683869

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- in lower respiratory tract infections: a 13 European country study. *Fam Pract* 2012;**29**:131–8. doi:10.1093/fampra/cmz081
- 3 Irving G, Holden J. The time-efficiency principle: Time as the key diagnostic strategy in primary care. *Fam Pract* 2013;**30**:386–9.
 - 4 Rubin G, Berendsen A, Crawford SM, *et al.* The expanding role of primary care in cancer control. *Lancet Oncol* 2015;**16**:1231–72. doi:10.1016/S1470-2045(15)00205-3
 - 5 Bösner S, Hartel S, Diederich J, *et al.* Diagnosing headache in primary care: a qualitative study of GPs' approaches. *Br J Gen Pract* 2014;**64**:e532–7. doi:10.3399/bjgp14X681325
 - 6 Irving G, Holden J. Measures of promptness of cancer diagnosis in primary care. *Br J Cancer* 2013;**108**:2186. doi:10.1038/bjc.2013.193