and a resulting real change to clinicians' use of electronic health records.

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Clinical scores in primary care

A clinical prediction rule represents a distillation of measurable features, usually by regression modelling. It helps standardise the approach to diagnosis and, in theory, should reduce variation in diagnosis and inappropriate prescribing.

Our review compared Centor's score with McIsaac's score.[1] These are the two most recommended prediction rules used for diagnosing GABHS-related pharyngitis in different national guidance.[2,3] Although other scores such as Walsh's score exist, they tend not to feature in international guidance.[2,3]

FeverPAIN does appear in UK guidance and was developed in the UK by one of the co-authors of the editorial.[4] However, the derivation study is still the only study that has evaluated the rule and so meta-analysis was not possible.

Our review demonstrates for both scores that there is substantial variation in performance across different settings.[1] Furthermore, the two studies that reported the most favourable receiver operating characteristic (ROC) curves for McIsaac's score have McIsaac as first author. Both of these points reinforce the need for multiple independent validation studies of FeverPAIN before we conclude on its accuracy.

Clinical features, in whichever combination or weighting, are unlikely to be sufficient to rule in GABHS pharyngitis. Point-of-care (POC) tests vary in shape and form, with some more disruptive to the consultation than others. But this should be weighed against the likely benefit they can bring — we don't hesitate in sending a patient to the loo to produce a urine sample if a subsequent dipstick test helps diagnose a urinary tract infection. So it may be in the future that a POC test augments one of the scores sufficiently to reduce diagnostic errors and the inappropriate prescribing of antibiotics.

Otherwise we may use clinical gestalt, which allows for less measurable, intangible features to be included in the diagnostic process. This is not without merits, but it is also more likely to vary between practitioners and be open to cognitive biases.

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Competing interests

We are the authors of the meta-analysis that compared Centor's score with McIsaac's score.

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Sarcopenia: hand grip dynamometers, the latest addition to the doctor's bag

The debate article highlights the importance of identifying sarcopenia, and the impact it has on reducing 'physical performance'.[1] It is also worth identifying that skeletal muscle is a 'metabolic organ', and that many of the associated adverse health outcomes may be potentiated by an endocrine mechanism. In order to screen for this, we propose the use of hand grip strength as a clinically relevant screening tool in general practice.

There is growing evidence that low hand grip strength is associated with an increased risk of developing diabetes.[2,3] One study from the UK Biobank demonstrated that high-risk 'South Asian' populations have on average a 5–6 kg lower grip strength than 'white European' counterparts. When the relative prevalence of diabetes was taken into account, low grip strength in the 'South Asian' population was associated with an attributable risk of 3.9 (male) and 4.2 cases (female) per 100, as opposed to 2.0 (male) and 0.6 (female) in 'white Europeans'.[4]

These studies support an interesting theory that there may be ethnicity-specific grip strength cut-offs, and one reason why there is no clear consensus on screening recommendations. Despite these drawbacks, it is clear that low hand grip strength is inversely proportional to disease-specific and all-cause mortality.[5] Specific dietary and exercise interventions to improve muscle strength may reduce this risk significantly and help in the management of long-term conditions (LTCs).

We propose that enough evidence has accumulated over the last decade to support the use of hand grip strength as a clinically relevant screening tool in primary care. It allows for objective measurement of grip strength in a number of seconds; we hope that hand grip dynamometers find their common place in general practice in the near future.

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NEWS2: supporting and enhancing clinical judgement?

My patient of two decades phoned me one Friday afternoon, saying she felt very ill. She travelled for an hour to my clinic. She has immunosuppression, multimorbidity including steroid-induced type 2 diabetes mellitus, and morbid obesity. Careful physical examination was entirely normal, including pulse, blood pressure, SpO2, temperature, and mental state. Prior to NEWS2 I didn't routinely measure all six physiological parameters.[1] Her respiratory rate was 28, NEWS2 score of 3. Doubting myself, I checked and rechecked her respiratory rate. This was the sole basis of my referring her to ED. Later that day, the CT thorax, abdomen, and pelvis revealed a large intra-abdominal abscess. She made a full recovery.

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COVID-19

The transformation that our GP practices have had to make during the COVID-19 outbreak has surpassed the entirety of changes I have seen in primary care over almost 30 years as a family doctor.

As a GP and Director of SSP Health, the largest GP federation in the North of England, I have been incredibly heartened by the positivity that our staff, and our patients, have shown towards these very necessary alterations to how community care is provided.

Along with many other GP surgeries across the nation, we moved swiftly to limit the number of face-to-face appointments our clinicians were carrying out to cut their potential exposure to coronavirus and also to keep our patients safe.

Within just a few days, almost all our appointments, be it with a GP, pharmacist, AP, ANP, practice nurse, or other clinician, were being done via the phone or through video. Many of these appointments are now carried out from home.

Some of our clinicians who previously had reservations about telephone appointments understood that the pandemic necessitated this new way to treat patients. Each has embraced and adapted to the changes with professionalism and positivity.

Despite the shift away from routine face-to-face appointments, vital services such as childhood immunisations and post-natal checks continue. We are pleased to report that we continued to be on target to achieve our usual high Quality and Outcomes Framework scores, with extremely low levels of exception reporting. For 2019–2020, 23 of our practices achieved 100%, four were above 99%, and one was on 97.5%. Our data team continues to track these quality standards and NHS targets as they will provide an invaluable measure of how telephone appointments have performed. Initial analysis — and anecdotal evidence from our GPs — shows they have been incredibly successful.

We are still in the middle of the pandemic and it is too early to consider how primary care may have permanently transformed due to COVID-19, but it seems likely that some of the changes that have been implemented could and should be here to stay.

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Child care in the primary care environment

Newson falls into his own trap of seeking 'evidence' to reinforce his own prejudices. There are many more possible explanations for his anecdotal diagnostic delays than training or skills of individual GPs. With regard to his case:[1]

- How many GPs were consulted?
- Crucially, what was the appointment system?
- Did he report as a significant event to the referrer?
- What were the lessons?

With regard to Duchenne's, I wonder if diagnostic delay has any relationship to the reduction in routine health checks, and a scarcity of health visitors.

I suspect any secondary care specialist could make what they feel is a justified case for taking their own area of work out of general practice. This is the kind of denigration of general practice that has been well recorded in medical schools.

Both Newsom and Ridd's articles[1,2] are doctor-centric, and ignore the critical issue of building personal continuity into appointments systems (though that is a challenge in an era of less than full-time professional working).

Sanjay Patel's article offers an interesting, alternative, constructive, and cooperative approach.[3]

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