

Honorary Secretary of Council

Mr Oliver Robert Longstaff

Area Coroner for the Coroner area of West Yorkshire (Eastern)

Sent by email to:

4 July 2024

Dear Mr Longstaff

Regulation 28 Report to Prevent Future Deaths - touching on the death of Alexander Lee Reid

Thank you for sharing a copy of your report touching on the tragic death of Alexander Lee Reid. I am responding on behalf of the Royal College of General Practitioners as Honorary Secretary to Council. Firstly, can I convey our sincere condolences to the family and friends of Alexander, I was deeply saddened to read of the circumstances around his death.

The Royal College of General Practitioners (RCGP) is the largest membership organisation in the United Kingdom solely for GPs. It aims to encourage and maintain the highest standards of general medical practice and to act as the 'voice' of GPs on issues concerned with education; training; research; and clinical standards. Founded in 1952, the RCGP has just over 54,000 members who are committed to improving patient care, developing their own skills and promoting general practice as a discipline.

The RCGP Special Interest Group in Health Informatics is composed of members of the RCGP who have an interest in and work in the area of Health Informatics. The Joint General Practice Information Technology Committee (JGPITC) comprises of members of the British Medical Association, and members from the Health Informatics Group at the Royal College of General Practitioners; it is recognised by paragraphs 4.31 and 4.40 of the National Health Service General Medical Services (GMS) Contract 2003/04 for General Practice surgeries.

This response on behalf of RCGP draws on and includes the expert opinion of our members in the HIG and Joint GP IT Committee.

Royal College of General Practitioners

We have considered your report and the expert opinion of the GPIT committee and offer our response focusing on the areas where the RCGP might have most significant influence to prevent further deaths.

We set out below out the responses to your matters of concern from the GPIT committee followed by actions we can take as RCGP to prevent future deaths.

Matters of concern

Issue 1 - When Alex was invited to receive his vaccination early, he did not understand why, and noone was able to tell him.

We were made aware of frustration voiced by patients, their GP surgeries and those delivering the immunisation programme that the indication for immunisation was not transparent to either party at the point of care. These concerns were discussed with NHS England. The clinical safety hazard is that, because the precise reasons for inclusion in the immunisation programme were not surfaced, neither the patients nor the staff delivering their immunisation were able to identify the incorrect invitation. Those hazard logs may provide insights into what was known about these risks. The lesson learned nationally should be that transparency promotes safety, and in particular that when a patient asks, those providing care should be able to investigate and provide a clear answer.

Issue 2 - The inquest heard expert evidence that the combined vaccination monitoring and recall specification designed to identify vulnerable people for the purposes of inviting them to receive their Covid vaccinations early had identified Alexander as vulnerable from an incorrect BMI of 68.97 recorded in his GP records on 06/02/2004. The mistake was due to the relevant clinician recording Alexander's height as 145cm and his weight as 145 kg, giving a BMI of 68.97 for an 11-year-old boy whose previously recorded BMI aged 9 had been 14.88.

We note that:

- a) GP electronic patient record system design typically allows a user to enter all 3 variables manually, but when a height and weight are present the system offers to calculate a body mass index for the user, in turn filing that calculation when the data are saved;
- b) The relevant, validated child growth charts are available at the internet page https://www.rcpch.ac.uk/sites/default/files/Boys_2-18_years_growth_chart.pdf;
- c) Using those charts as reference:
 - i. a height of 145 cm is typical for an 11 year and one month old boy (around the 65th Centile for his age)
 - ii. a weight of 145 kg is very atypical. The 99.6th Centile for him would be approximately 65 kg. This means that his atypical weight was readily computable;

- iii. the number 145 is repeated across the height and weight entries, which is readily computable and an unlikely coincidence – user error can be reasonably suspected;
- iv. the sudden significant change in weight was readily computable. All sudden apparent significant changes in weight should be of concern to users, but changes incompatible with normal rates of weight change can reasonably be treated as suspicious for data error;
- v. a recorded body mass index of 68.97 is much less likely to be entered by a clinician manually, because it is more clearly erroneous. It is a computably very atypical body mass index (especially for a child of 11);
- vi. the sudden significant change in body mass index was also readily computable and suspicious for data error; and
- vii. BMI is not a routinely calculated item for a child, as it does not offer significant clinical value in normal health, and so any system which interacts with physical health parameters for a child could be optimised for the context of height and weight recordings for paediatric populations and modified to not routinely promote the calculation or recording of a BMI.

We also observe that there was a 16-year latency between the detectably erroneous data being entered, and Alex suffering harm as a consequence. This is relevant to the potential for reducing risk, because there was ample opportunity for the data to have been identified and corrected if there were system tools to help identify such issues and either correct the false data or verify that the data were in fact correct. It also presents an opportunity for improving safety by limiting the data extraction time window to ignore very old data.

Issue 3 - The inquest heard expert evidence that to have built a system that would validate multiple data items in an individual's GP records for the purposes of ensuring that individuals were not incorrectly identified as vulnerable would not have been feasible within the constraints and context of the Covid-19 programme

The Committee worked with NHS England and other organisations during the pandemic, and we note that many of the systems were developed at a speed and pace commensurate with the overwhelming need to deliver the immunisation programme, balancing speed against safety. The Committee agrees with the expert evidence you were provided.

Issue 4 - The inquest heard expert evidence that an easier and more appropriate option would be to embed validation rules in general practice IT systems that would check such information at the time of data entry.

The Committee agrees that embedding validation rules into GP IT systems would reduce the likelihood that computably erroneous data are entered into patient records.

Issue 5 - If the obviously erroneous BMI had not been recorded or had been challenged at the point of entry by the relevant IT system, Alex would not have been classed as vulnerable, would not have

been offered a vaccine before guidance was published that the under 30's should not receive the Oxford Astra Zeneca vaccine, and would not have died when he did.

The Committee identifies that the ability to record data that are likely to be erroneous in electronic patient records is a cause of clinical safety hazards including this one. We agree that appropriate mitigations to this hazard include consideration of system design.

- a) A warning at the point of entry would be one example of a control mechanism and we agree that it would have been likely that if such a mechanism were in place, those data would not have been recorded in Alex's record.
- b) We note that in some circumstances, thresholds can be set to entirely prevent data entry, such as where numerical variables entered are incompatible with life. In this particular case, a body mass index of 68.97 may not have been appropriate to exclude from data entry.
- c) The Committee notes an emergent problem in GP record systems, known as 'alert fatigue' which refers to the progressively increasing volume of safety issues presented to users of the GP systems. During time pressured consultations, a user must balance the need to complete a consultation and see the next patient, with tackling system alerts for *possible* safety / data quality issues which may or may not be clinically necessary to address.

Issue 6 - The consequences of the data input error in this case give rise to a concern that more might be done by way of potential data input errors at the point of entry, with consequential improvements in the reliability of such data and the safety of patients and reducing the risk of other deaths occurring in similar circumstances in the future.

We agree that point-of-entry improvements have the potential to reduce data entry input errors, with the consequential risks of death, and other non-fatal harms.

Comment from the Committee

- 1. The Committee notes that the most effective management of clinical safety relies on not only the good articulation of hazards, but the holistic appraisal of all of the underlying causes before mitigations are planned. A root cause analysis approach would surface those issues.
- 2. The absence of a root cause analysis placing this error in context means that the Committee cannot quantify the benefits of improving data input errors.

As RCGP we will ask the GPITC to discuss these matters at the next full Committee meeting, which is due to be held in July 2024.

We will ask NHS England to:

a) Consider coordinating funded clinical safety workshops to document formally the underlying causes of the hazard, identify existing controls, and define the professional requirements for how the systems should ideally behave to mitigate the risks

b) Report to the Joint GPIT Committee on how these concerns might be addressed in alterations to the existing standards and capabilities set out in the supplier contracts

c) Share your report and ours with the NHS England New Market Entrants programme which is currently working with future GP system suppliers; and

d) We will ask the GPITC to consider what existing reports are available on the quality of clinical data in the UK's primary care records and advise whether or not there is a need for a national clinical data quality improvement plan.

For our Members we will highlight through our programme of continuing professional development:

a) The importance of accurate data entry into the record, the importance for accurate systems for data entry within practices and the implications If this does not occur

b) That risks exist if inaccurate data is shared beyond the practice where there are fewer opportunities for it to be rectified

I trust that this reply is helpful and if you have any questions, please do not hesitate to contact me. Our sincere condolences are with Alexander's family.

Yours sincerely



RCGP Honorary Secretary