

## Notification of Abnormal and Critical Values: The Road Ahead

To the Editor:

The importance of critical values transmission was described 3 decades ago by George D. Lundberg.<sup>1</sup> As such, the interesting article by Singh et al<sup>2</sup> should be welcomed, because it addresses some key aspects of critical values reporting. Basically, the article describes the implementation of a mandatory automated notification of critical values to a specified ordering provider. Although the authors should be praised for their efforts to improve this critical postanalytic issue, there are some issues to be discussed.

First, the innovative value of the system is limited compared with that developed and applied in our institutions.<sup>3</sup> The main difference is that we use mobile phones rather than a “View Alert” window of the electronic medical record screen. The system developed by Singh et al<sup>2</sup> seems therefore most useful for inpatients’ critical values notification, because communication of outpatients’ results is dependent on availability and access to electronic medical records. Expectedly, the authors highlight that most safety concerns related to timely patient follow-up remain, especially in the outpatient setting where transmission of a short message by phone would indeed be more effective than a “View Alert.”

A second drawback in Singh et al’s<sup>2</sup> article is that abnormal test results that would be potentially life threatening are excluded from the automated notification but are forwarded as a verbal notification. On the contrary, the system developed in our institution is effective in notifying abnormal, “high priority,” and critical results on physicians’ mo-

bile phones. Finally, information technology is also helpful to reduce the unexpectedly high rate (17%) of abnormal test result alerts that were deemed redundant by the authors, by using, for example, an automatic system for verification, validation, and delivery of laboratory test results such as that developed in our institutions.<sup>4</sup>

The issue of critical values is receiving an increasing focus in healthcare and laboratory medicine. Although Singh et al<sup>2</sup> concluded that the current system of mandatory automated notification of abnormal laboratory test results does not guarantee timely follow-up on the abnormality in the outpatient setting, it should be pointed out that alternative strategies such as that developed in our institutions and overlooked in their article might work more efficiently.<sup>4,5</sup>

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