A web-accessible computer application for teaching arterial blood gas interpretation
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Rationale: Seasoned respiratory care practitioners (RCPs) are frequently called upon to function as preceptors to junior practitioners and students in an effort to teach the latter the intricacies of arterial blood gas (ABG) interpretation.

Methods: A web-accessible computer application (“app”) has been created to essentially serve as an electronic “preceptor’s assistant”. This app, the “Acid-Base CLinIMApp™”, is accessible using any hand-held, tablet, laptop, or desktop computer, as well as any smartphone, which incorporates browser software (URL: www.clinimapp.com) It is based on the so-called tri-axial representation of acid-base equilibrium1. In response to feedback received over the past two years from various clinicians, the app has been modified in order to render it more “user-friendly”.

Results: The Acid-Base CLinIMApp has proven to be very popular with respiratory therapy (RT) students, as well as graduate RCPs and registered nurses (RNs).

Conclusions: One’s ability to ascertain the acid-base derangement, if any, which applies to any patient is an important component of the skills inventory of bedside practitioners. Consequently, it is crucial that each member of the care team be conversant with the concepts and principles of ABG interpretation. The availability of “millennial-approved” teaching tools can be uniquely effective in teaching new graduates who are already extremely fluent with computer software. The functionality of the app will be demonstrated by means of screen-capture software to enable attendees of this presentation to evaluate the potential utility of this electronic tool in their own practice.

References:

Conflicts of interest: none.
Financial support: none.