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Do the Right Thing



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Oscar Wilde once described consistency as the “last refuge of the unimaginative.”¹ Mr Wilde, however, was speaking about art and fashion and, to the best of our knowledge, never spent time managing critically ill patients. Some like-minded intensivists seem nevertheless to have taken Wilde’s pithy aphorism to heart, eschewing unimaginative “one size fits all” protocols in favor of “tailored” therapy. We hope, therefore, that our fellow intensivists give due consideration to the careful analysis by Vranas et al² published in this issue of *CHEST* that attempts to explain the authors’ previous finding that patients admitted to high-acuity ICUs enjoy better outcomes.³ Using a large ICU telemedicine database, the authors compared adherence to evidence-based processes of care between ICUs with high acuity and those with low acuity. They showed that patients admitted to ICUs with higher acuity were more likely to receive best practices for glucose management and blood transfusion.

Before continuing, we will pause to acknowledge that it is, of course, possible that higher acuity hospitals are not necessarily better but are instead unfairly helped by the models that adjust for disease severity. This same argument has been used to discount the finding that

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critically ill patients have better outcomes when managed by nonintensivists.⁴ Although residual confounding cannot be fully eliminated from the models, Vranas et al² performed their analyses for both the current study² and their previous research³ at the patient level rather than at the ICU level. This approach is an effective bulwark against the claim that their findings result from statistical treachery. Overall, this study provides another piece of the puzzle needed to understand why some institutions have better outcomes than others.

So, is it that high-acuity ICUs have better clinicians? And what does “better” entail? “Tailored” medicine enthusiasts might hypothesize that the ICUs which have the sickest patients employ superior physicians and nurses who apply their exceptional intellect, honed from years of experience, to tailor the ideal treatment for these incredibly complex patients. Although rough seas may make strong sailors, the work of Vranas et al² suggests just the opposite, that superior outcomes in higher acuity hospitals instead derive from more mundane practice. The ICUs with the highest acuity and better outcomes simply seem to adhere to evidence-based practices better than lower acuity ICUs. The inference is that this adherence, and therefore the better outcome, is a result of consistency rather than brilliance or skill.

Clinicians’ inability to adhere to universally accepted therapies is baffling.⁵ Low tidal volume ventilation, for instance, has been the standard therapy for ARDS for nearly 2 decades, yet remains incompletely implemented among these patients, including at centers that participated in the foundational study.^{6,7} Although we all give lip service to the importance of evidence-based therapies, our actions belie our assertions. Deviations from best practice, however, are rarely the product of a conscious decision but more typically result from the human brain’s limited ability to integrate and retain multiple streams of complex data.⁸ As the authors suggest,² the mechanism by which ICUs with more data streams still managed to get the details right more often therefore deserves further study.

The findings linking consistency in implementing evidence-based therapies to improved outcomes may seem obvious, but apparently this lesson needs reinforcement now more than ever. As the coronavirus

disease 2019 (COVID-19) pandemic continues, some intensivists are abandoning evidence-based therapies while embracing unproven, experimental therapies, including thrombolytics, corticosteroids, and others.^{9,10} Many unproven therapies have been touted on social media or by government leaders, and clinicians have administered them indiscriminately, only to abandon them the subsequent week when evidence of harm arises.¹¹ With generally little or no evidence to either support or exclude a favorable risk/benefit ratio for these creative therapies, their proper use is in the setting of clinical trials where efficacy can be rigorously measured and safety closely monitored. Meanwhile, many patients with COVID-19 and ARDS are not receiving low tidal volume ventilation or other proven therapies, with some physicians contending that ARDS arising from COVID-19 is not ARDS, or even making the unfounded claim that COVID-19 is high-altitude pulmonary edema.^{12,13} It is tempting to succumb to the belief that the brilliant intensivist at the high-acuity COVID-19 ICU knows some secret on how to better manage these patients, but the reality is that unimaginative consistency outperforms brilliance daily in the ICU.

The intervention most likely to save lives in the ICU will not be a novel drug or therapy but the implementation of therapies already known to work. The current study by Vranas et al² offers important hints on how to achieve such consistency. The authors studied simple interventions that can easily be protocolized and implemented at the ICU- or hospital-level, making use of computerized protocols or other strategies to offload clinicians' cognitive work and reduce unnecessary variation in care.⁸ Even if the studied best practices are just markers of beneficial behaviors, these findings suggest that cultivation of clinical environments, institutional practices, protocols, and mindsets that help busy ICU teams get the details right will also help patients.

The work by Vranas et al² should serve as a reminder to all intensivists in this most uncertain hour. Let us redouble our efforts in doing the right thing. Consistently.

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