Perspectives on Assessing UV Efficacy by Biologic Measurements

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UV devices are commonly used in healthcare facilities as an adjunct to manual cleaning and disinfection. However, practical tools are needed to monitor the efficacy of UV devices. Cultures can be used to assess microbiological efficacy but are labor intensive and results are not immediately available. Use of radiometers to measure irradiance can provide comparative data for different devices and assess delivery of UV to different sites in patient rooms, but measurement of irradiance is currently not practical for routine monitoring. Colorimetric indicators provide rough estimates of UV delivery and are promising as an easy-to-use and rapid method of assessment. However, further validation of commercial indicators is needed. For all methods of assessing UV efficacy there is a need for standardized testing protocols.