The outbreak of Ebola virus disease (EVD) in West Africa has outstripped available resources. Novel strategies are desperately needed to streamline operations. The present norm of requiring negative results on polymerase chain reaction for EVD convalescent patients to be discharged is not evidence-based and often results in asymptomatic patients competing for beds in dangerously crowded Ebola Treatment Units, posing risks to ward staff and patients and the community if infected persons are turned away. We summarize the relevant data and call for a change in discharge criteria for convalescent patients that can safely help reduce the strain on resources and direct energies where they are most needed. In the longer term, research is needed to assess the true infectivity of EVD convalescent patients to establish evidence-based criteria and guidelines for discharge.

The epidemic has continued to accelerate dramatically in West Africa. Many areas of Liberia and Sierra Leone have passed tipping points in which ETUs can no longer accommodate the case load and measures are being implemented for community-based management. Bed capacity has reached a critical level in some areas. Novel but evidence-based strategies are desperately needed to streamline operations to meet this challenge. To reduce the community “viral load” and optimize use of limited bed and laboratory capacity, we recommend that convalescent patients should be discharged if asymptomatic for 48 hours and independently mobile, with appropriate counseling regarding possible infection risk and a basic discharge kit for infection control. This approach will have the additional benefit of enabling already constrained EVD testing laboratories to focus primarily on testing of new cases, thereby increasing the rate at which EVD PCR-negative suspect cases are identified and discharged, reducing the risk of ward-based EVD transmission to these individuals and freeing up additional beds. More conservative policies requiring blood or even urine to be reverse transcription-PCR (RT-PCR) negative before discharge may be maintained in centers and laboratories where capacity remains sufficient to perform such testing without unduly impacting the flow of patients. In the longer term, research is needed to establish evidence-based criteria and guidelines for safe discharge. This research must include collection of a wide range of bodily fluids from convalescent EVD patients and the testing of individuals who have been declared PCR-negative on PCR-positive specimens.8,9

persists for months after infection has been recognized.8,9 Furthermore, PCR positivity does not necessarily indicate the presence of infectious virus, but may simply indicate residual nucleic acids being cleared. Cell culture results are very often negative on PCR-positive specimens.8,9

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samples by both RT-PCR and, importantly, cell culture to detect infectious virus.

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