

## **Operational Cost Analysis of Dental Emergencies for Deployed U.S. Army Personnel During Operation Iraqi Freedom**

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The documentation of dental emergency (DE) rates in past global conflicts has been well established; however, little is known about wartime DE costs on the battlefield. Using DEs as an example for decreased combat effectiveness, this article analyzes the cost of treating DEs in theater, both in terms of fixed and variable costs and also highlighted the difficulties that military units experience when faced with degradation of combat manpower because of DEs. The study found that Dental-Disease and Non-Battle Injury cost the U.S. Army a total of \$21.4M between July 1, 2009 and June 30, 2010, and \$21.9M between July 1, 2010 and June 30, 2011.

The results also revealed that approximately 32% of DE required follow-up treatment over the 2-year period which increased the costs associated with a DE over time. Understanding the etiology and cost of DE cases, military dental practitioners will be better equipped to provide oral health instructions and preventive measures before worldwide deployments.