



## **MD, Facilities, and Finances: Resources Deficiencies in Accredited Paramedic programs**

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**Background:** Initial paramedic education must have sufficient rigor and appropriate resources to prepare graduates to provide lifesaving prehospital care. Despite required national paramedic accreditation, there is substantial variability in paramedic pass rates that may be related to program infrastructure and clinical support. Our objective was to evaluate paramedic program resource deficiencies in the US and identify common deficiencies that may impact program success.

**Methods:** We conducted a cross-sectional mixed methods analysis of the 2018 Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP) annual report focusing on program Resource Assessment Matrices (RAM). The RAM is a 360-degree evaluation completed by program personnel, advisory committee members, and students identifying program resource deficiencies impacting educational delivery. Included in the analysis were all paramedic programs who reported graduating students in 2018. Resource deficiencies were categorized into 10 categories: faculty, medical director, support personnel, curriculum, financial resources, facilities, clinical resources, field resources, learning resources, and physician interaction. Descriptive statistics of resource deficiency categories were conducted followed by thematic analysis of deficiencies to identify commonality. Themes were generated from evaluation of individual deficiencies, paired with program reported analysis and action plans for each entry.

**Results:** Data from 626 programs were included (response rate=100%) with 156 programs reporting at least one resource deficiency (25%). A total of 406 deficiencies were identified in the 10 categories. The largest categories (n=406) were medical director (14%), facilities (13%), financial resources (13%), support personnel (11%), and physician interaction (11%). Thematic analysis demonstrated lack of medical director engagement in educational activities, poor facility management, and lack of available financial resources impacted the educational environment. Additionally, programs reported poor data collection due to program director turnover.

**Conclusion:** Resource deficiencies were frequent for programs graduating paramedic students in 2018. Common themes identified were a lack of medical director engagement, facility problems, and financial resources. Considering the pivotal role EMS physicians play in prehospital care, a consistent theme throughout the analysis were challenges with medical

director and physician interactions. Future work is needed to determine best practices for paramedic programs to ensure adequate resource availability for initial EMS education.