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# 104 Milestones Residency Assessment Tracking (MRAT): A Cross-platform Mobile Web

## App for Bedside Evaluation of Residents Using Milestones

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**Introduction/Background:** The ACGME initiated outcomes-based Milestones for resident assessment in anticipation of the NAS. These are progressive, competency-based, developmental outcome measurements. Best practices reveal optimal assessment and feedback of resident performance to be real-time and related to actual events. Thus we created an interactive web-based application that assesses real time resident performance of the EM Milestones.

**Educational Objectives:** Implement a web-based interactive application that incorporates the EM Milestones and provides instant feedback to residents. The application should satisfy the conditions of the ACGME and be web-based device accessible.

**Curricular Design:** From the bedside experience, we created Resident Experience Templates (RETs). RETs relate to clinical experiences (i.e. Trauma Patient), procedures (i.e. Wound Management) while others are non-clinical (i.e. QA). These RETs then map back to 3-7 individual Milestones. The App allows a resident to initiate a RET evaluation process and choose an evaluator who instantly receives notification of a pending evaluation.

The application is interactive and provides the ability to evaluate bedside expertise as well as success in meeting the required Milestone. Real time evaluations allow for immediate feedback. Data is stored and can be used to document resident progress over time. The technology is intuitive, easy to use and time efficient and runs on multiple platforms and operating systems.

**Impact/Effectiveness:** Post Beta-testing, both residents and faculty reported satisfaction with ease of use and real-time feedback of actual patient care experiences. Initial beta-testing revealed several system issues that were corrected.

The MRAT system provides real-time Milestones tracking and immediate, Milestones-based feedback to residents on clinical experiences. It is based on experiential templates, thus this technology can be used by all specialties that have a Milestone evaluation requirement.