

# Validation of an Emergency Medicine Fellowship Didactic Teaching Program against the ACGME Milestones

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## Background:

The Emergency Medicine Fellowship (EMF) program in Qatar goes beyond clinical competencies into the development of management, leadership, teaching and academic skills. The program curriculum is underpinned by the Accreditation Council for Graduation Medical Education (ACGME) milestones. This validated set of 23 educational milestones (Figure 1) developed by the ACGME may offer a shortcut method to track the delivery of the curriculum in the didactic teaching program sessions.

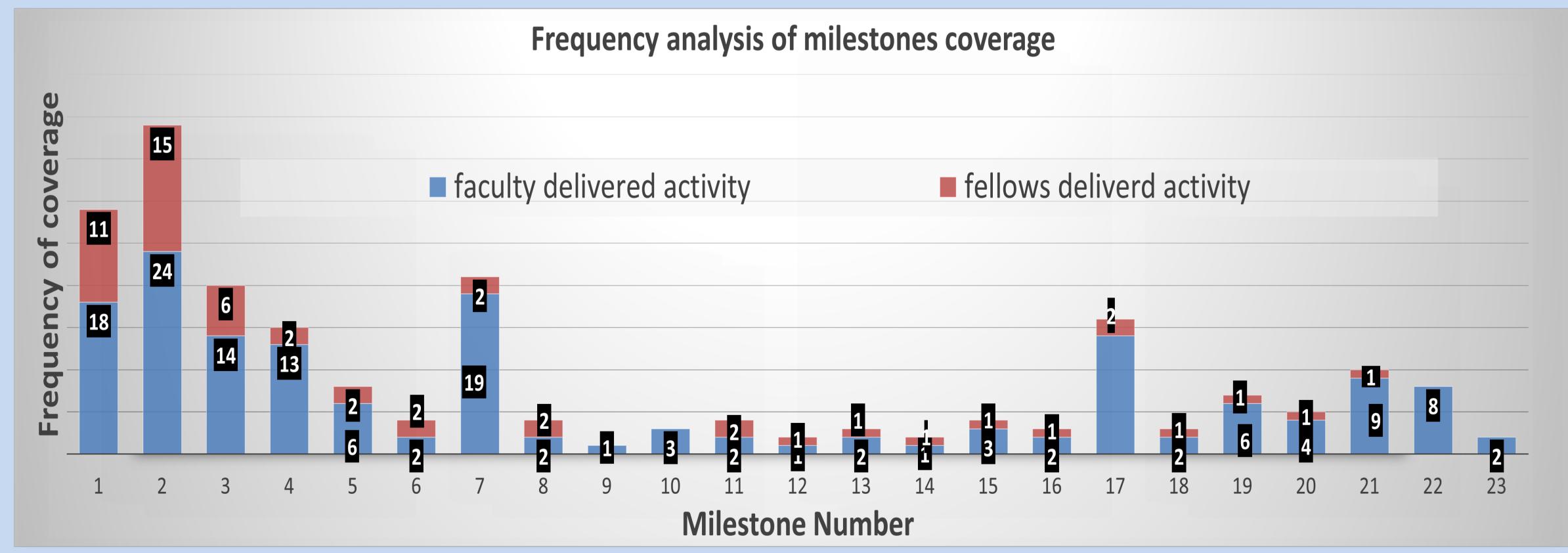
# Methodology

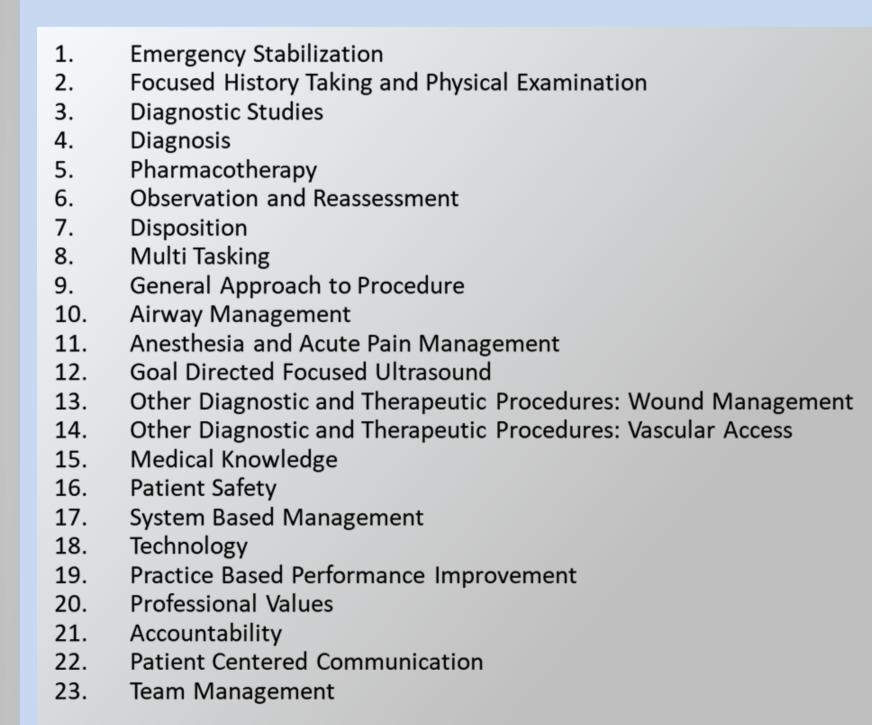
We undertook a full review of the weekly didactic EMF teaching activities during the academic year of 2016 -2017 and mapped these against the ACGME milestones. We studied the didactic teaching program to determine the mode of delivery, the depth and frequency of coverage of each milestone. A further qualitative analysis was undertaken of those milestones that were infrequently visited in the didactic program.

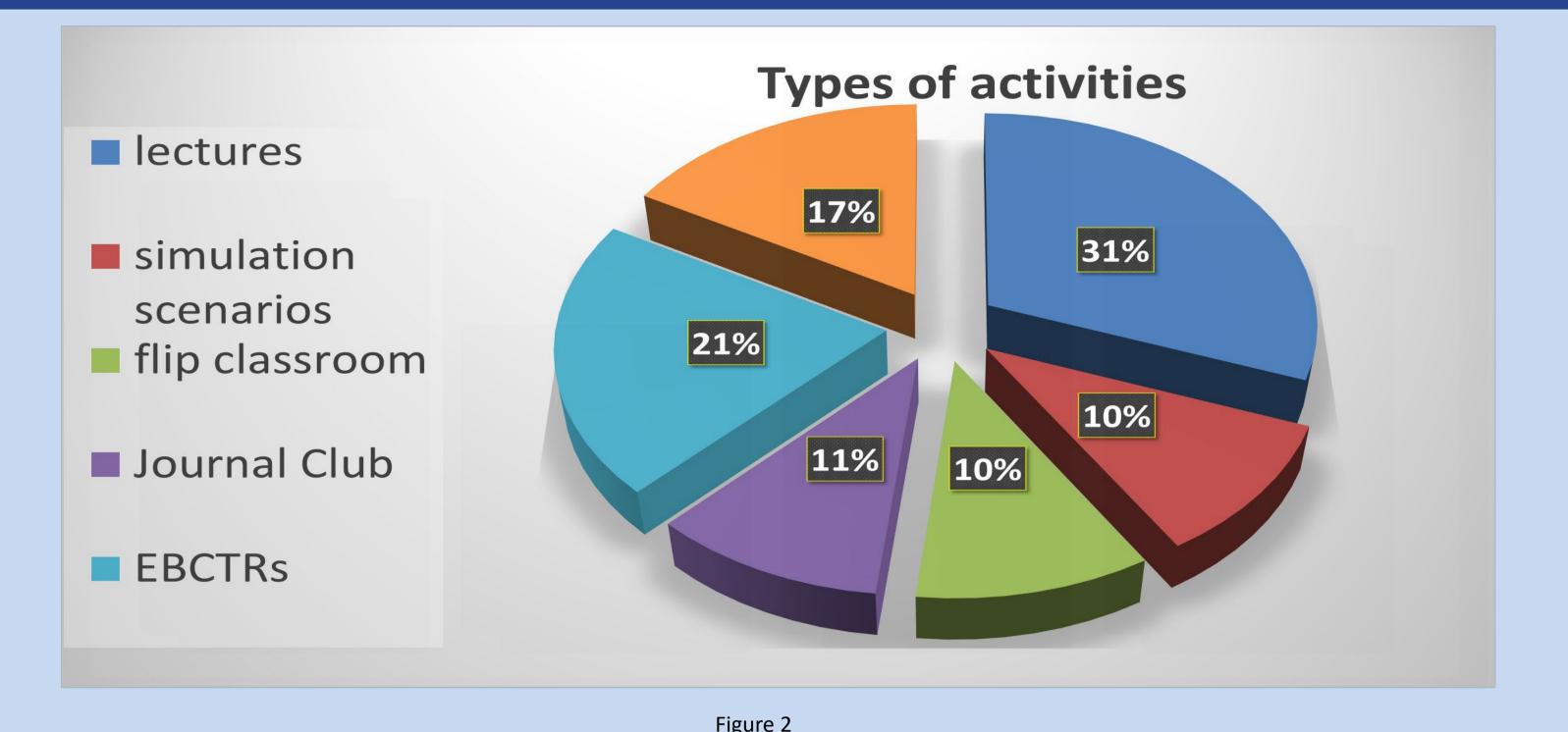
#### **Results:**

•A total of 125 classroom teaching activities were delivered throughout the academic year of 2016 -2017, conducted in the form of interactive lectures 28%(n=35), evidence based clinical topic reviews 19.2% (n=24), journal club 17.6% (n=22), simulation workshops 15.2% (n=19), simulation scenarios 9.6% (n=12), and flipped classrooms 9.6%(n=12). Of these activities, 68% (n=85) were delivered by the faculty and 32% (n=40) by the fellows under supervision (Figure 2).

•Frequency analysis showed that some milestones were more likely to be covered in detail than others. For example, milestones on 'focused history and examination' was covered most often, followed by 'emergency stabilization' (n=29), 'disposition' (n=22), 'diagnostic studies' (n=20), 'pharmacotherapy' (n=18) and 'system-based management' (n=17). Other milestones that were less often visited were on 'professional values' (n=5), 'wound management' (n=4), 'multi-tasking', 'anaesthesia' and 'technology' (n=1).







### Discussion:

Overall, the EMF didactic program clearly demonstrated the delivery of the 23 ACGME milestones. However, variance was noted; some milestones seemed to permeate the program while other specific milestones appeared to be dealt in a limited manner. As a result of the study, we have undertaken further revisions to the program to ensure certain milestones are visited more frequently in the next academic year. This project has also helped in identifying the milestones that are often challenging to be delivered in a classroom setting e.g. focused ultrasound, wound management and multitasking. These may be better achieved through workplace supervision in clinical areas, workplace-based projects and academic assignments such as quality improvement projects, morbidity and mortality meeting presentations and clinical research activities.

## **Conclusion:**

The ACGME milestones appear to provide a comprehensive structure to measure the quality of an EMF didactic teaching program. A mapping exercise against the milestones may prove to be a short-cut quality improvement method for blueprinting the teaching activities against the curriculum.