The National Academies of
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Examples of Potential GME Outcomes and Metrics

Note: *Intermediate outcomes – measured at the time of graduation from GME – are italicized*

Domain	Level of measurement			
	Individual	Program	Teaching institution	(state, region, or) National
Experience (upon completion of GME)	• *Volume of surgical cases and other key clinical experiences during GME* • *Experience working on inter-professional teams*	• Average volume among individuals trained • *Experience working on inter-professional teams, averaged across individuals*	• Annual institutional volume • *Experience working on inter-professional teams, averaged across individuals*	• *Volume of key experiences averaged across all individuals by specialty*
Capabilities and Clinical Competence	• *Readiness for independent practice at time of graduation* • Board scores • Quality of care delivered* • Cost/value of care delivered	• *Average readiness among individuals trained* • Board pass rate • Average quality of care delivered by graduates • Average cost/value of care delivered by graduates	• *Average readiness among individuals trained* • Average quality of care delivered by graduates • Average cost/value of care delivered by graduates	• *Average readiness among individuals trained* • Average quality of care delivered by graduates • Average cost/value of care delivered by graduates
Workforce considerations	• (Sub)specialty • Entering practice vs. other activities • Practice location • Population cared for • Volume of care delivered	• #/% pursuing fellowship training • Proportion of graduates entering practice vs. other activities • Graduation rate • Distribution of practice locations • Populations cared for across all grads	• Mix of (sub)specialties; #/% pursuing fellowship training • Proportion of graduates entering practice vs. other activities • Average graduation rate • Distribution of practice locations, populations cared for • Populations cared for across all grads	• Mix of (sub)specialties; #/% pursuing fellowship training • Proportion of graduates entering practice vs. other activities • Average graduation rate • Distribution of practice locations, populations cared for • Populations cared for across all grads

	• Professional satisfaction and wellness	• Total volume of care provided by graduates • Professional satisfaction and wellness avg'd across graduates	• Total volume of care provided by graduates • Professional satisfaction and wellness avg'd across graduates	• Total volume of care provided by graduates • Professional satisfaction and avg'd across graduates
Academic contributions	• Publications • Grants awarded • Academic titles • Honors, prizes • Teaching	• Average across graduates	• Average across graduates	• Average across graduates
Leadership and other contributions	• Leadership positions held • Honors, prizes	• Average across graduates	• Average across graduates	• Average across graduates
Cost		• Cost of training/graduate	• Cost of training/graduate	• Cost of training/graduate

NOTES:

- Semantics are tricky: "inputs", "outcomes", and "metrics" overlap and blend together.
- Broadly, "outcomes" of GME would encompass the distribution of the physician workforce; physicians' productivity (volume of care delivered); the quality and value of care delivered; and academic output that advances biomedical science, care delivery and human health. (We could argue whether the overall status of population health should be considered as an outcome related to GME – many would feel that other factors have greater influence - e.g. socioeconomic factors; availability of social safety net and services.)
- Research aimed at optimizing GME might suggest looking at the immediate outcomes of GME, such as the volume of experience accrued/care delivered during training, more as "inputs" for which correlation to significant later outcomes (e.g. quality of care delivered) should be assessed.