



MACRO/POLICY CLUSTER

System Analysis of Graduate Medical Education Processes

PROJECT 07-05161.NEU

Value Proposition:

- Improve the ability of graduate medical education (GME) to meet its objectives
- Create an understanding of current GME processes from a systems analysis perspective and provide documentation of systems-based approaches applied to current GME practices
- Identify potential opportunities to redesign GME and develop recommendations for its redesign

Description:

As medicine becomes more advanced and graduate medical education (GME) more densely packed, there is increasing recognition of the need to re-examine resident training processes, methods, and content. By example, the Accreditation Council for Graduate Medical Education (ACGME) recently released its new Clinical Learning Environment Review (CLER) guidelines and a call for proposals for innovative redesign of GME. In support of this, this project will conduct normative work to apply systems engineering to define and analyze current GME systems from a formal systems design perspective. The work will be conducted with one or more CHOT health system partners involved in GME, with a focus on applying formal systems tools to analyze current GME processes, explore alternatives, and identify areas of greatest need and opportunity for further systems work. Pilot results from this work will inform a larger anticipated subsequent body of research and redesign activities.

How this is different than related research:

Few published studies on graduate medical education have used a systems-based perspective, and even fewer have utilized systems engineering analytic methods. This project will involve several systems analysis and design methodologies including but not limited to engineering design, Functional Resonance Analysis Method (FRAM), axiomatic design, and Systems Modeling Language. This work is motivated by the growing industry need to re-examine and innovate new models for achieving GME design specifications, in particular interdisciplinary training in systems methods.

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