

2020 GIR Excellence Award Winner
NYU Langone Institute for Innovations in Medical Education

Medical schools seek to deliver competency-based medical education, driven by data about individual learners as well as population health needs, and informed by the constantly growing body of medical knowledge. However, medical schools often lack the information system infrastructure to integrate and visualize the educational and clinical data necessary to guide the design and delivery of a curriculum that can evolve with the changing health care landscape. At NYU School of Medicine, we built an Education Data Warehouse (EduDW) and implemented enterprise analytic software to centralize and visualize a broad array of education-related data. These tools allow us to manage our curriculum, align it with clinical information, and measure key performance indicators including learners' competencies. Further, they facilitate support of faculty and students in prescribing interventions and improvements using a centralized view of data integrated from a wide set of sources – from the learning management system, evaluation and assessment tools, simulation checklists, student information system, the electronic medical record, and more.

Connected to the enterprise-wide clinical data warehouse, the analytics infrastructure allows us to track learner's performance throughout his or her entire academic trajectory, from medical school admission to residency and into clinical practice. The opportunity presented by integrated data is transformative. The evaluation of the effectiveness of curricula can move from the anecdotal to the epidemiologic; detailed learner-level data can inform individualized learning and personalized progression through curricular content; and the analysis of performance over time can accelerate the realization of true competency-based health professions education. NYU's education data analytics platform is used to guide insights and decision-making in the education mission using a transparent and data-driven approach. This includes providing easy access for students, faculty and administration to their own education data and/or data on the programs they lead.

This is aligned with the GIR's mission to promote excellence in the application and integration of technology and information resources in academic medicine.