The Frank H. Netter MD School of Medicine at Quinnipiac University
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Medical Education Program Highlights

Named for the well-known surgeon and medical illustrator, the Frank H. Netter MD School of Medicine at Quinnipiac University (Netter) first matriculated students in 2013 and graduated its inaugural class in 2017. Netter’s focus on student education drives all strategic decisions including budgetary allocations and faculty hires. Faculty members in the Department of Medical Sciences are supported to dedicate the majority of their time to teaching, mentoring, and curriculum development. The school is located on an interprofessional campus in North Haven, Connecticut, with the Quinnipiac University (QU) schools of education, health sciences, nursing, and law. Netter’s state-of-the-art facilities are custom designed to promote active, collaborative learning and include small-group learning settings and extensive clinical skills training facilities adaptable to evolving learning modalities and technologies.

Netter’s commitment to active learning is aligned with its vision of a vibrant health care community to educate and nurture diverse, compassionate physicians who promote wellness and patient-centered care for all of society. Faculty foster the students’ growth mindset and responsibility to patients, peers, and co-learners. The school shares QU’s commitment to the values of academic excellence, a student-oriented environment, and a strong sense of community. These shared values are evident in academic excellence, a student-oriented environment, and a strong sense of community. These shared values are evident in congruent, linked strategic priorities.

See Figure 1—Mission, vision, and values.

At Netter, basic and clinical science courses are designed to shift the focus from “what is taught” to “what, where, and how students learn.” Courses are integrated horizontally and vertically through multiple pedagogies to promote learning, retention, and retrieval. The Scholarly Reflection and Concentration/Capstone (SRCC) course requires every student to select an area of concentration and to complete a capstone project. Students select concentrations in the following:

- Global, public, and community health
- Health policy and advocacy
- Health management and leadership
- Health communications
- Medical education
- Translational, clinical, and basic sciences
- Medical humanities
- Interprofessional education and practice

The SRCC course extends over 4 years and allows learners to advance a personal interest and develop professionally through exposure to narrative medicine and research mentorship.

Another important element of Netter’s student-centered and growth-oriented education model is a comprehensive, multistep student advising program that spans all 4 years. The structure for advising builds on Netter’s student-driven “Big Sib” program for entering students and encompasses learning communities, academic coaches, career advisors, and specialty-specific mentors. An academic coach is assigned to each “sibling” cohort and supports students through early transitions, reflection, and goal setting. In the third year, cohorts are transferred to career advisors who support each student through specialty selection, development of a fourth-year schedule, and residency application. Students are encouraged to consult and work with specialty-specific mentors early in the advising process.

The majority of Netter’s clinical experiences, including the Medical Student Home (MeSH) longitudinal curriculum in the first and second years, and clerkships and electives in the third and fourth, occur in community settings, made possible through an extensive network of affiliated hospitals and physician offices. Exposure to diverse settings and practice styles enrich student learning, and the clinical affiliates are strengthened by the presence of Netter students and engagement with the school of medicine. A rural longitudinal integrated clerkship at the Northern Maine Medical Center in Fort Kent, Maine, was initiated in academic year 2019–2020 and hosts 4 students annually.

In 2018, Netter expanded its educational footprint as an ACGME-accredited sponsoring institution for GME. Incorporating residency programs has provided benefits for UME and GME programs by expanding the clinical network for students, engaging more residents in teaching medical students, and enhancing the quality of both clerkships and residency programs through the provision of additional learning resources and professional development activities.

The Office of Faculty Development has been critical to successful implementation of new pedagogies, assessment strategies, and the professional growth of faculty members as educators in a new medical school.

Netter’s Institutes of Primary Care, Global Public Health, and Rehabilitation Medicine broaden the school’s capacity for addressing critical health care issues. Global public and community health themes are integrated throughout the
The Netter curriculum is holistic in scope, with content including prevention, population health, complementary medicine, and health systems science incorporated intentionally into discussions of patient care. Longitudinal themes encompassing medical humanities, pharmacology, epidemiology, ethics, nutrition, and socio-behavioral science anchor content throughout the curriculum.

The school’s curriculum and educational program objectives (EPOs) are based on ACGME and CanMeds competencies. EPOs are framed in outcomes-based terms that facilitate assessment of student progress in developing the knowledge, skills, and attitudes expected of physicians.

See Table 1—Competencies, Sample Educational Program Objectives, and Assessment Methods.

The preclerkship curriculum consists of 3 courses: Foundations of Medicine (FOM), Clinical Arts and Sciences (CAS), and SRCC. Basic and clinical science block content is integrated within and across the 3 core courses and organized around organ systems. The clerkship years include clerkships, electives, and continuation of SRCC.


Multiple pedagogies throughout the 4 years focus on active learning. FOM features numerous small-group sessions, including weekly 2-hour case-based discussions embedding basic science in clinical reasoning. A novel social pedagogy–based pharmacology curriculum allows first-year students to acquire and apply an interpretive conceptual framework for comprehension, analysis, and synthesis of drug information. CAS instructional methodologies include extensive experiential learning in weekly small-group sessions and examination of standardized patients, a longitudinal 2-year clinical immersion experience (MeSH), and ultrasonography workshops taught in an interprofessional education format with ultrasonography technician students. The pediatric and surgery clerkship
Curriculum changes since 2010
Netter engages in small-scale tests-of-change as part of its continuous educational quality improvement activities. Changes since matriculating the first cohort include:

- Adding small-group problem-based learning to the second-year curriculum using clinical cases and introducing concepts of health care disparity, social determinants of health, and stewardship of medical resources
- Shortening preclerkship calendars, allowing earlier start and completion of the third year
- Moving Netter’s comprehensive narrative medicine sessions to the second and third years, when students are ready to understand the concepts and clinical contexts
- Increasing vertical curricular integration to reinforce content and highlight connections

Three ongoing efforts to advance the curriculum are formal components of the “Better Netter ’23” strategic plan:

- Vertical and horizontal integration throughout the 4 years of medical education with concurrent mapping of the enhanced curricula include workshops that integrate simulation activities to reinforce basic science learning.
- Implementation of a health systems science curriculum across the 4 years of medical education
- Expansion of current curricular interprofessional education activities
- Development and preparing them for assessment in GME.

Currently, Netter’s assessment system includes multiple assessments and frequent formative and summative feedback to document students’ attainment of the EPOs. Assessment modalities include summative and formative OSCEs (FOSCEs), feedback from standardized patients, and workplace-based assessments (WBAs). Recently, formative WBAs have been integrated into the preclerkship clinical curriculum. Important changes in summative assessment have included giving students a choice in the timing of the USMLE Step 1 examination, which can occur at 8 time slots beginning at the end of the second year and spanning the third year, to accommodate students’ study and preparation styles. In 2020, the medical school will begin to redesign its assessment system to balance “assessment of learning” with “assessment for learning.” The new system will offer enhanced integrated assessments with the goal of further broadening information on students’ progress and professional development and preparing them for assessment in GME.

Growth in class size from 60 to 95 students has presented opportunities to adapt and refine the curriculum to ensure an optimal learning experience for every student. This has also

Table 1
Competencies, Sample Educational Program Objectives, and Assessment Methods

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<tr>
<th>Competency</th>
<th>Sample EPO</th>
<th>Assessment methods</th>
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<tr>
<td>Care of individual patients</td>
<td>Gather medical histories from patients/families; attend to patient symptoms, concerns, expectations, and illness experience</td>
<td>Global performance evaluations, multiple-choice questions (MCQs), OSCEs/FOSCEs, patient write-ups, patient/procedure logs, self-assessments, small-group evaluations, WBAs</td>
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<td>Professionalism</td>
<td>Demonstrate honesty, integrity, and respect in interactions with patients, colleagues, and faculty</td>
<td>Global performance evaluations, MCQs, self-assessments</td>
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<td>Knowledge and scholarship</td>
<td>Describe essential concepts in human biology, including molecular, biochemical, genetic, immunologic, and cellular mechanisms</td>
<td>Global performance evaluations, MCQs, self-assessments</td>
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<td>Interpersonal and communication skills</td>
<td>Communicate patient data to other health professionals through oral presentations and written and electronic medical records</td>
<td>Global performance evaluations, OSCE/FOSCEs, self-assessments, small-group evaluations</td>
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<td>Practice-based learning and improvement</td>
<td>Use information technology effectively, including acquiring, storing, retrieving, and analyzing medical data</td>
<td>Evaluation of projects, global performance evaluations, MCQs, self-assessments, small-group evaluations</td>
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<td>Systems-based practice</td>
<td>Identify factors that contribute to health care disparities</td>
<td>Evaluation of projects, global performance evaluations, MCQs, small-group evaluations</td>
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<td>Interprofessional collaboration</td>
<td>Engage in real and simulated patient experiences with health professionals from other disciplines</td>
<td>Global performance evaluations, self-assessments</td>
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<td>Citizenship and service</td>
<td>Identify resources and barriers to health of local and regional communities, identify vulnerable and marginalized populations</td>
<td>Evaluation of projects, self-assessments, small-group evaluations</td>
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<td>Medical practice management</td>
<td>List the business principles underlying successful health care delivery models</td>
<td>Global performance evaluations, MCQs, patient/procedure logs</td>
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<td>Concentrated and independent learning</td>
<td>Demonstrate effective presentation of capstone project in a self-selected area of concentration</td>
<td>Glassick-informed rubric for project implementation and scholarly product, MCQs, self-assessments, small-group evaluations</td>
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necessitated recruitment of additional faculty and clinical sites, expanding Netter collaborations and reaching deeper into the community.

**Curricular Governance**

The Committee on Curriculum Oversight (CCO) is chaired by the senior associate dean for education and co-chaired by the associate dean for faculty development. It has representation from UME and GME faculty and administrators, students, and QU’s health sciences and nursing schools. The CCO oversees all aspects of the curriculum. Subcommittees include the Curriculum Evaluation Committee and course and clerkship committees.

**Education Staff**

The Office of Medical Education is housed within the Office of the Senior Associate Dean for Education, providing centralized and local support to both the UME and GME programs at Netter through staff, educational committees, the Standardized Patient and Assessment Center, and the Office of Educational Assessment and Program Effectiveness. The Office of Medical Education works in close collaboration with the Office of Student Affairs, which provides learning support through a combination of in-house coaches (clinical skills remediation, learning strategies, and test-prep) and external consultants (test-prep and professionalism coaching).

See Figure 2—Educational leadership.

**Faculty Development and Support in Education**

Netter’s multimodal faculty development program enhances educators’ skills in teaching, mentoring, curriculum development, assessment, inclusion/diversity, leadership, and scholarship and promotes their career advancement. Strong, sustained institutional support has facilitated growth and innovation of a centralized faculty development program that provides comprehensive learning opportunities for medical science educators, clinical faculty, residents, and students who teach. A major focus of the program is engagement of all clinical faculty including those at geographically distant sites. The Teaching for Educators in Clinical Health care traveling workshop series rotates to different affiliate sites to provide core content. An annual clinical faculty retreat provides immersive learning, often with nationally recognized leaders in medical education.

Monthly lunch-and-learn sessions, a medical education journal club, and a facilitated peer-mentored education scholarship group (Scholaris) address the needs of medical sciences faculty. All faculty and residents have access to faculty development offerings within the school’s learning management system, which serves as an active repository of resources such as online courses, an interactive tool to create a customized menu of learning opportunities, and a dashboard to track participation. In 2019, webinar options were added, and a new podcast series will be released in early 2020, enhancing access to professional development material.

Netter’s faculty members are evaluated for promotion based on teaching, scholarship, service, clinical activity, and professionalism. Faculty describe their contributions using an educator portfolio model. Demonstration of excellence as an educator is required for promotion.

**Initiatives in Progress**

Building on the student-focused learning environment, current efforts to innovate in teaching and learning aim for a relationship-
centered model of medical education and to enhance interactions among learners, faculty, staff, and patients across the QU community and clinical affiliates. The programmatic focus will be on mentor–mentee relationships, coaching, collegiality and inclusion, and interprofessional communication. Relationship-centered education is also essential to Netter’s strategic priorities in diversity and inclusion and student well-being.

Plans call for expanding Netter’s efforts to promote student well-being with coordination across the continuum of medical education and the Netter and QU communities. Initiatives bridging student affairs and medical education will focus on well-being skills for learners and how the learning environment, curricular structure, and assessment system affect well-being. Netter’s GME programs offer sessions on recognizing and responding to distressed learners and clinicians and titrating stress to promote optimal learning. The well-being of Netter’s faculty and staff is also addressed by individual- and organizational-focused initiatives. Netter is working with the Connecticut health care community to design and implement strategies to promote well-being for the region’s clinicians.

Efforts to promote educational scholarly activities are represented by the “Netter Cube”—a 3-dimensional conceptual model that links domains for scholarly work that relate to core medical school functions, contributions to the field, “Better Netter” strategic plan priorities.

See Figure 3—Cube conceptual model.

This conceptual model enables mapping of individuals’ scholarly work within a local and national context. It also promotes collaboration among faculty with a focus on discovery, dissemination, application, integration, and strategic recourse allocation to support educational scholarship.

Netter’s strategic planning is rooted in its mission, vision, and values to move this new school from its launch into a thriving next decade.