



UNIVERSITY OF TORONTO  
FACULTY OF MEDICINE

# Teaching and Academic Capacity in Toronto (TACT)

## MONOGRAPH

August 31, 2015



Since the Task Force on Teaching Capacity for Undergraduate Medical Education (UGME) and Postgraduate Medical Education (PGME) submitted its report in 2009, the University of Toronto Faculty of Medicine (the Faculty) experienced another five years of unprecedented growth and expansion in UG and PG medical education programs, creating a need to review the Faculty's available capacity within its full and community affiliated sites. The challenge, however, is that the Faculty has no system-wide method to assess current activity and potential capacity for clinical teaching of medical learners and associated opportunities and challenges in using this capacity. Thus, Deputy Dean Verma commissioned a follow up of the 2008 Task Force work under the auspices of the Teaching and Academic Capacity in Toronto (TACT) Project. The TACT Project was overseen by a steering committee that submitted this report to Dr. Verma in her capacity as Associate Vice Provost Relations with Health Care Institutions. This short monograph represents the summary of methods and conclusions and is being distributed to clerkship and PG program directors and participants in the TACT survey.

### The TACT Project

The Teaching and Academic Capacity in Toronto (TACT) Steering Committee (the Committee) was established to:

1. Update the environmental scan of the *real*<sup>1</sup> capacity in our affiliated hospitals.
2. Conduct surveys, interviews and/or focus groups about clinical capacity with representatives from medical education.
3. Recommend mechanisms to stretch the ability of affiliated teaching sites to expand their capacity over five years.
4. Develop recommendations around an online, electronic "capacity dashboard", to accurately predict and maximize medical student and resident placements across all affiliated sites.

### Methods

The Committee approved a work plan that included an environmental scan, analysis of current and historical data, data collection of current and potential capacity for clinical teaching activity, discussions with each discipline regarding current and potential teaching activity and the development of a clinical teaching capacity tool (i.e., the "capacity dashboard"). During the course of its work, the Committee made two major changes to the work plan:

1. Data collection was limited to disciplines that represent 54% of clinical teaching activity.
2. Given the challenges that arose in the data collection exercise, the Committee decided that it was not possible at this time to design and build the full clinical teaching capacity database.

### Environmental Scan

A literature review and environmental scan were conducted to locate expertise, existing processes or tools related to measuring or tracking clinical teaching capacity in health sciences education programs. The articles and reports reviewed described the complexity of defining clinical capacity and developing a consistent tool across disciplines and sites to measure capacity. They also reinforced the importance of having and using data sets that document current activity to help manage clinical teaching capacity.

---

<sup>1</sup> "Real" capacity is interpreted to mean the maximum or optimal capacity at a site or within a program, rather than the current level of activity.

## Analysis of Current and Historical Data

The Committee examined a number of data sources to better understand current and historical aspects of clinical teaching activity, including:

- Clinical activity, using the Ministry of Health and Long-Term Care's (MOHLTC's) Healthcare Indicator Tool (MOHLTC, Health Data Branch), which contains metrics for each hospital related to patient activity, staffed beds, admissions, discharges and ambulatory visits.
- Clinical teaching activity, based on the published medical trainee days (MTD) counts from the MOHLTC for fiscal 2012/13<sup>2</sup>.
- The intensity of clinical teaching (i.e., the ratio of clinical teaching to clinical activity).

Although much **clinical activity** can be found in the Faculty's community affiliated sites, 80% of the **clinical teaching activity** (as measured by MTDs) was concentrated among five large fully affiliated teaching hospitals. These same five hospitals also had the highest "teaching intensity" of all hospitals. The lower intensity among other affiliated hospitals suggests that they may have considerable additional capacity beyond their current activity (i.e., their "teaching intensity" has room to grow).

## Development and Distribution of Data Collection Tool

The Committee explored, through two iterations of a pilot survey, whether it was possible to collect learner capacity data and create a database of clinical capacity information that hospitals, clinical departments, programs and the Faculty could use for planning and information sharing between the Faculty and teaching sites. The Committee found that the concept of measuring capacity is complex and involves a great many factors that are interrelated and in constant flux, and the factors vary by site and by discipline.

Notwithstanding the challenges, three separate surveys were developed, one for each of the UG and PG site representatives and one for division chiefs. The survey tool asked for information on the current levels of clinical teaching activity (e.g., number of learners, number of clinical teachers), the current capacity for clinical teaching, and barriers to realizing additional capacity at each site in each discipline.

The data collection exercise proved to be a very good first attempt at collecting clinical capacity data from the sites. However, due to a response rate of 41% (168 responses received out of 413 requests) and some inconsistencies within and across data records, the Committee found that there is still much work to do in developing a reliable and valid data collection tool.

All respondents were asked for feedback on how difficult the survey was to complete, and 67% rated it 1 (not at all difficult) or 2 on a scale of 1 to 5. The survey was easiest for UG site contacts, and most difficult for PG site contacts, which is expected given the greater complexities (varying lengths and services) around scheduling of PG rotations.

## Assessment of Clinical Teaching Capacity by Discipline

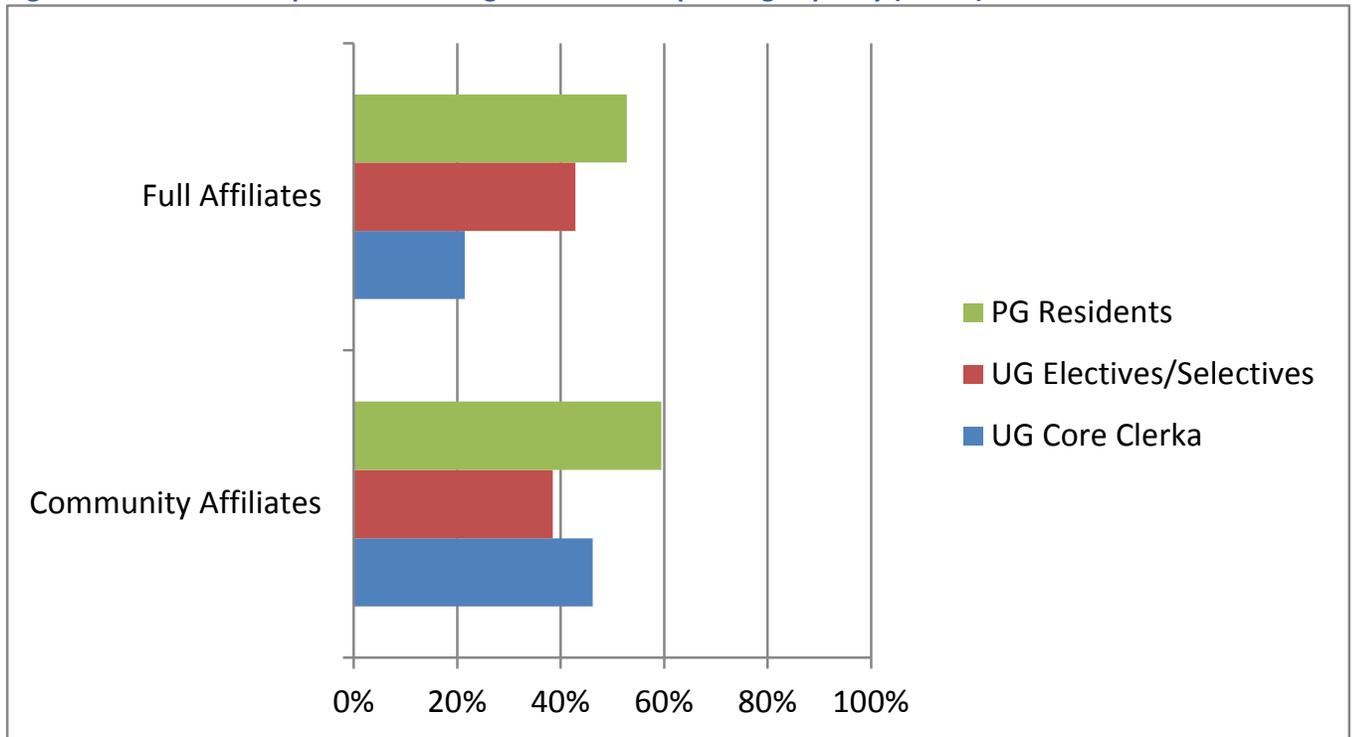
In order for the Faculty to establish a comprehensive clinical capacity database, responses would be required from 100% of disciplines and sites. In addition to the relatively low response rate resulting in an incomplete dataset, the Committee identified several data quality issues (e.g., incomplete records, duplicate responses, inconsistencies within individual data records).

---

<sup>2</sup> The 1.08 million MTDs recorded at 30 selected affiliated hospital sites were used for this analysis.

However, the Committee still felt that the data collected, combined with the written qualitative comments, did create a high-level (albeit incomplete) understanding of the overall **ability** and **willingness** of each site to accept more learners, and the order of magnitude of that potential incremental capacity. As suggested by the analysis of the intensity of current clinical teaching by site, the survey respondents confirmed that many sites (both full and community affiliates) are interested in increasing their capacity, particularly for PG residents (as shown in Figure 1).

**Figure 1: Percent of Respondents Willing to Consider Expanding Capacity (n=127)**

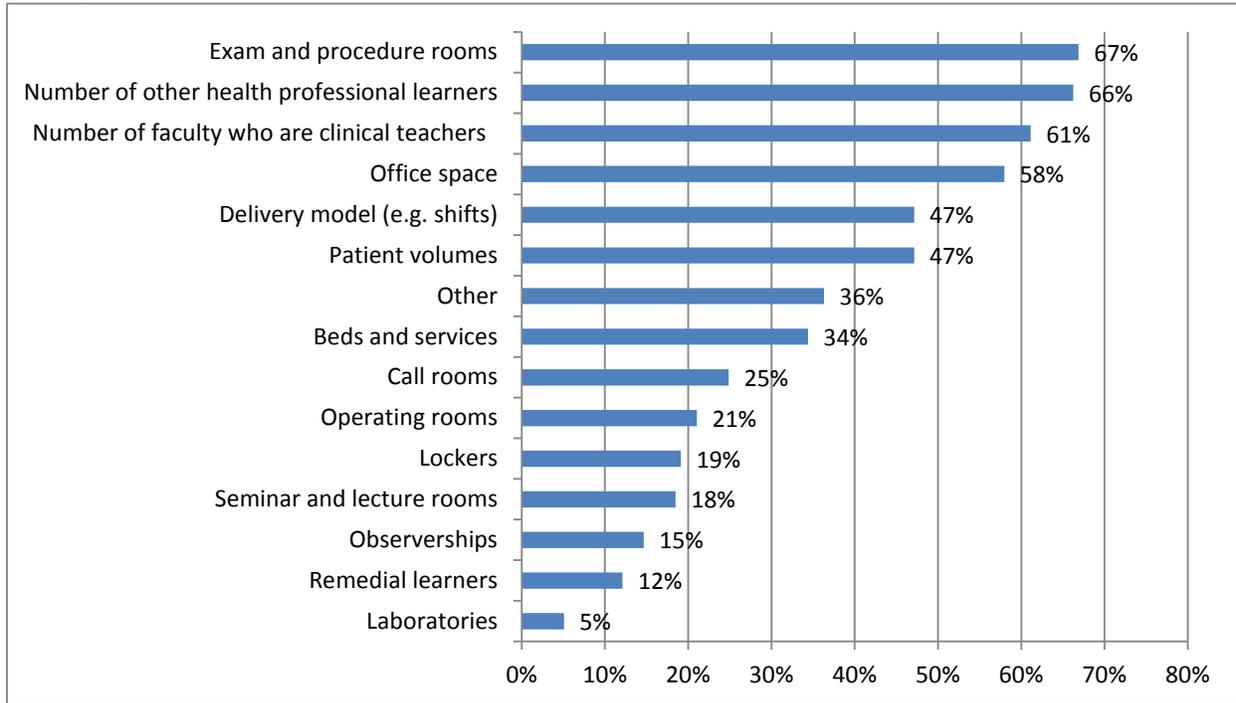


On average, approximately 90% of all physicians who teach were reported to have a faculty appointment, which may reflect recent efforts to ensure that all clinical teachers have appointments.

### Barriers to Capacity

All respondents were asked about barriers that might limit the ability to increase clinical teaching activity in future at their site. Two-thirds (67%) of the respondents indicated that a shortage of clinical exam rooms and procedures rooms was a barrier to increasing clinical teaching activity, as shown in Figure 2. A similar number (66%) reported that the number of other health professional learners present on rotation (e.g., physician assistants, nurses), the number of faculty who are clinical teachers (61%), and a shortage of office space (58%) were barriers to accepting more medical learners.

**Figure 2: Percent of Respondents Who Identified Barrier to Clinical Teaching Capacity (n=103 for UG; n=98 for PG)**



### Summary Comments

The Committee learned that defining and measuring clinical teaching capacity is complicated, but not impossible. The process did provide useful data and insightful learnings about teaching, barriers, and attitudes towards clinical teaching. The process also confirmed that there are pockets of untapped capacity in some disciplines and at some full and community affiliated hospitals.

Although the Committee set out to learn about current activity and potential capacity, the exercise is more appropriately viewed as a first step in a scholarly attempt to design a new process. The Committee has attempted to identify gaps in the Faculty’s knowledge to help inform a better clinical placement planning process. The TACT data collection exercise has created a baseline for defining and measuring clinical teaching capacity from which the Faculty can now build a more refined approach.

### Next Steps

Building on the results of the TACT project, the Committee recommends the following next steps:

1. Develop a strategy for the dissemination of the key findings from the TACT project through an academic paper and/or posters.
2. Develop a comprehensive registry of site contacts, with a mechanism for all hospitals and disciplines to keep the database current.
3. Further develop the TACT capacity tool within a single discipline and a single type of learner to customize the data collection tool to reflect the unique characteristics of the approach to clinical teaching in that discipline. The tool would then be further adapted and expanded across other disciplines and other types of learners.
4. Explore the potential to build on the increased functionality of POWER and MedSIS in capturing MTD data. The new MTD process will yield an incredibly detailed and accurate database of current

learner volumes that could be used as a base from which to ask capacity questions in the future. Connecting the dots between MTD volumes and clinical teaching activity and capacity will be an important enabler in future discussions about policy around PG quotas and UG capacity.

5. Once a POWER/MedSIS clinical database and an integrated, more refined clinical capacity tool is developed, the proposed dashboard of clinical teaching capacity could be achieved.

## TACT Steering Committee Members

Lead:	Sarita Verma (Associate Vice Provost, Relations with Health Care Institutions and Special Advisor to the Dean of Medicine)
Co-Chairs:	Glen Bandiera (Associate Dean, Postgraduate Medical Education) Stacey Bernstein (Director, Clerkship, UGME)
Members:	Caroline Abrahams (Director, Policy & Analysis, PGME) Janet Hunter (Registrar, Undergraduate Medical Education) Jay Rosenfield (Vice Dean, Undergraduate Medical Education) Sal Spadafora (Vice Dean, Postgraduate Medical Education) Paul Tonin (Manager, Strategic Operations & Policy, UGME)
Consultants:	Marcella Sholdice, Mary-Kay Whittaker

*Project assistance provided by Kimberly Eadie, Shawn Healy, and Leslie Smith.*

### Project Sponsored By

**Sarita Verma**, LLB, MD, CCFP  
Associate Vice Provost, Relations with Health Care Institutions  
Special Advisor to Dean of Medicine  
Faculty of Medicine, University of Toronto

The TACT project was commissioned by Dr. Sarita Verma and overseen by the TACT Steering Committee. Two project consultants were engaged to conduct the project management, survey and report. The TACT project acknowledges Marcella Sholdice and Mary-Kay Whittaker for this work and thanks them for their insights and analyses.