

Research Student - Delirium_CCI

Internal Job ID: 2025-03

GEMINI (www.geminimedicine.ca) is a unique big data platform in the Canadian healthcare landscape using advanced methods and analytics to extract and standardize data captured in hospital electronic health records. We are based out of Unity Health Toronto, St. Michael's Hospital and currently exist at 30+ hospitals in Ontario. GEMINI is a collaborative data and analytics platform for all Ontario hospitals to accelerate research and quality improvement, leading to excellent hospital care.

Position Overview:

Successful candidate will be involved in two small projects:

- (1) Delirium Data Transformation: Delirium is the sudden onset of confusion experienced by many patients in the hospital and poses a significant challenge to healthcare providers. GEMINI has obtained manually abstracted electronic health records data on delirium in the form of excel spreadsheets and Access database. The hired student will be transforming and ingesting the data into a REDCap database upon resolving inter-coder discrepancies.
- (2) CCI codes documentation and integration: CCI stands for Canadian Classification of Health Interventions, a system of codes that indicates the medical procedures performed on the patient. The hired student will transform existing CCI documentation into csv and create a useful R function to assist users in identifying and filtering for the right procedures of interest with proper documentation.

The hired student will be a part of Unity Health's [Keenan Research Summer Student Program](#), and expected salary range is \$17.56 - \$21.95 per hour.

Key Responsibilities:

- Learn and understand the delirium manual abstraction process in order to ingest the data into the REDCap database
- Review existing CCI documentation and create useful reference table
- Create and test a CCI helper function in R that identifies and filters for the procedure of interest
- Write useful instruction on navigating CCI codes

Qualifications:

- Current undergraduate student
- Interest in both healthcare research
- A curious mind and a strong drive to learn
- Experience with any programming languages (R, Python, etc.) is preferred but not required
- Eligible to work in Ontario, Canada (e.g. Canadian citizenship, permanent resident, study permit, etc.)

Time Commitment:

Full time contract (37.5 hours per week) for at least 10 weeks from May to August 2025. Student will be expected to work in a hybrid environment with the ability to come into GEMINI's office (located at Li Ka Shing Knowledge Institute, Downtown Toronto) at least once a week.

How to Apply:

Please submit your CV/resume and a quick paragraph on your interest in GEMINI (around 100 words) to gemini.data@unityhealth.to with your subject header "<Your Name> Application for Position 2025-03".