Productivity dashboard for a radiation therapy department

The Radiation Medicine Program (RMP) at Princess Margaret Cancer Center is the largest radiation therapy department in Canada. The department is comprised of over 350 staff organized by three core disciplines of radiation oncology, radiation therapy and radiation physics. The RMP is organized by disease specific site groups and operates a large infrastructure for patient imaging, treatment simulation and planning and treatment delivery. Last year, the RMP provided more than 8000 radiation oncology consultations and delivered over 10,000 courses of radiation therapy.

The RMP is continuously working on improving its productivity and enhancing clinical operational performance. As part of this task, the department has started the development of weekly dashboard to help monitoring performance indicators related to machine utilization and completed courses of radiation therapy. This new weekly dashboard has proved useful and is now in use by the department leadership as a monitoring tool departmental productivity. The objective of this work is to investigate additional indicators such as the number of medical consultations and the treatment machine staffing as predictors for departmental productivity. Another objective is to determine variation in completed course of radiation therapy among disease site-groups over the last 5 years.

As part of this project, the selected candidate will participate in the following tasks:

- Extract and organize medical consults, machine utilization and completed courses data for the last 5 years.
- Determine the variation in completed courses for different anatomic sites and cancer presentations during the last 5 years.
- Retrospective analysis to determine the value of different potential performance indicators to predict departmental productivity (completed courses/week).
- Establish the data processing to compute the selected performance indicators in a weekly dashboard.
- Assist in the implementation of the weekly dashboard.

Following skills are required:

- Detail-oriented and good organizational skills to document procedures and results
- Ability to apply evaluative and analytical skills to process and productivity-related data
- Ability to work independently or as part of a team
- Plan, organize and prioritize your time
- Computer skills including Microsoft Office and MatLab (including script writing), ability to import and export data sets from different software systems

Please send your resume and a letter of intent to:

Daniel Létourneau, PhD
Princess Margaret Cancer center
610 University Avenue,
Toronto, Ontario.
Daniel.letourneau@rmp.uhn.on.ca