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## INTRODUCTION

- Palliative radiation therapy (PRT) improves symptoms and quality of life of patients with incurable cancer (1).
- Approximately 50% of radiotherapy is delivered with palliative intent (2).
- Despite having been established in Canada in 1996, there has not been a cross-comparison of dedicated PRT programs reported to date (2,3).
- Our goal was to comprehensively review the national availability of dedicated PRT programs, often called 'fast track' clinics.

## METHODS

- 44 centres that deliver radiation therapy (RT) across Canada were invited to participate.
- Site contacts were identified multiple ways including phone calls and emails to the RT department, authors of previous PRT publications, and the Royal College of Physicians and Surgeons of Canada directory.
- An embedded web-based link with outlining consent was sent to the specific site contacts.
- The survey included open-ended, multiple choice and check-box questions exploring patient volumes, indications, PRT delivery, and team composition.
- The survey was distributed through the REDCap™ electronic data capture system which also collected the data.
- Responses were extracted, anonymized and analyzed via descriptive summary statistics.
- Provincial research ethics approval was obtained.

## RESULTS

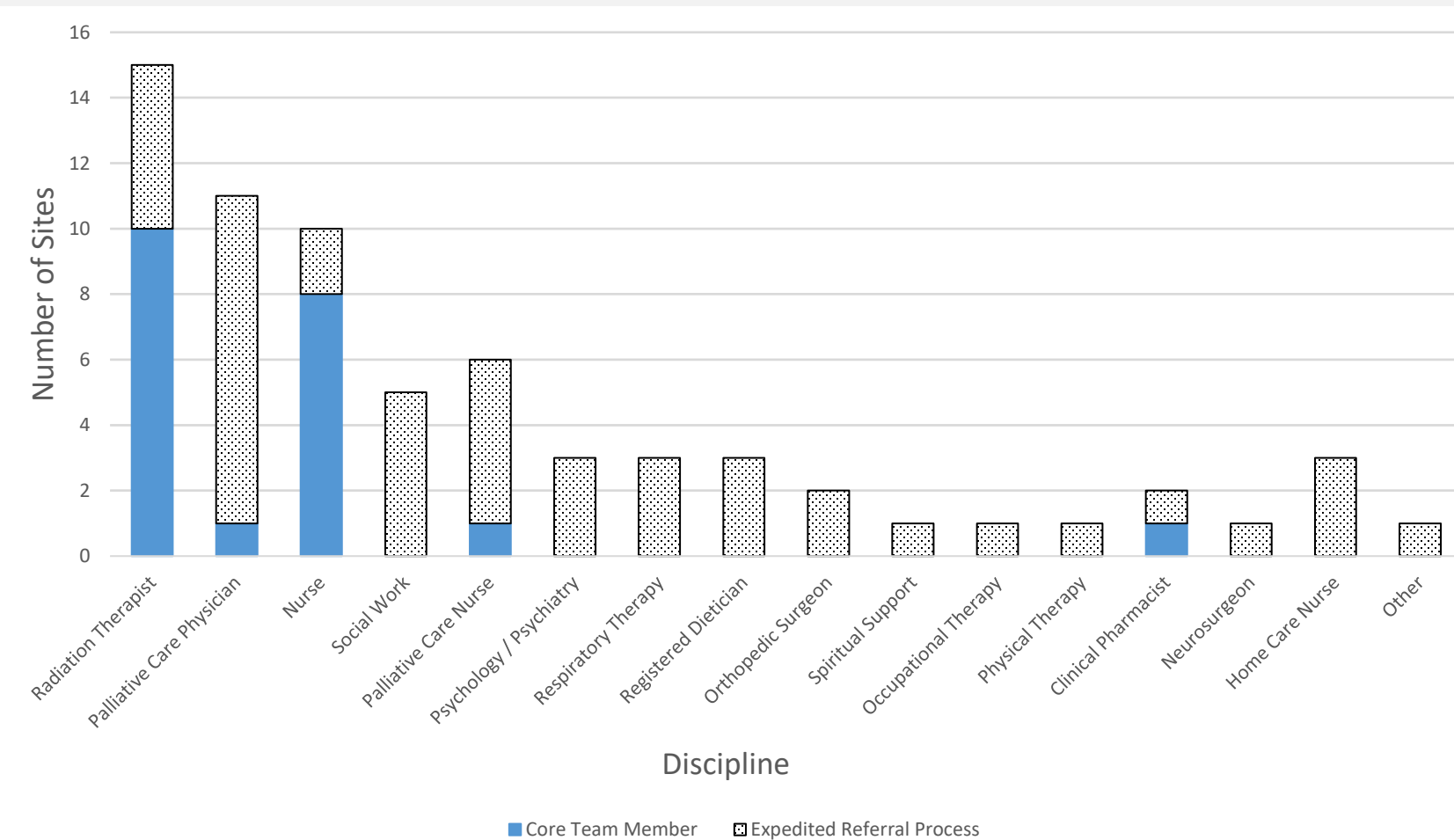


Figure 1. Multidisciplinary program composition of the core clinic team versus available via expedited referral process.

## RESULTS

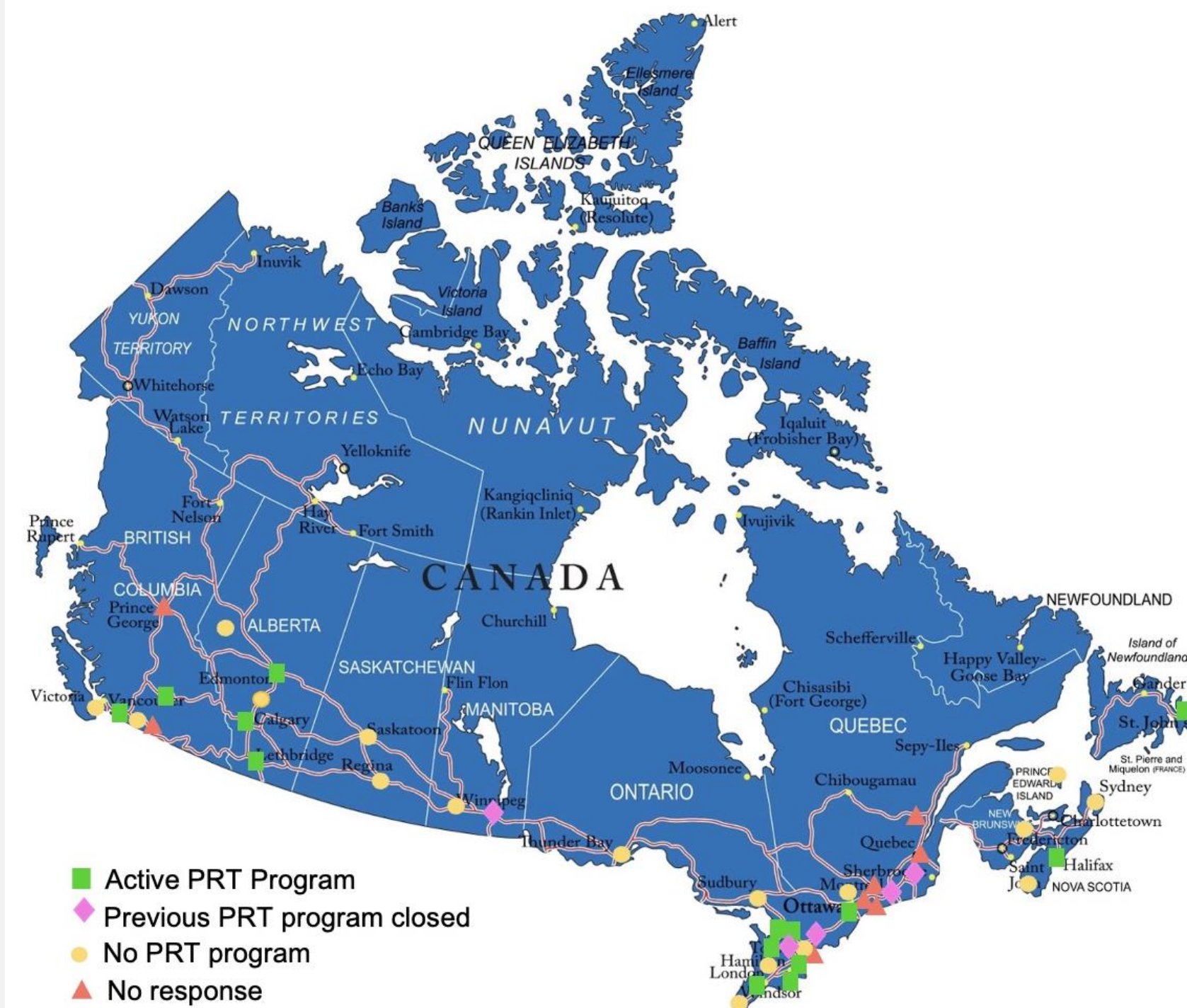


Figure 2. Geographic distribution of PRT programs across Canada.

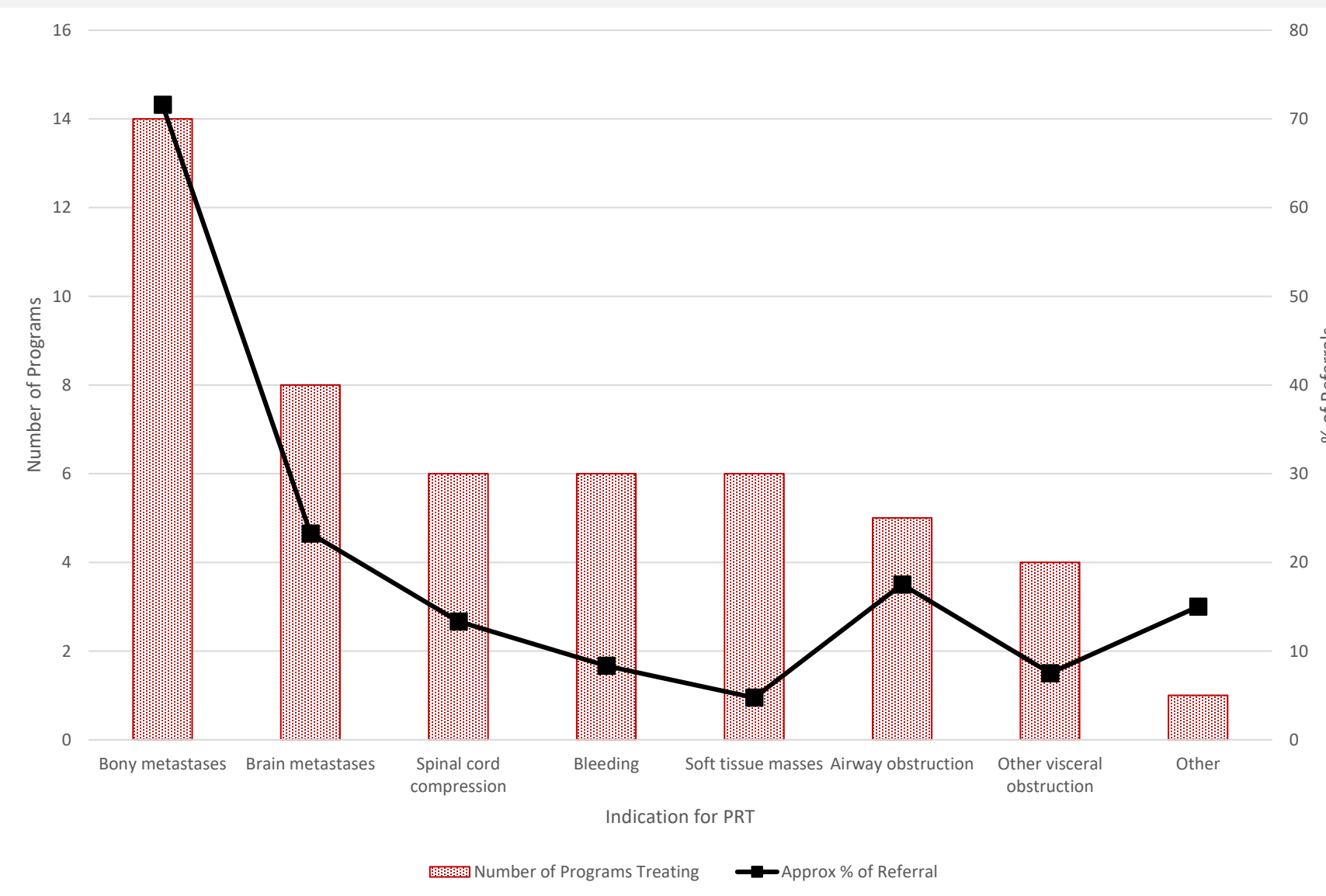


Figure 3. Referral indications for PRT programs currently in operation.

## RESULTS

- Response rate was 81.8% (36/44 sites).
- Radiation therapists and nurses account for majority of core team members, with multiple other disciplines involved as part of the expedited referral process (Figure 1).
- 14/36 (38.9%) sites across 5 provinces currently operate a PRT program (Figure 2).
- 17/36 (47.2%) sites have never had a program, and 5/36 (13.9%) have operated a program in the past that is now closed.
- Most common indications for PRT clinic referral are bone (100%) and brain (57.1%) metastases (Figure 3).
- Respondents estimate that 2/3 of patients with bone metastases receive a single fraction of PRT, a higher proportion than is received outside of these clinics.
- All programs have reserved simulation slots and 9/14 (64.3%) have reserved treatment machine slots.
- Referrals to these PRT programs are most often by medical oncologists, palliative care physicians, and inpatient physicians.
- The majority of the challenges with both programs not in operation or currently operating are logistics- and resource-related (Figure 4).
- For sites currently without a program, 58.8% (10/17) perceive value in the 'fast track' PRT model.

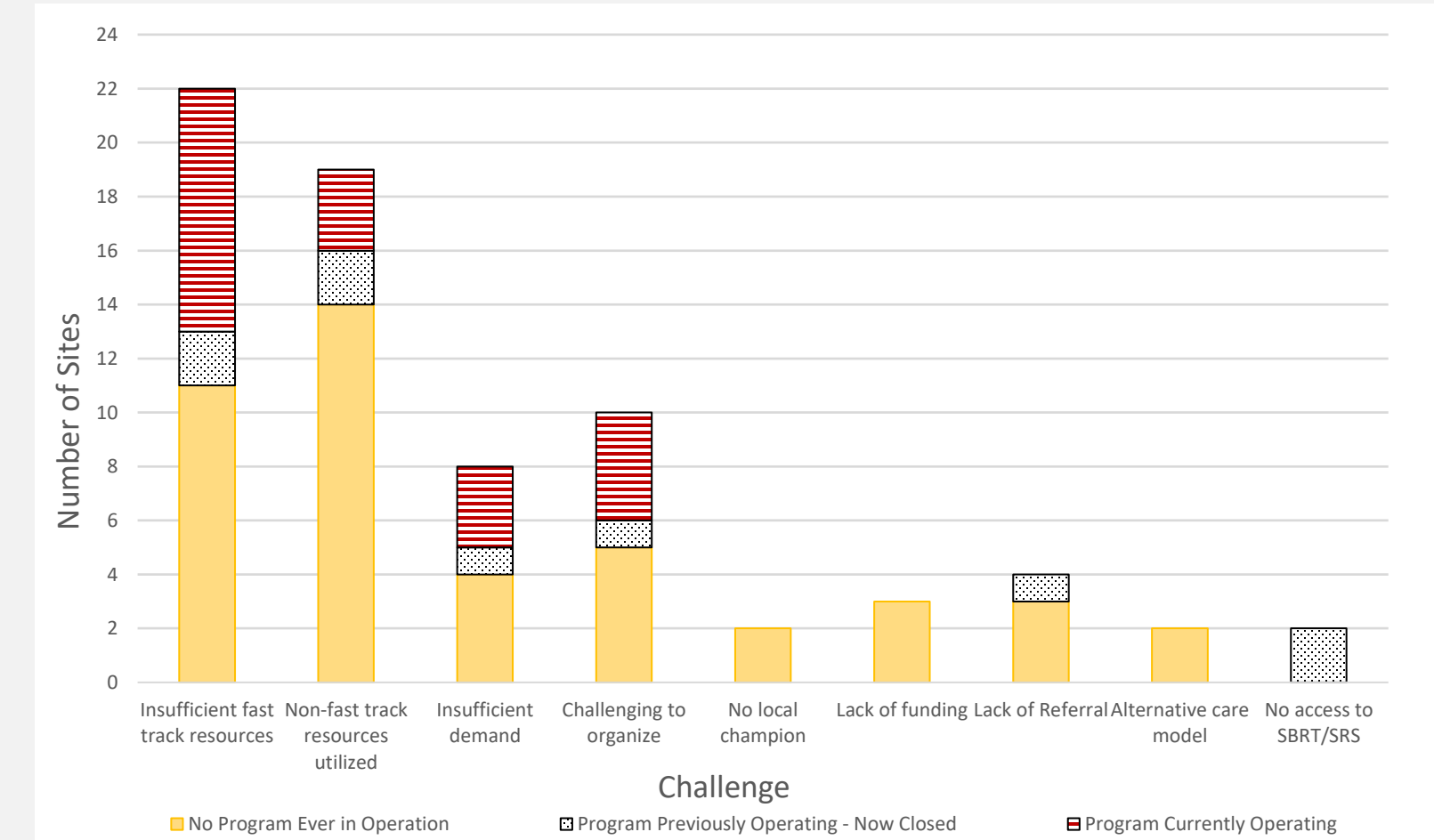


Figure 4. The actual or anticipated program challenges across responding sites that are currently operating, never had a program in operation or had one that is now closed.

## CONCLUSIONS

- Across Canada there has been variability in the implementation of PRT programs, with 5 provinces currently operating at least one specialized PRT clinic.
- Programs have evolved to meet demands of the local population, within resource and logistical limitations.
- Two thirds of centres who have never had a PRT program believe there is value in adding one.
- Our hope is to create an academic community for future clinical and research collaboration.

## REFERENCES

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