

Relooking at the denominator of the value equation: quantifying the opportunity cost of neurology IVIg appointments in St. Paul's Hospital's Medical Short Stay Unit

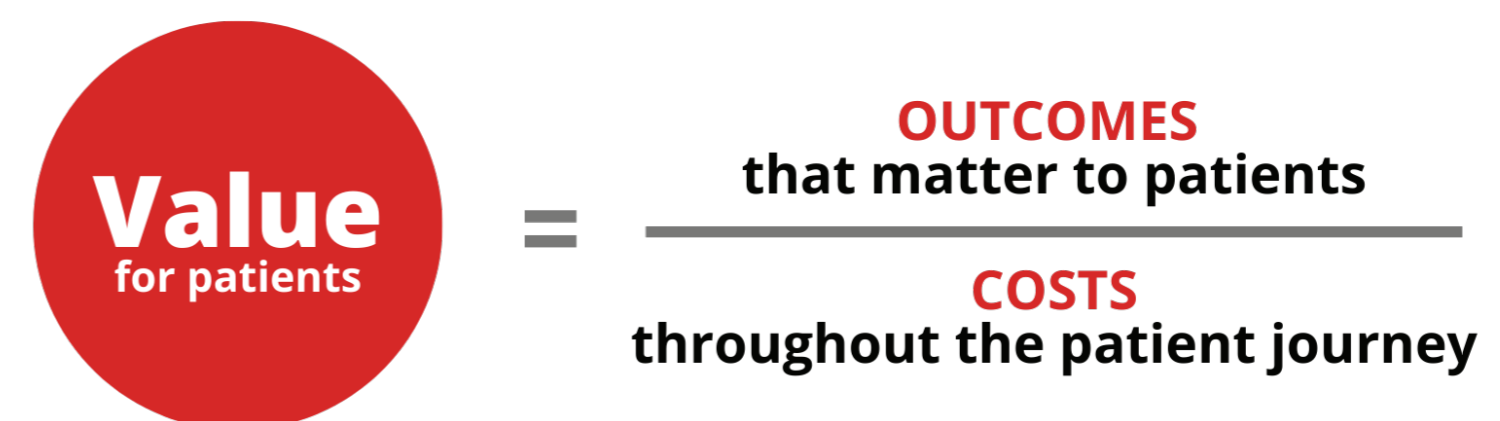
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Introduction

In our journey to implement Value-Based Health Care, the Providence Health Care Value Team worked with the St. Paul's Immunotherapy in Neurology (SPIN) Clinic transitioning patients with autoimmune neuromuscular disease to home based subcutaneous immunoglobulin (SCIg) therapy, instead of intravenous immunoglobulins (IVIg) which require infusion in the hospital Medical Short Stay Unit/Outpatient Parenteral Therapy Unit (MSSU/OPAT). Patients underwent measurement of health and functional outcomes to ensure comparable outcomes between the two treatments. Transition to SCiG does not yield any cost savings for the MSSU/OPAT, as the time that would have been used for IVIg infusions is used for other outpatient IV treatment, procedures or wound care. The MSSU/OPAT is open 7 days a week for 12 hours/day and there are substantial wait times for appointments.

We sought to understand and measure the opportunity cost (workload unit and time) of these resource-intensive IVIg appointments for SPIN patients, and to consider what it may mean for other patients requiring that space.



Methods

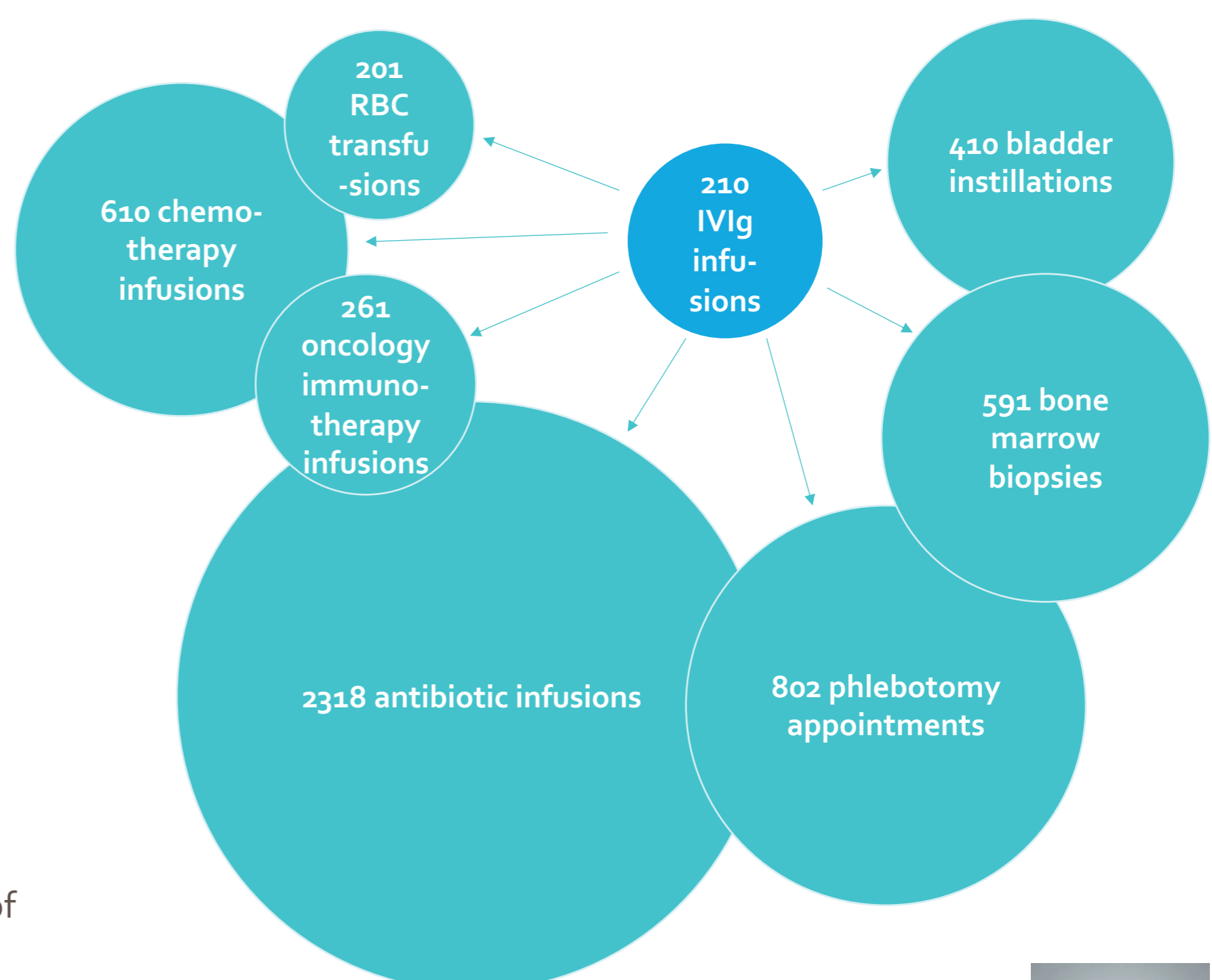
Electronic health record data from the 2022 calendar year was analyzed for the number and duration of all appointment types in the MSSU/OPAT, including IVIg appointments for SPIN patients. Financial statements were cross referenced, and results were validated with the patient care manager and the clinical nurse leader of the unit.

Results

A total of 19 SPIN patients received IVIg in the MSSU/OPAT in 2022:

- Required **210 appointments**
- Totaled **72,045 minutes (1201 hours)**
- **4.6% of total MSSU/OPAT annual minutes**
- Ranked **8th in appointment time** allotted
- Cost approximately **\$107,347** (excluding physician time and IVIg cost)

Time spent on these IVIg infusions is equivalent to any one of:



Conclusion

The management of MSSU/OPAT capacity and the booking of appointments are complex processes and dependent on many clinical factors. This costing activity offers financial insights in the absence of cost savings to the medical unit, and can estimate access and potential reallocation of resources for other patients in this shared space. This type of opportunity costing can be helpful when investigating the denominator of the value equation as we continue to redesign health care for all patients.

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