

Investigating adherence to screening guidelines for cardiometabolic disease in persons with spinal cord injury at the Parkwood Institute Outpatient Clinic

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BACKGROUND

Persons with spinal cord injury (SCI) are at an increased risk of developing cardiometabolic disease (CMD) and related complications. To address this, the Paralyzed Veterans of America released clinical practice guidelines with screening recommendations for specific risk factors such as dyslipidemia, hypertension, obesity, and diabetes.

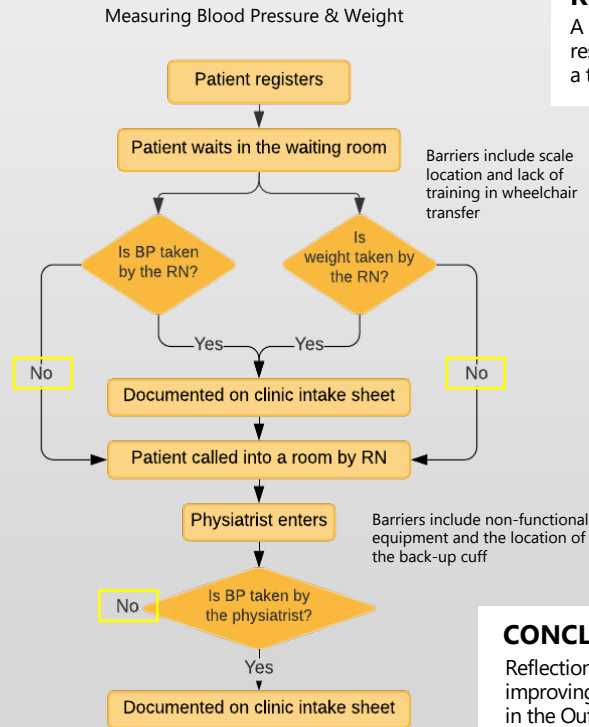
OBJECTIVES

The purpose of this project was to evaluate and reflect on the adherence to screening recommendations for persons with SCI currently being seen at the Parkwood Institute Outpatient Clinic. Additional objectives included determining the proportion of outpatients currently at risk of developing CMD, as well as identifying the facilitators and barriers to completing screenings in the clinic.

METHODS

Clinical data related to dyslipidemia, hypertension, obesity, and diabetes was collected on 48 outpatients from admission into rehab to present. Clinic intake forms were reviewed to determine if blood pressure and weight measurements were recorded at in-person appointments. Analyses were performed to determine adherence and risk.

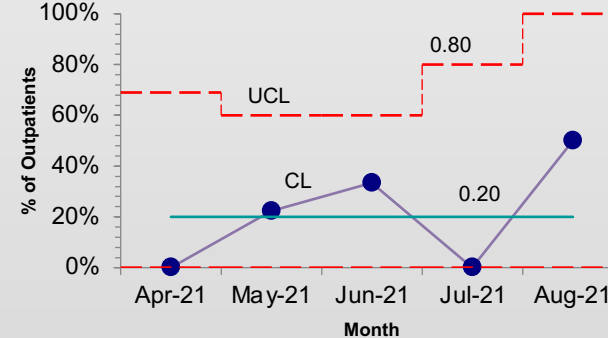
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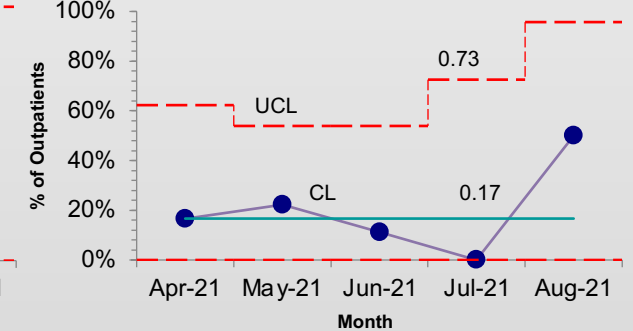
RESULTS

A review of 30 Outpatient Clinic intake forms showed that blood pressure and weight assessments were completed a total of 6 and 5 times respectively. Analyses on data from admission into the SCI rehabilitation program at the Parkwood Institute indicated that 25 patients out of a total of 48 (52%) are at an increased risk of developing cardiometabolic disease, which is defined as having 3 or more risk factors present.

Outpatient Hypertension Screening



Outpatient Weight Screening



The control charts above represent the % of patients who were screened for hypertension and obesity during outpatient clinic appointments from April to August 2021, out of a total of 30 individual visits.

CONCLUSION

Reflections on current screening practices and the progression of risk factors in the SCI population will help to inform better treatment strategies for improving adherence and reducing cardiometabolic risk. The low rates of screening emphasize the need for understanding and addressing barriers in the Outpatient Clinic. Overall, the end-goal will be to work towards increasing hypertension and weight screening to a 100% completion rate.

OBESITY

HYPERTENSION

DYSLIPIDEMIA

PRE-DIABETES/DIABETES

RISK FACTOR	BMI ≥ 22kg/m ² (n = 44)	BP > 130/85 mmHg (n = 35)	HDL < 1.03 or 1.29 mmol/L		HbA1c > 7% (n = 41)	Fasting Glucose ≥ 5.6 mmol/L (n = 43)	Overall CMD Risk: 3+ Risk Factors (n = 48)
			Male (n = 20)	Female (n = 15)			
PREVALENCE	80%	20%	75%	67%	12%	40%	52%