

Multiple Morbidity in Nova Scotian Adults: A Record Linkage Study Using Three Provincial Program Registries

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PURPOSE: Nova Scotia's Provincial Programs – Diabetes Care (DCPNS), Cardiovascular Health (CVHNS), and the Renal Program (NSRP) – linked their registries to describe the burden of multiple morbidities (≥ 2) in adults for 2008/09.

METHODS: Registry records from the 3 Provincial Programs were linked at the individual-level for NS adults (≥ 20 years) meeting the following criteria:

- DCPNS: ≥ 1 ambulatory visit(s) to a Diabetes Centre for diabetes (not gestational) or prediabetes (N=57,278)
- CVHNS: ≥ 1 hospitalization(s) for myocardial infarction, unstable angina, or congestive heart failure (N=27,712)
- NSRP: ≥ 1 Regional Renal Program visit(s) for decreased renal function (not on dialysis) or on dialysis (N=3,530)

RESULTS: Approximately 11% of the entire NS population ≥ 20 years was present in ≥ 1 of the Program Registries (N=79,522). Of these individuals, 89% (N=70,898) were present in a single Program Registry, 10% (N=8,250) were present in 2, and $<1\%$ (N=374) were present in all 3. Although the degree of overlap varied by Program, the majority of individuals from each Program only appeared in their respective Program's Registry (DCPNS: 86%, CVHNS: 72%, NSRP 56%). The overlap increased with age, but there was little difference by sex or geography.

CONCLUSIONS: : The small percentage of cases with multiple morbidities underscores the very different subpopulations covered by the Provincial Program Registries. Within the context of chronic disease management, it is important to recognise that these diseases share common risk factors; however, the lack of overlap in the disease populations also demands that special attention be paid to disease-specific programming.

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