

THE UNRECOGNIZED POTENTIAL FOR DECEASED ORGAN DONATION IN CANADA

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BACKGROUND: The extent that recent stagnation in deceased organ donation in Canada is due to a decrease in the number of medically eligible potential organ donors is unclear.

METHODS: Using data from the Discharge Abstract Database, we estimated the number of potential deceased organ donors (PDs) among Canadian in-hospital patient deaths between 2005-2008. PDs were identified among mechanically ventilated patients aged ≤ 70 y, with diagnoses compatible with neurological death, and without contraindications to donation defined by Canadian Standards. We compared our estimates of PDs to a gold standard (chart audit of in-hospital deaths in Manitoba). Finally information on the actual number of organ donors was obtained from the Canadian Organ Replacement Register to calculate the donor conversion ratio (actual donors \div potential donors).

RESULTS: N= 8,274 of 335,793 deaths (2.5%), were identified as PDs; and this proportion was similar between provinces. Compared to the gold standard, our study method resulted in a two-fold overestimate of PDs. The overall conversion ratio of PDs to actual donors was 15%, but varied between provinces (Table). After accounting for the two-fold overestimate of PDs, N=2,928 identified PDs were not converted to actual donors during the study period.

CONCLUSIONS: These findings suggest that organ donation is limited by failure to convert potential donors to actual donors, rather than low numbers of potential donors. Estimating potential donors using administrative data from hospital separations in conjunction with periodic chart audits can provide timely information regarding the performance of Canada's organ donation system, and may inform strategies to increase deceased organ donation.