Hospital characteristics and the use of evidence-based discharge practices in Ontario, Canada

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Current state of hospital discharge

- Patients and families describe receiving inadequate and incorrect information (Hessenlink et al 2012; Coleman & Roman 2015)
- Day of discharge is frequently confusing & chaotic (Soong et al, 2013)
- If patients return to hospital within 30 days, this may be a sign of a poor discharge process (Vashi et al, 2013; Clancy, 2013)

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Hospital readmission

- 8.5% of patients discharged from hospital in Canada are readmitted to hospital within 30 days (CIHI, 2012)
- 13.3% of adult medical patients are readmitted to hospital within 30 days (CIHI, 2012)
- In Ontario, the current readmission rate is 13.1% for medical patients (HQO, 2016)
- HQO has identified reducing readmissions and improving care transitions as goals (HQO, 2015)

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Evidence-based discharge practices

Project RED (Re-Engineered Discharge)

Decreased readmission rates
Decreased costs
Improved patient outcomes

(Adams et al, 2014; Jack et al, 2009; Markley et al, 2013)

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Development of survey

- Based on 34 indicators of Project RED
- Use of a Delphi panel to determine best indicators of evidence-based discharge practices in Ontario context
- All 34 indicators rated as important or very important, 2 reworded indicators,2 new indicators

(Innis, Barnsley, Berta & Daniel, 2017)

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Administration of survey to Ontario hospitals

- Survey administered to nursing managers and health care providers (n=212) in Ontario hospitals (N=143) in Spring 2015
- Survey endorsed by Ontario Hospital Association
- 99 participants from 79 hospitals
  - Participation rate for hospitals 55%
- Wide range of use of evidence-based discharge practices (EBDPs) in Ontario hospitals

  (Innis, Barnsley, Berta & Daniel, 2017)

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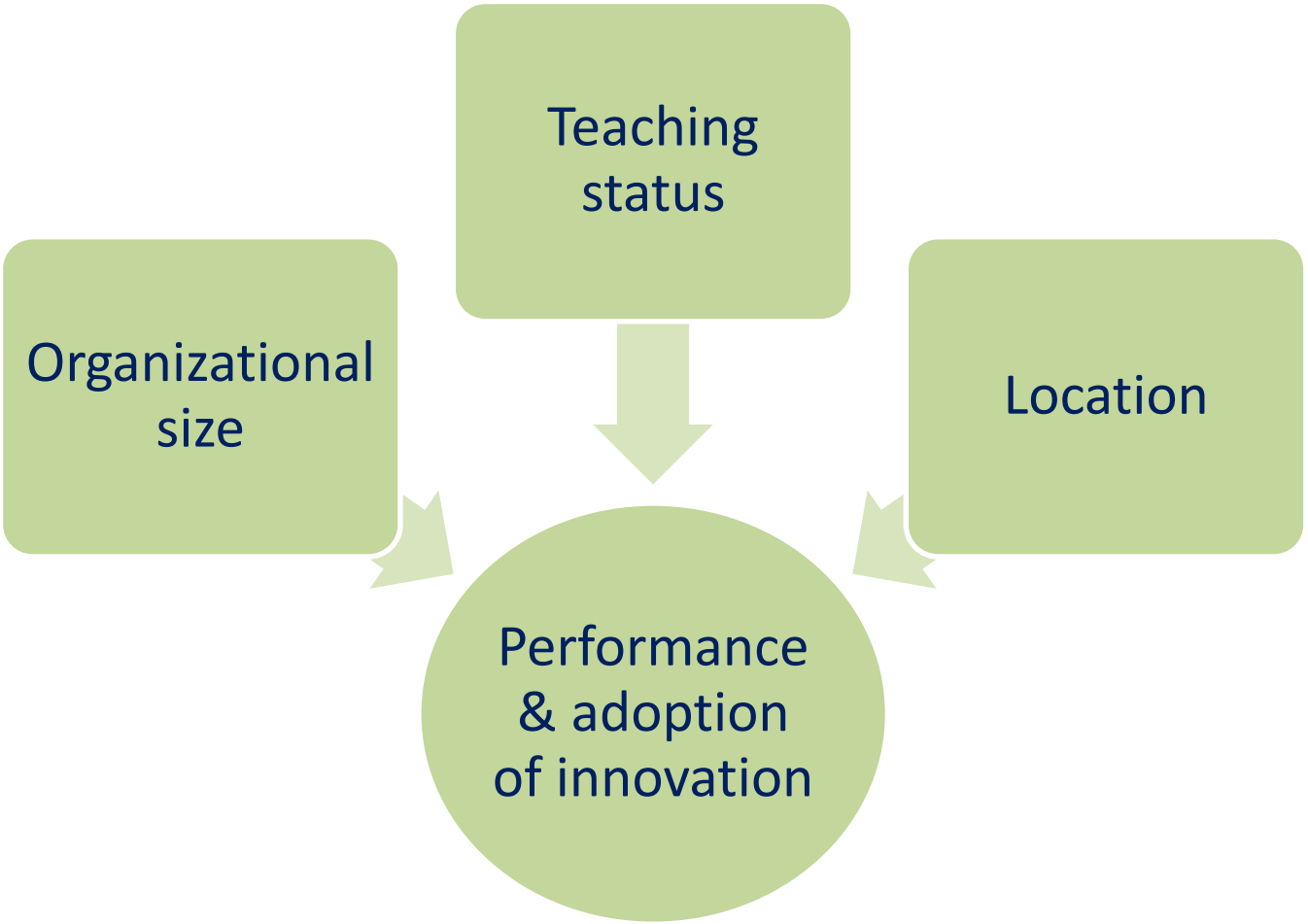
Hospital characteristics & use of EBDPs



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Hospital characteristics & use of EBDPs

- Multiple regression analysis was used to examine the relationship between survey score and
  - Hospital size (number of acute care beds)
  - Teaching status
  - Location (region & rurality)
    - Region: north, south, east, west, central
    - Rurality: population density and travel times for basic and advanced health care services

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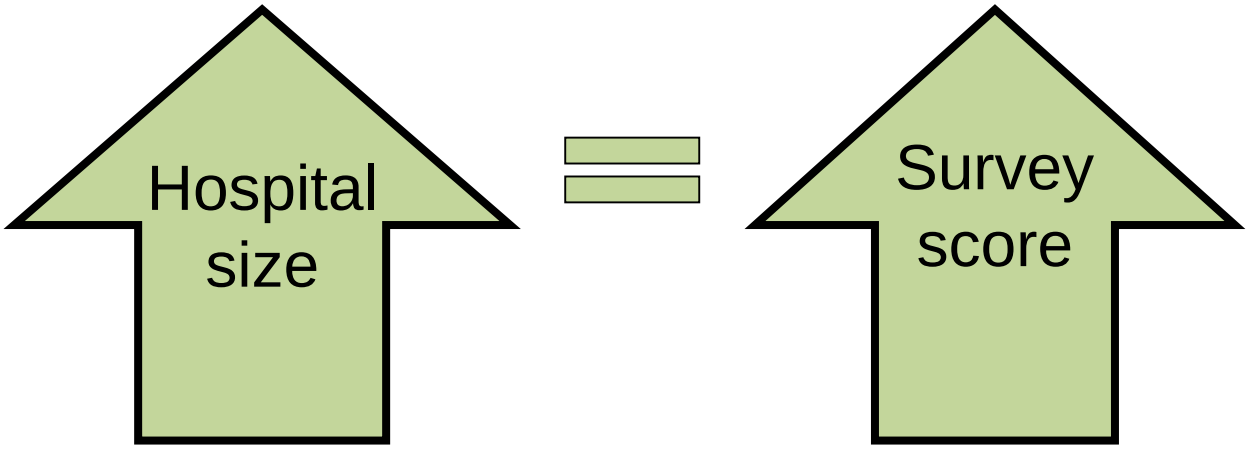
Hospital characteristics & EBDPs

Hypothesis 1: There is a significant relationship between organizational size and the survey score



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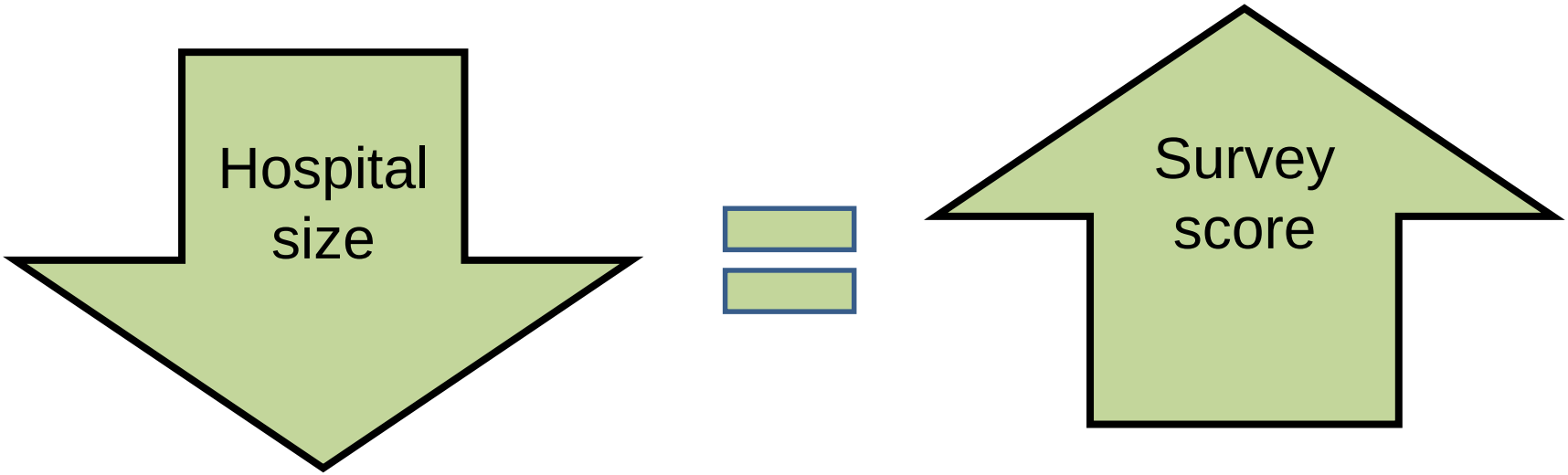
Hospital characteristics & EBDPs

Results

Size accounts for 5% of the variance in survey score



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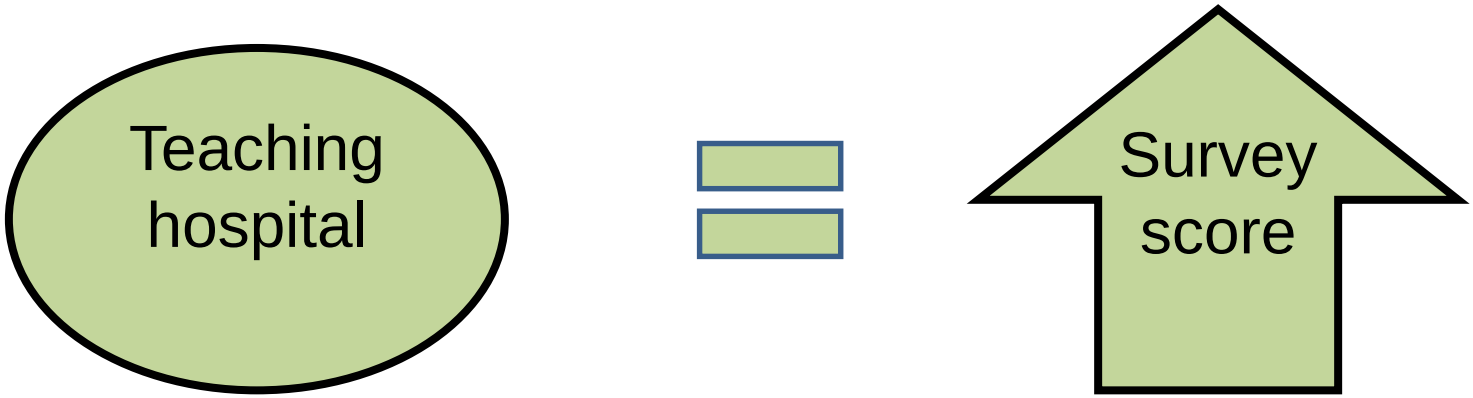
Hospital characteristics & EBDPs

Hypothesis 2: Hospitals with teaching status have significantly higher survey scores than non-teaching hospitals



Hospital characteristics & EBDPs

- Result
- No relationship between teaching and survey score

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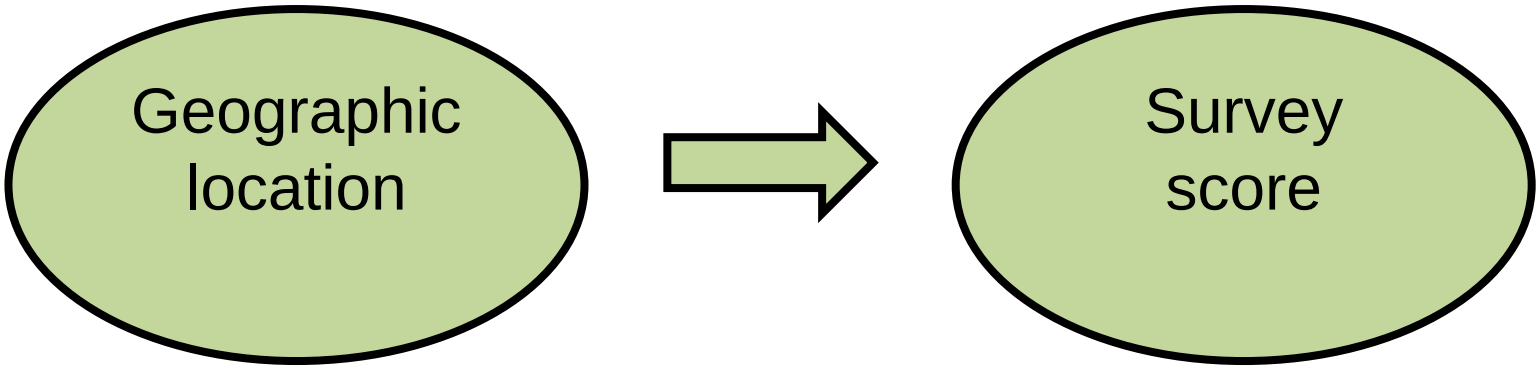
Hospital characteristics & EBDPs

Hypothesis 3: There is a significant relationship between the hospital's geographic location and the survey score



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Hospital characteristics & EBDPs

- Region and survey score
  - Region accounts for 16% of variance in survey score
  - Significant relationship between North and South & between North and East
- No significant relationship between rurality & survey score

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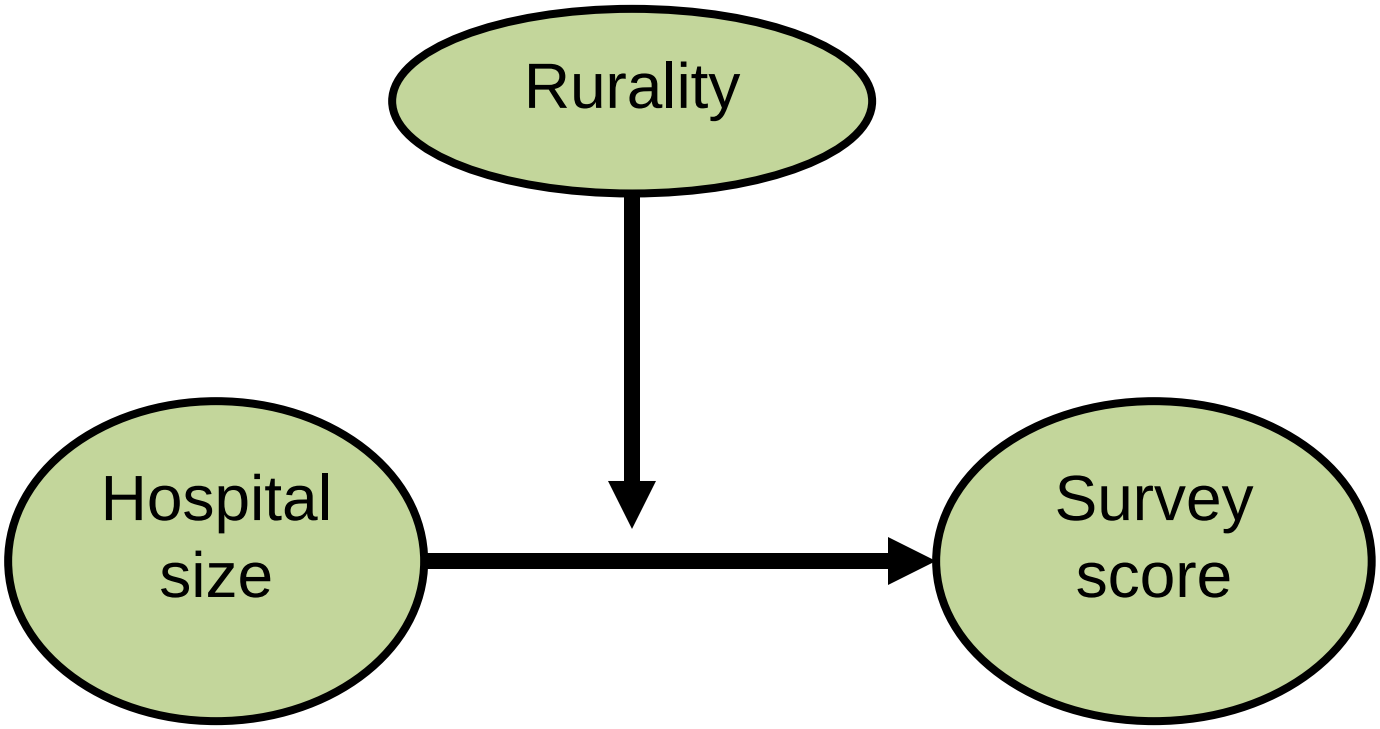
Hospital characteristics & EBDPs

Significant interaction between rurality and hospital size



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Hospital characteristics & EBDPs

Limitations

- Measure of organizational size
- Survey is a self-reported measure
- Survey score treated as a continuous measure
  - Each item given the same weight

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Conclusion & Implications

- Use of evidence-based discharge practices was higher in small, rural hospitals and in the north region of the province
- Question of improved information continuity and sharing of resources between smaller hospitals in rural settings
- Need for future research into the reasons for the differences between regions

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Questions?

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