



The Cost of Hospital Stays: Why Costs Vary

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Objective

- May help to inform a variety of financial decisions, including those related to effective case and resource management, budgeting, care planning, hospital funding, program planning and restructuring

Overview of hospital spending in Canada

- In 2007, hospitals accounted for 28% of total health spending (10.6% of the GDP) versus 45% in 1975
- In 2005, about 91% of hospital spending was paid for by the public sector

Where does the money go?

- Bulk of hospital spending is for operating costs (e.g., salaries and benefits for hospital staff)
- Spending involves the provision of various services (e.g., acute inpatient and outpatient care, day surgery, ED)
- However, acute inpatient care tends to account for the majority of hospital costs

Why costs may vary

- **Type of disease or condition** being treated
- **How many and what type of interventions** are used in a single hospital visit
- **How and where** a patient is treated
- **Type of patient** (age, number of comorbidities)
- **Length of hospital stay**

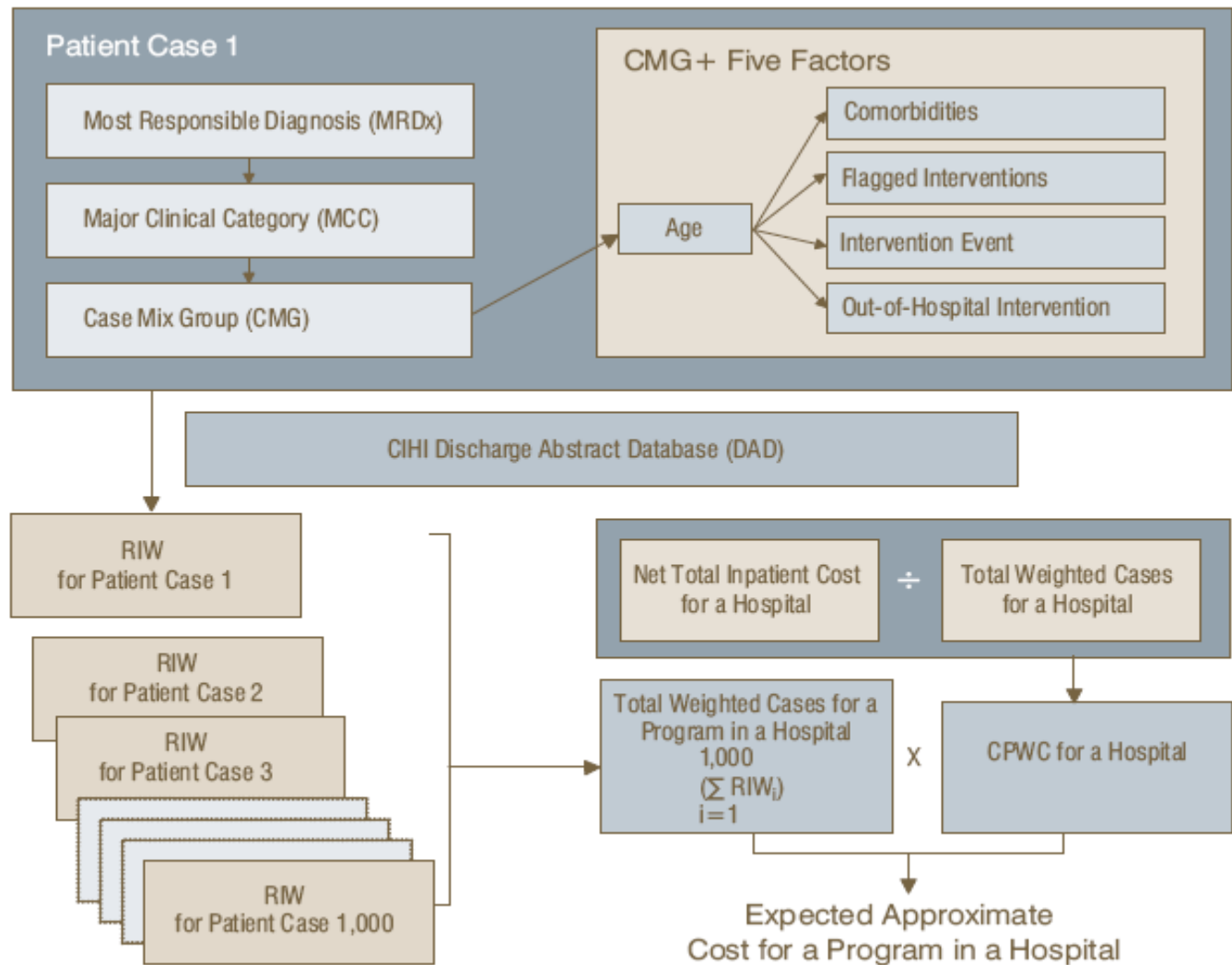
What is CMG + ?

- This methodology is used to create distinct patient groupings that are clinically similar and/or homogenous in terms of the hospital resources that are used

CMG + and the five factors

- **Age category:** the **age** of the patient
- **Comorbidity level:** the **number of illnesses** a patient has beyond the main reason for hospitalization.
- **Flagged intervention:** specific **“flagged” procedures associated with higher resource consumption**, such as dialysis
- **Intervention Events:** The number of **specified intervention events that are performed in a single hospital visit**. That is, a patient who just underwent an intervention may be required to return to the surgical suite or visit another procedure suite for another intervention event during their hospital stay.
- **Out-of-Hospital (OOH) Interventions:** Selective **interventions that are performed outside the treating/admitting facility**, such as pacemaker implantation

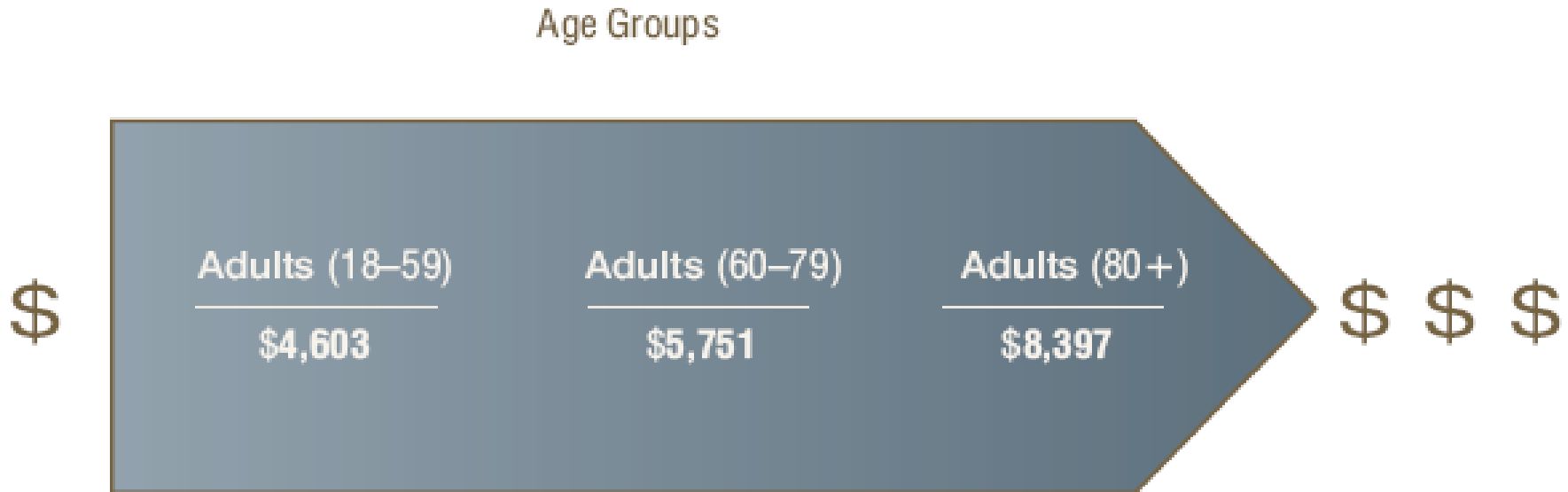
Using CMG + and CPWC to calculate average costs



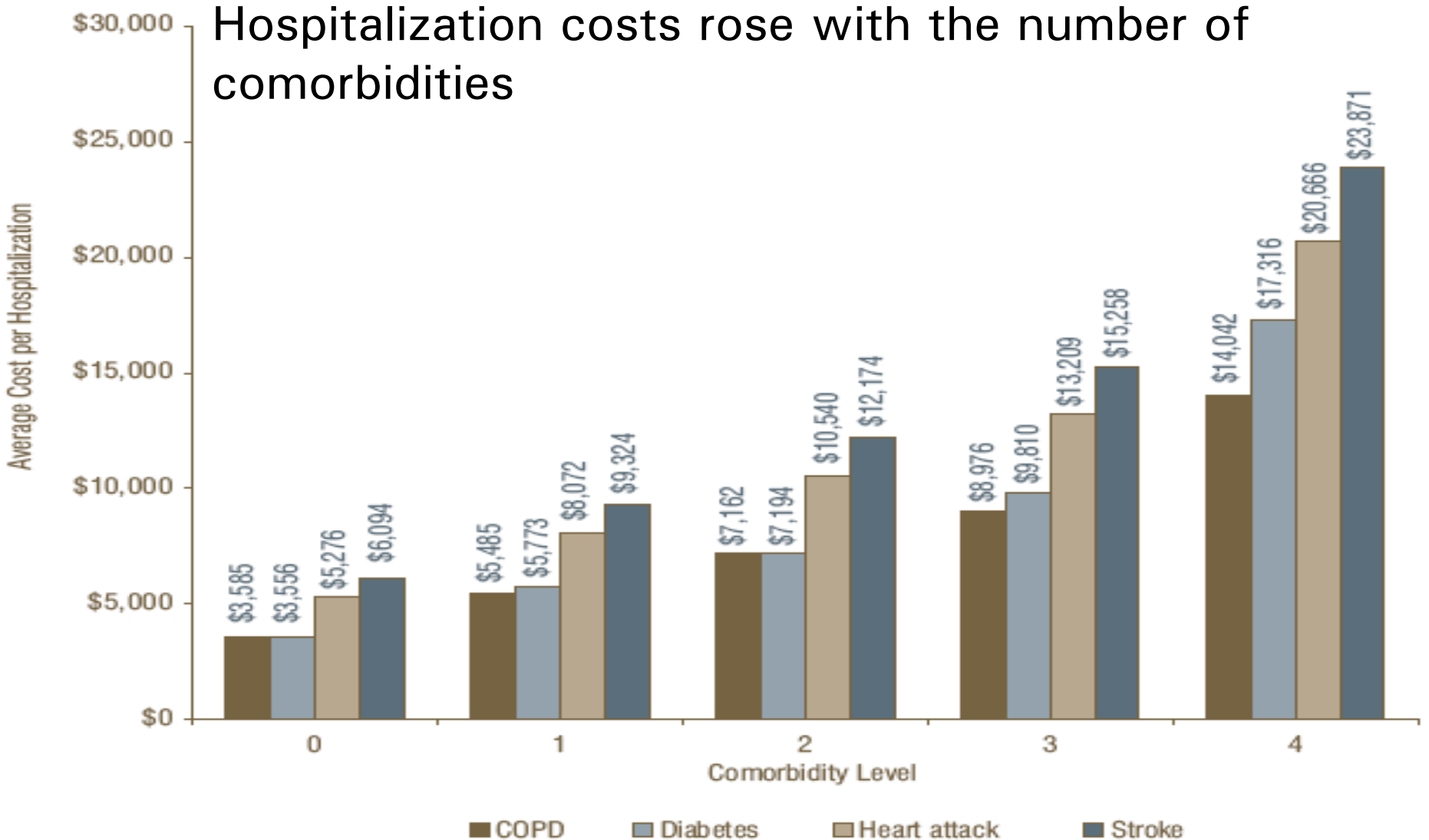
Factors affecting hospitalization costs:

Age

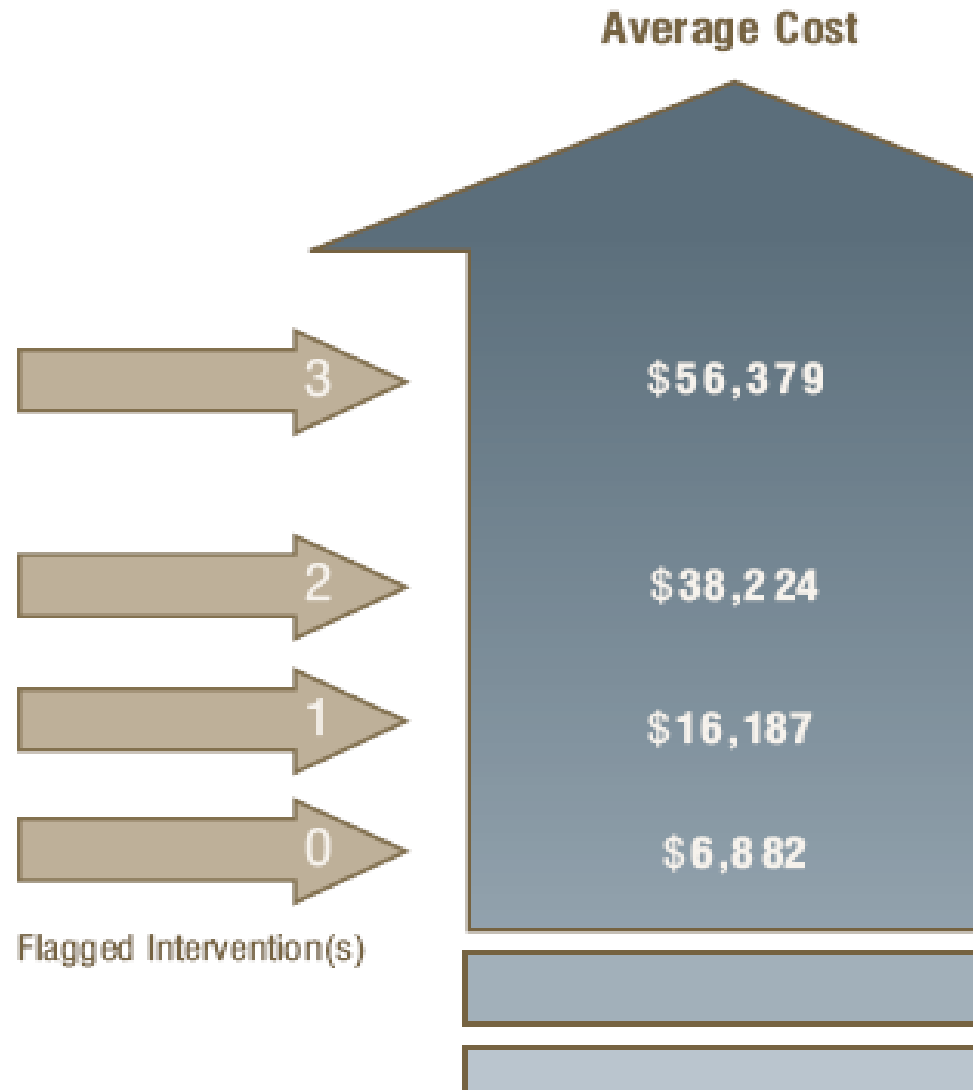
Average costs of hospitalization for treating Parkinson's disease patients increased with age



Factors affecting hospitalization costs: Comorbidity level

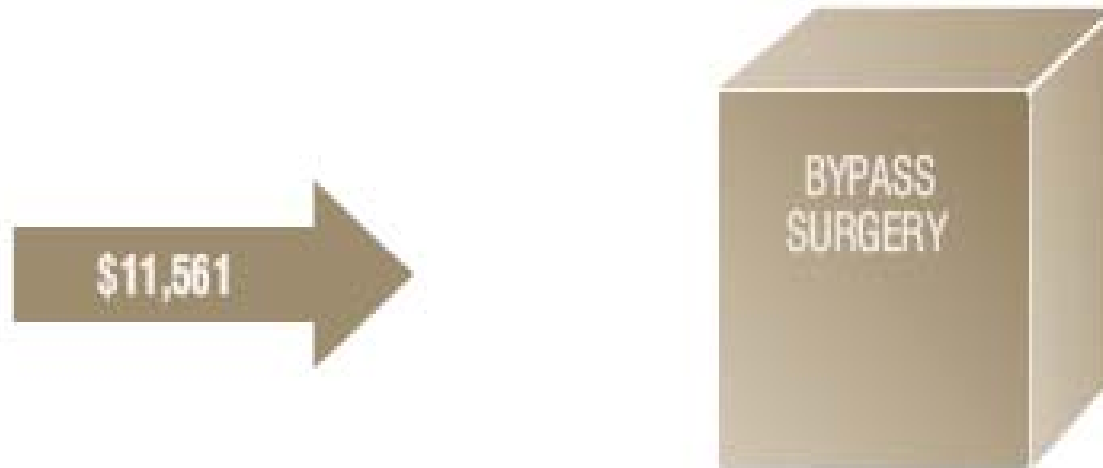


Factors affecting hospitalization costs: Flagged Intervention



For seniors (60 to 79 years) treated for respiratory failure, there was a significant change in average cost per hospitalization as the number of flagged procedures increased.

Factors affecting hospitalization costs: Intervention event

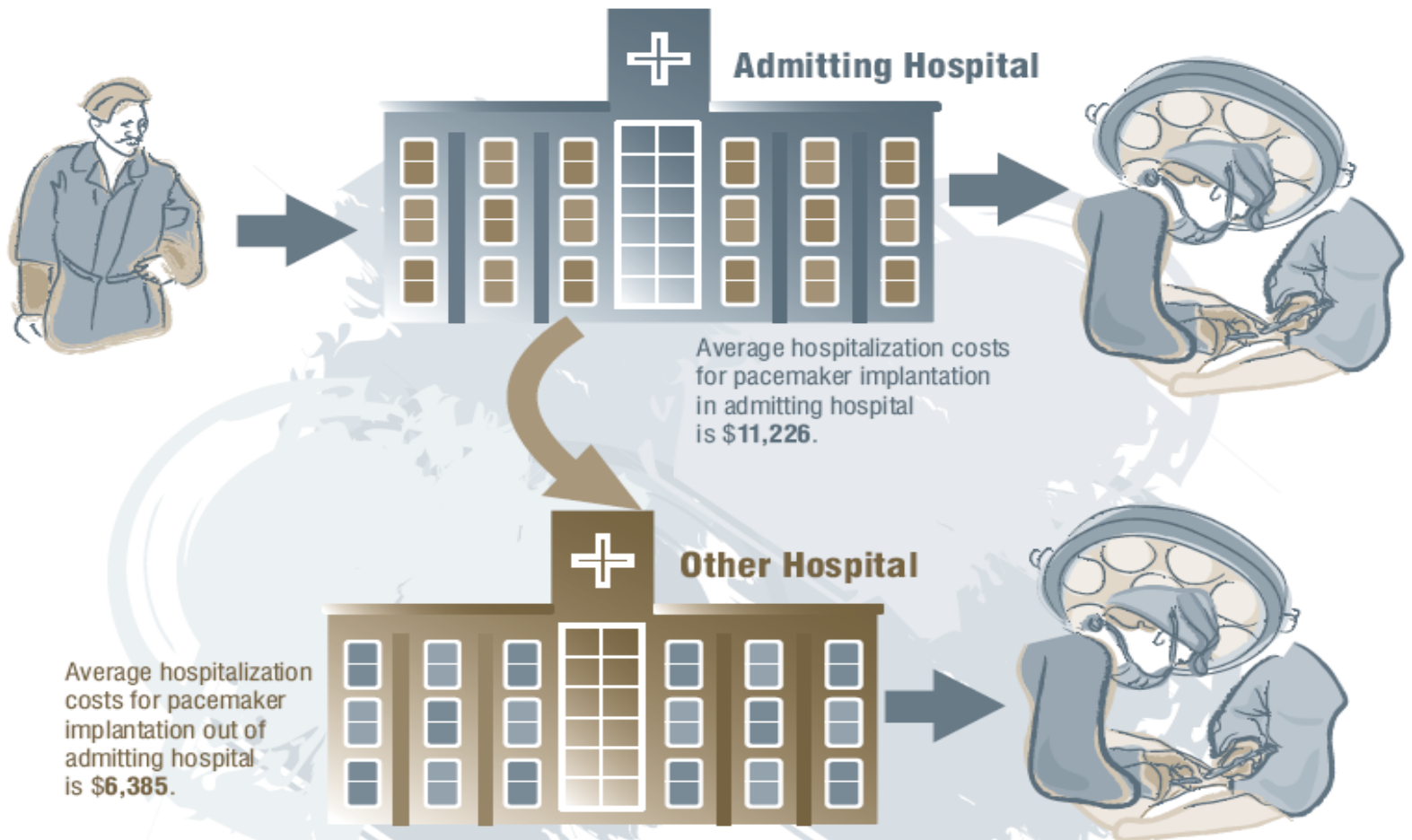


The average hospitalization cost nearly doubled for typical bypass surgery patients who had two intervention events compared to those who had only one during a single hospital admission

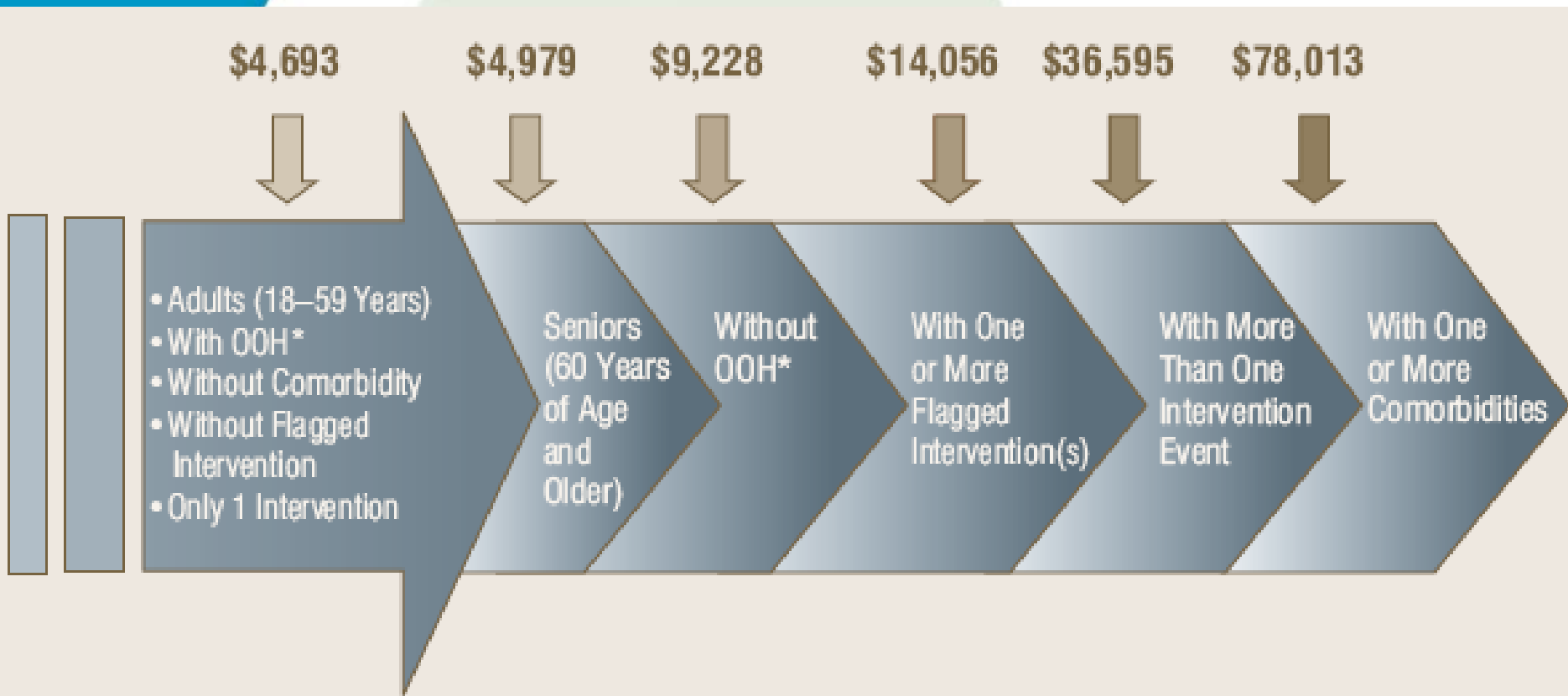


Factors affecting hospitalization costs: Out-of-hospital (OOH) intervention

The difference in cost of a pacemaker implantation performed in an admitting hospital versus out-of-hospital



Cumulative effect of the five factors on costs for angioplasty patients



Some information gaps

- How do **differences in the financing** of hospital, physician and drug expenditures **influence outcomes and cost efficiencies?**
- How do **different combinations of public and private financing and service delivery** affect costs, access, quality, outcomes and satisfaction?
- **To what extent do certain factors** (e.g., differences in staffing/practice patterns, the organization of hospital services and the availability and use of services outside of hospital) **explain variations in hospital spending** across the country?

Questions/Comments



For the full report please visit:

http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=AR_1970_E