

Research Shows Older Albertans Are Not High Users of Hospitals

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Research Background

Studies on hospital utilization have often found:

- Older persons are “high” users of hospitals
 - The use of hospitals increases as death nears
 - Death often takes place in hospital
- * Older people are typically portrayed as high users, while younger people are not...

Research Background

A systematic review of past studies focusing (in part or in whole) on “high users” of hospitals revealed:

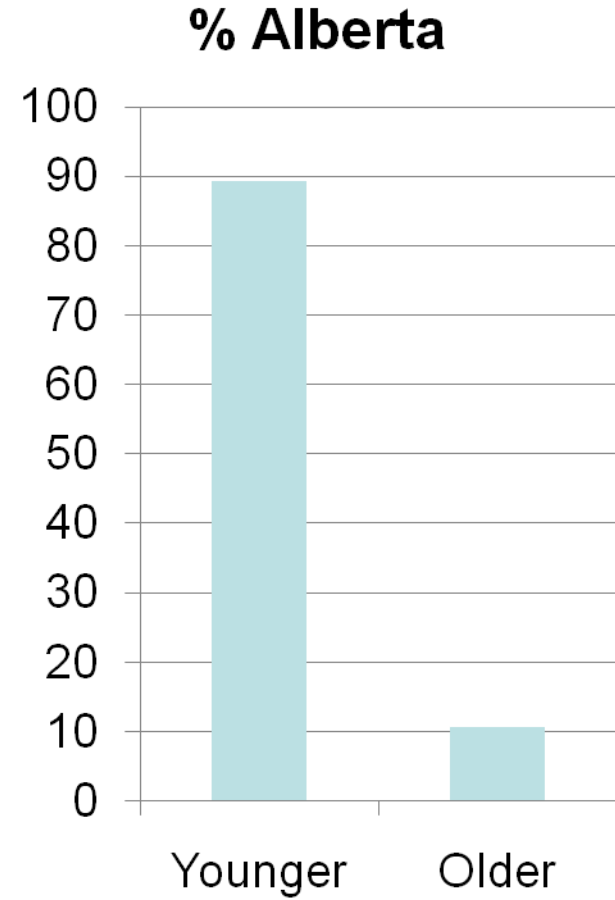
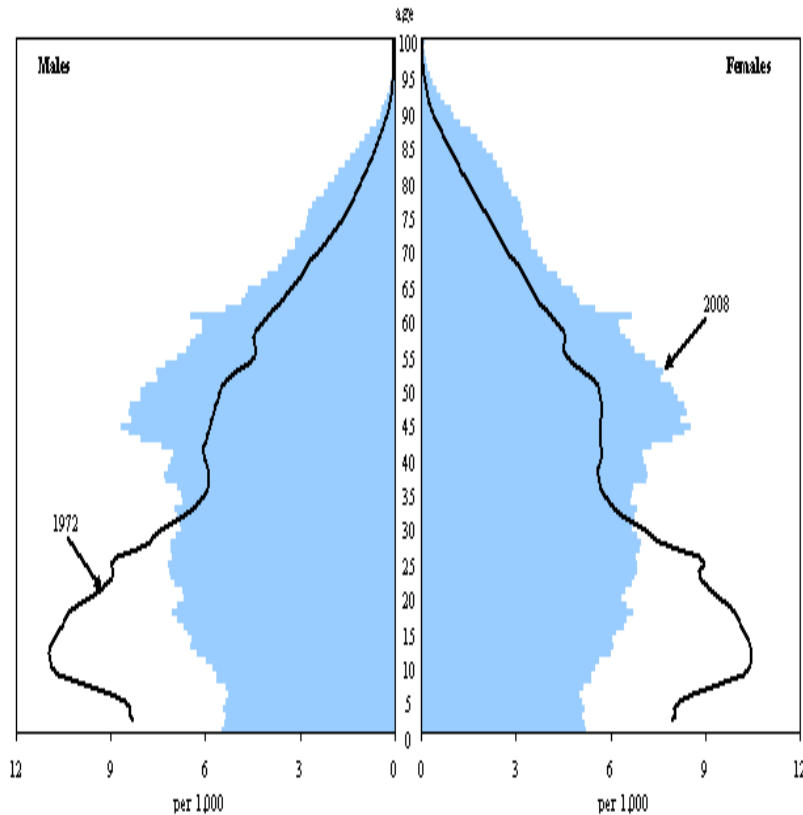
- Few studies (N=21, in Canada or USA).
 - Most report on 1960-1999 hospital data; outdated given health system/care changes.
 - Half only studied seniors' hospital data.
- * Many common beliefs about seniors and their use of hospitals could be myths ...

Research Background

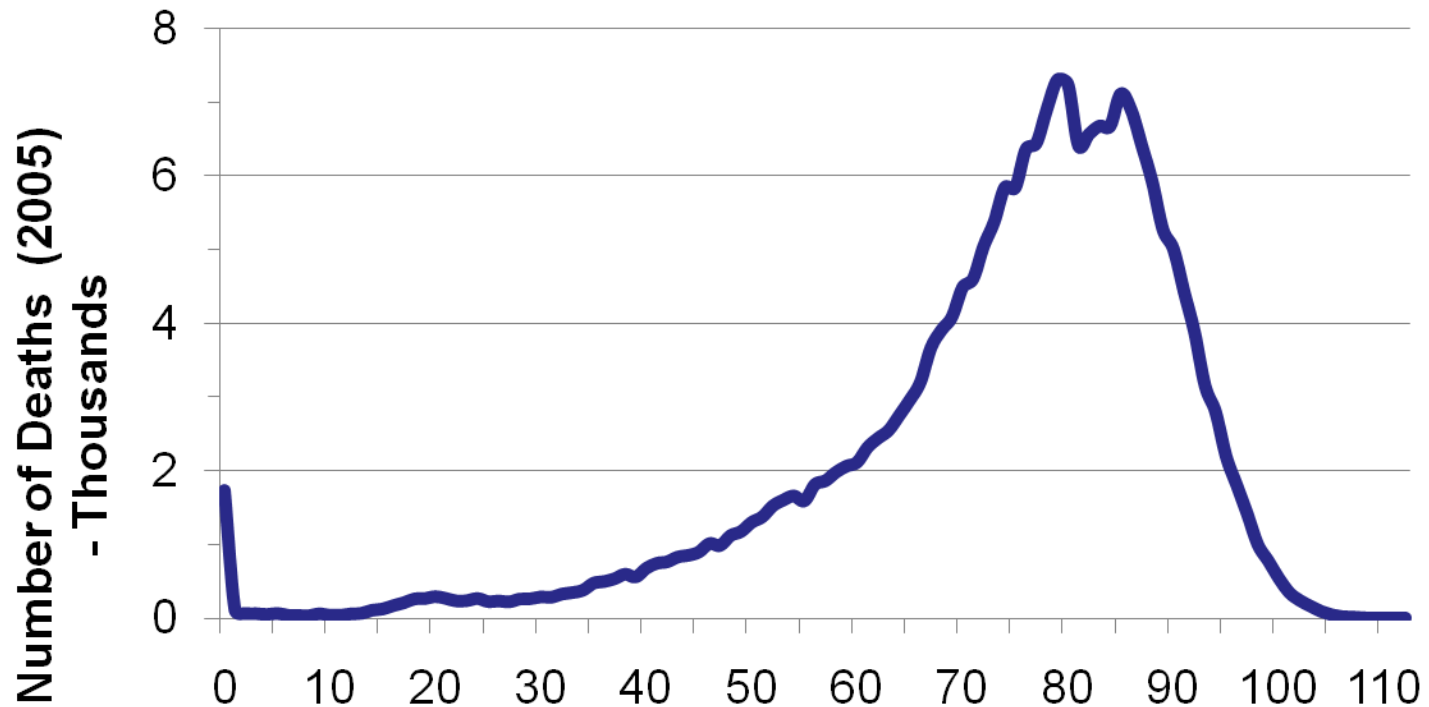
With population aging accelerating and with death most often taking part in old age now, research involving current hospital utilization data is needed...

*for evidence-based action so that the end-of-life care needs of older persons are met, and that myths about seniors and their use of health services are identified and dismissed.

Canada is aging, but has relatively few (14%) older persons



Age at Death In Canada



Mean = 74.2 Median = 78 Mode = 82 SD = 17

2% aged 0-22 and 22% aged 0-64

22% aged 87+, with 78% age 65+

Research Method

Two years (April 1, 2006- March 31, 2008) of complete individual-anonymous hospital inpatient, emergency room (ER), day-surgery department, and outpatient department data purchased from Alberta Health and Wellness to:

- Compare use between older (65+) and younger (<65) persons, and
- Describe high users of hospitals.

Research Method

Two years of data requested as a quality measure to check for correct data and analysis of data.

Findings of particular interest as:

- Comprehensive hospital use focus, not just inpatient bed utilization,
- 50% of 13,000 hospital beds closed 1993-95,
- 6,800 beds now despite population growth from 2,670,726 in 1993 to 3,632,483 in 2009

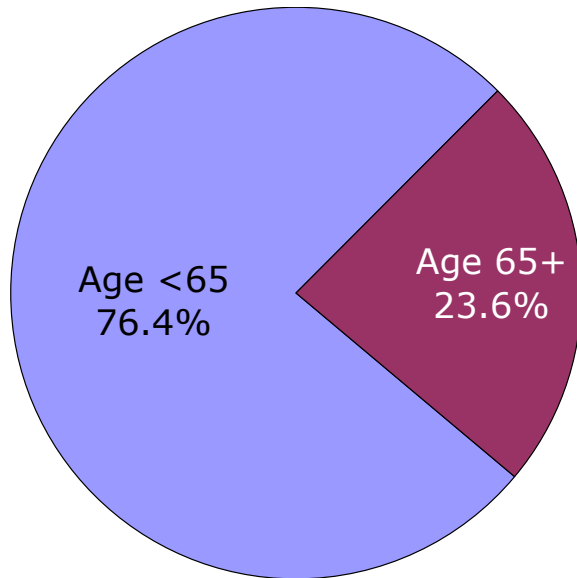
Hospital Inpatients (discharged from a hospital bed after one or more days of care)

Year	Alberta population	Albertans hospitalized	% hospitalized
2006-7	3,290,350	275,738	8.4%
2007-8	3,421,300	281,320	8.2%

*Note: 18,500 -
19,000 deaths
each year*

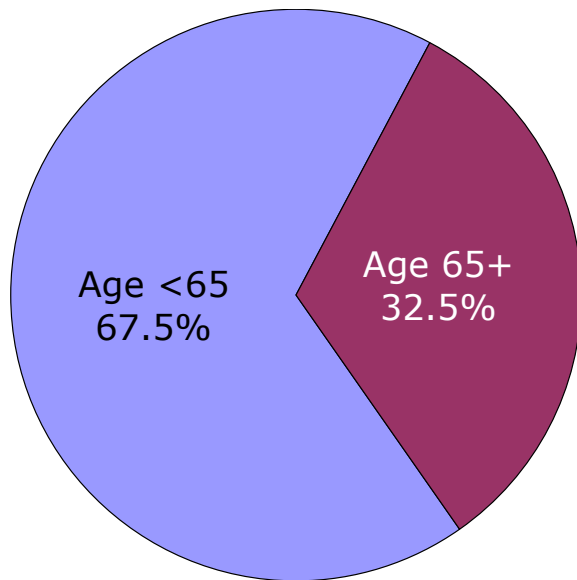
*Note: 11% of
Albertans are
aged 65+*

Hospital Inpatients, by Age



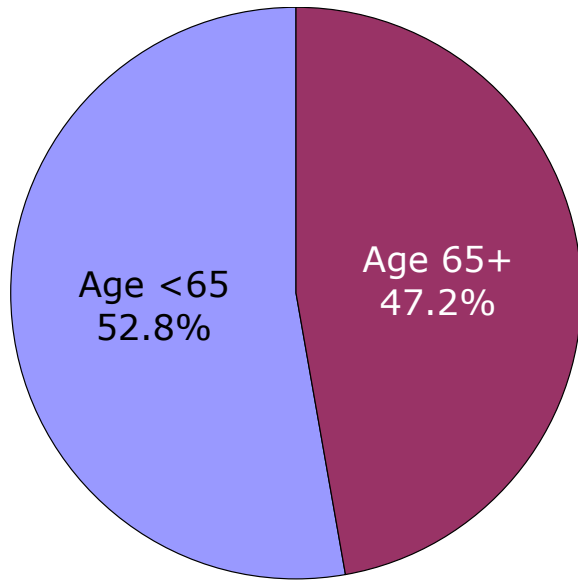
- 76.4% of all people admitted to hospital were under 65 years of age
- Average age was 39.5
- 1/2 were under age 36
- Children under the age of one year were most often hospitalized; this age group was responsible for 17.4% of all hospital admissions

Critical Care (ICU) Admissions, by Age



- 67.5% of all people admitted to critical care units were younger (under age 65)
- Younger people also had longer critical care unit stays than older people (6.5 days or 143.7 hours versus 4.7 days or 107.3 hours on average)

Share of Inpatient Hospital Days, by Age



- 52.8% of total inpatient hospital days in 2 years were used by persons under the age of 65
- Average stay of younger people was 7.0 vs 15.1 days for older people
- 25.1% of high users by repeat admissions or days of care were rural people, yet only 20.0% of Albertans are “rural”

Hospital Inpatient Tests and Treatments

On average, during each hospital stay,

- Younger patients had 1.1 procedures performed.
- Older patients had 0.9 procedures performed.

AND:

- Younger patients had a total of 498,031 procedures performed or 72.3% of total
- Older patients had a total of 191,101 procedures performed or 27.7% of total.

Higher Users of Hospital Beds

* 1.0% the first year and 1.4% the second year were admitted 2+ times to hospital. These people :

- averaged 57.0 years of age
- often suffered from a mental illness

* 2.1% the first year and 2.1% the second year had stays lasting 30+ days. These people:

- typically waited in hospital for a nursing home or rehabilitation bed
- 16.4% of these died while waiting

Dying in a Hospital Bed

* 3.3% of all persons admitted to hospital died in hospital, and usually in an inpatient bed.

These people :

- were more often elderly (76% age 65+)

* Half of all deaths in the province over these two years occurred in hospital.

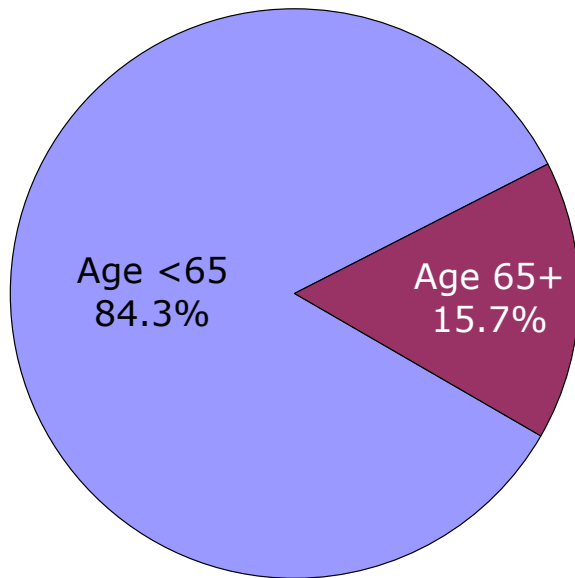
** Other hospital services should also be considered, as care is often ambulatory now.

Ambulatory Care Admissions (ER, Out-Patient, and Day-Surgery Departments)

Year	Alberta Population	Albertans Admitted	% Admitted
2006-7	3,290,350	1,466,499	43.7% vs 8.4% to a hospital bed
2007-8	3,421,300	1,480,693	43.3% vs 8.2% to a hospital bed

*** For every 1 inpatient, 19-20 are admitted for ambulatory care**

Ambulatory Care Admissions, by Age



- 84.3% of all people who went to hospital for ambulatory care were under 65 years of age
- Average age was 38.8
- 1/2 were under age 38
- Children aged 1 year were the most common ambulatory patients

Ambulatory Care – Tests and Treatments

On average, during each ambulatory care visit:

- Older patients had 1.19 procedures performed (and 23.2% had none).
- Younger patients had 0.95 procedures performed (and 34.6% had none).

BUT:

- 498,031 (72.3%) procedures on young patients.
- 191,101 (27.7%) procedures on older patients.

Discussion and Conclusions

This study found people of all ages can use hospitals:

- Younger people were the most common (76.4%) inpatient and (84.3%) ambulatory patient.
- Half of all deaths took place in hospital, and although hospitals can provide compassionate end-of-life care; this could be shifted to homes, nursing homes, and hospices with support...

Research is needed in other provinces and countries to examine current hospital data to address myths about the high use of hospitals by older persons.

Disclaimer

Alberta Health and Wellness, and the Government of Alberta, are not responsible for this study and have no comment on it.

Acknowledgements

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