Background Falls are common among older adults around the world. Several complex risk factors contribute to falls and many promising and proven falls prevention strategies have been reported in the literature. While the cost of falls have been examined, the variation in costs based on age, sex and area of residence such as rural and urban settings have not been examined.

Purpose This study was carried out to assess the direct cost of falls injury hospitalisations in older residents aged 65+ years (seniors) and their implications on health care delivery in the growing seniors population in the Canadian province of Saskatchewan.

Methods We performed descriptive and statistical analyses on hospital records of seniors hospitalised with fall injury diagnoses from 1995/96 to 2004/05. We derived the direct cost using length of stay (LOS), resource intensity weight (RIW) and average cost of acute care (COST) for each year. The costs were calculated for different age groups (65–74, 75–84, 85+), sex (male, female), and area of residence at time of injury (rural, urban, and north).

Results A total of 30,757 fall injury hospitalisations were recorded over a 10-year period. In addition, the fall injury hospitalisation rate varied with higher rates with advancing age, female gender, and rural location of residence. The average (±SE) 10-year RIW, LOS and COST were 2.13 (±0.02), 13.66 (±0.23) days and $6088 (±61.88), respectively. We observed statistically significant differences (p<0.01) in the RIW and COST of hospitalisations across the 10 years, both sexes, age groups and 13 health regions in the province. All of these factors except sex were significant (p<0.01) for the LOS. Males had slightly higher LOS and COST than females, while both LOS and COST increased with advancing age. Significant decline in LOS and COST occurred over the 10-year period. Both LOS and COST in the cases who died in hospital were more than double the values in those who survived. The COST was higher in cosmopolitan urban and Northern areas of the province as compared to other urban and rural areas.

Significance and Contribution to the Field An increasing trend in burden of direct health care costs associated with falls injury hospitalisation among Saskatchewan senior residents is evident. This would have implications in planning and budgeting for future health care needs of the growing population of seniors in the province and particularly in the heavily impacted regions and areas.