## EXPERIENCE THE BIOLOGY OF FRAILTY

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### **Frail Elder**



**Complex Surgery** 



# Frailty Linked with Muscle Mass/Sarcopenia







Healthy

Thin/sarcopenic Muscle

Obese/sarcopenic



## Government Funded Research Outcomes:



\$150K – National funds

- Examining the biology of frailty
- Loss of 5% of muscle mass/day in bed



- Muscle mass measured by CT scan can predict surgical outcome
  - Post-operative complications & death



### <u>Elder-friendly Approaches to the Surgical</u> <u>Environment (EASE) Study</u>



\$750K – Provincial funds







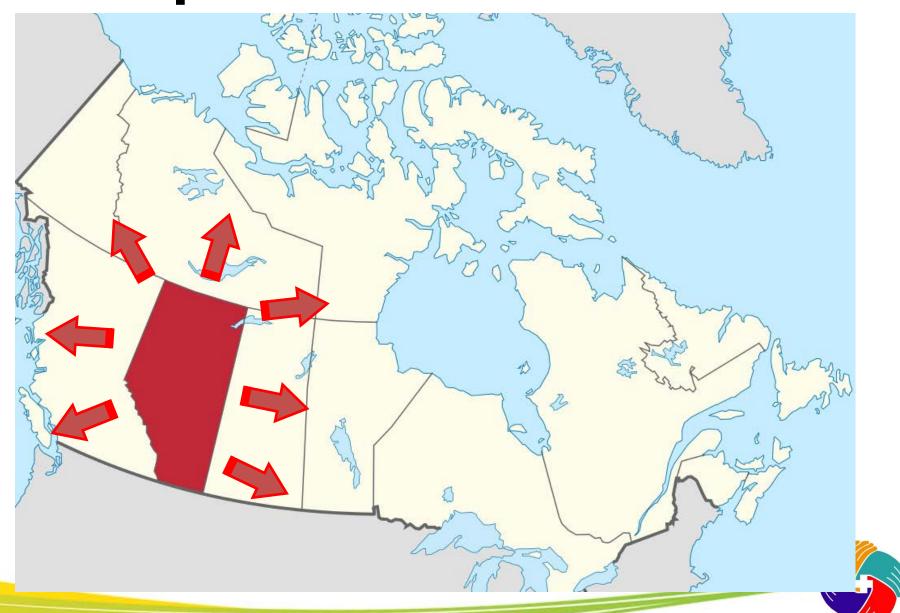




- Decreased rates of delirium (confusion) after surgery
  - 26% to 9%
- Improved strength following surgery
  - More Sit-to-Stands by discharge
- Decreased Length of Stay
  - 14.5 to 9.7 mean days = 34% less hospital stay



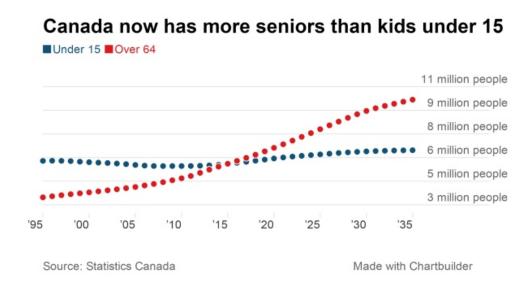
### Implement Canada Wide





### **How You Can Help**

By 2030 there will be > 9 million seniors



- \$3.6 billion savings in 1 year with 30% ↓ hospital stay
- Investment to Implement \$5 million

