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So What's In It For Us?

Basic Health Economics of FLS

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Outline

- An introduction to cost-effectiveness
- Cost of fractures in Canada – current and future
- The difference an FLS will make

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Introduction to cost-effectiveness

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When you assess a new "Health Technology"

- You compare it to the way care is currently being given
- The new way can work better, or less well
- The new way can cost more, or cost less

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Applying the results in practice

If the new technique:	Then you should:
• Works less well, and costs more	• **Definitely NOT do this!**
• Works less well, and costs less	• **Proceed with caution; not likely advisable**
• Works better, and costs more (common situation)	• **It depends...**
• Works better, and costs less (quite rare)	• **Definitely DO this!**

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What's 'works better' for fragility fracture care?

- Lower mortality
- Fewer repeat fractures
  - Less pain, better mobility, remain active
- More likely to retain independence
  - Less need for long-term care
  - Less burden on informal caregivers

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Cost of Fractures in Canada

Our Projections - Fractures

- Starting point is Canadian hip fracture data from 2007
- Longitudinal hip fracture data from Quebec (1997 to 2011) tightly fits linear slope
- Apply proportionately to other provinces and project forward
- Can use accepted, published ratios to project other types of fracture

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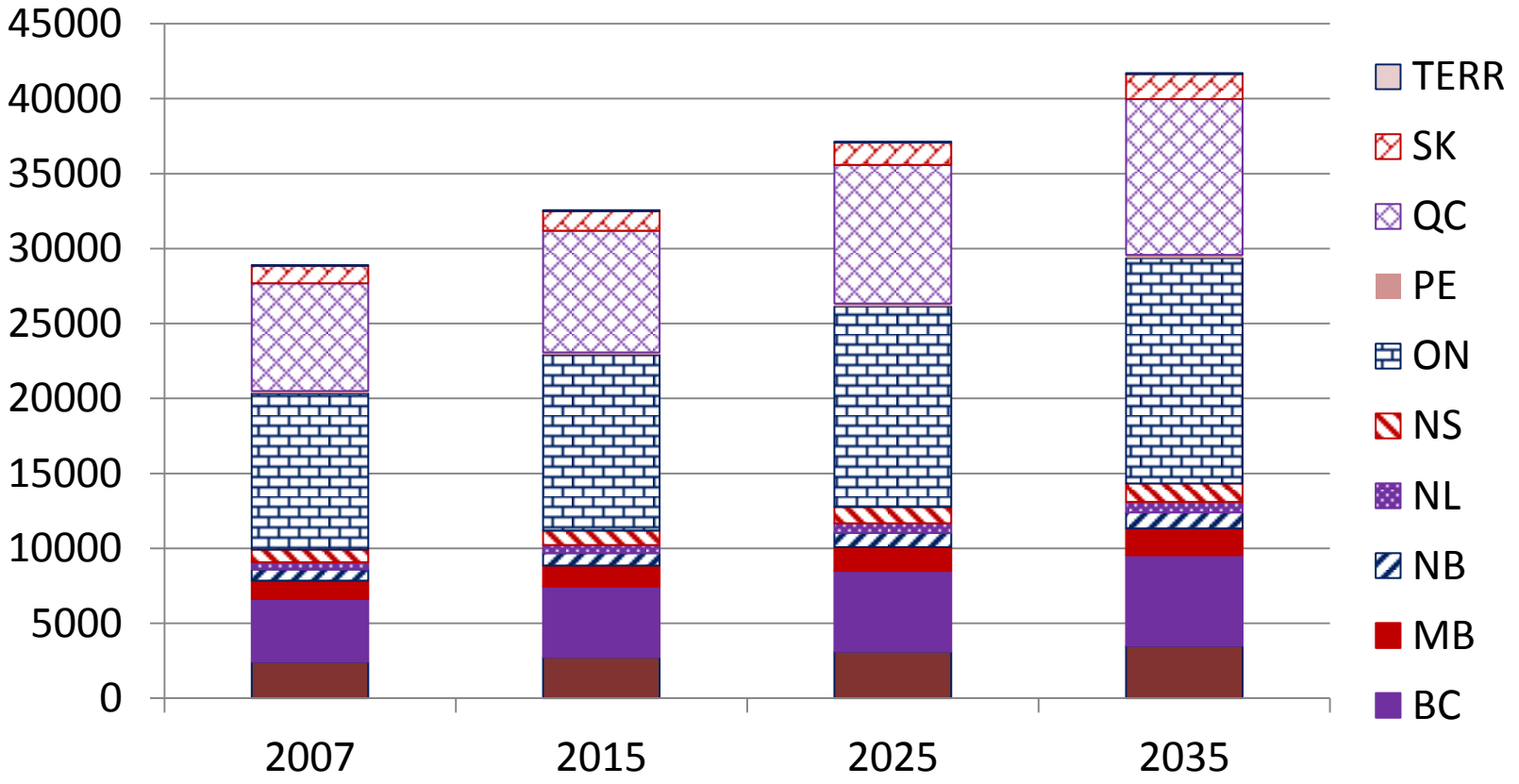
Hip Fractures to 2035



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100 hip fractures means:

- > **$2,140,000** for direct, acute inpatient care
- **2300** acute care bed-days
- ~**40** long term care admissions

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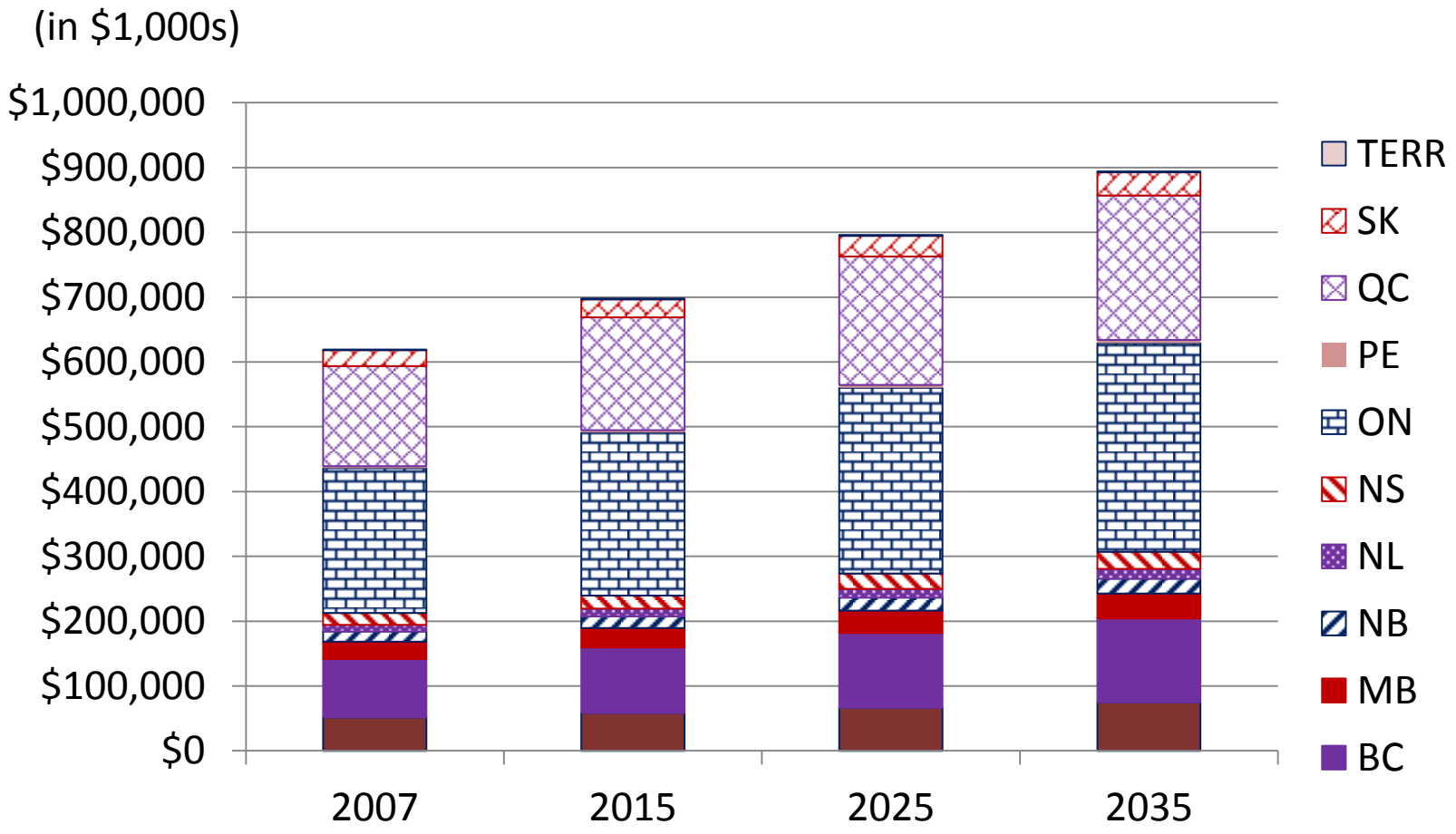
Acute care hip fracture costs



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~$900 Million in acute care hip fracture costs in 2035 means:

- about $1.7 Billion in overall direct fracture costs
- about $5.7 Billion if indirect and long term care costs are included

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The difference an FLS will make

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What the studies say:

- St Michael's (Toronto)
- Capital Health (Edmonton)
- Glasgow, UK
- Netherlands
- USA
- Australia

✓ **FLS works better and costs less**

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Remember from a few minutes ago:

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• Works better, and costs more (common situation)	• **It depends…**
• Works better, and costs less	• **Definitely DO this!**

- Even if real cost for program turns out to be twice what was estimated in the studies, FLS still **cost effective**
- Sensitivity analysis shows that cost of the FLS coordinator is a significant variable

Our Projections - Results

- One-year based on St Michael's hospital results (3 hip fractures prevented per 500 patients assessed)
- Eight-year based on Glasgow results

Our Projections – Savings

- Calculated for acute care costs linked to hip fracture only (very conservative)
- Varies with assumed ‘coverage’ of FLS
- Gross, not net of cost of program
- Cost of program: Salaries, office overhead, increase in prescription drug use, possible increase in BMD testing
- Also savings on bed days, operating room time, LTC admissions

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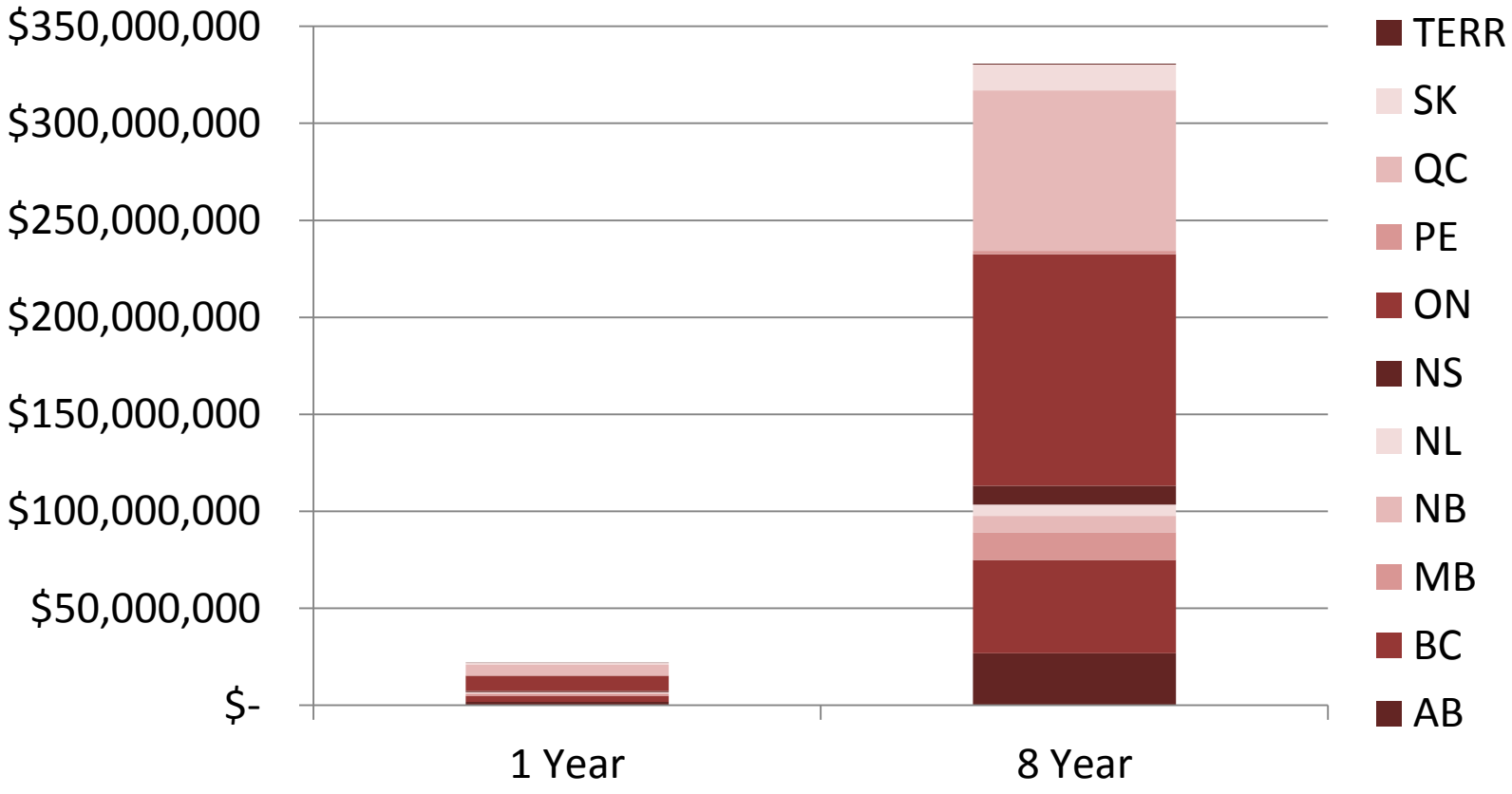
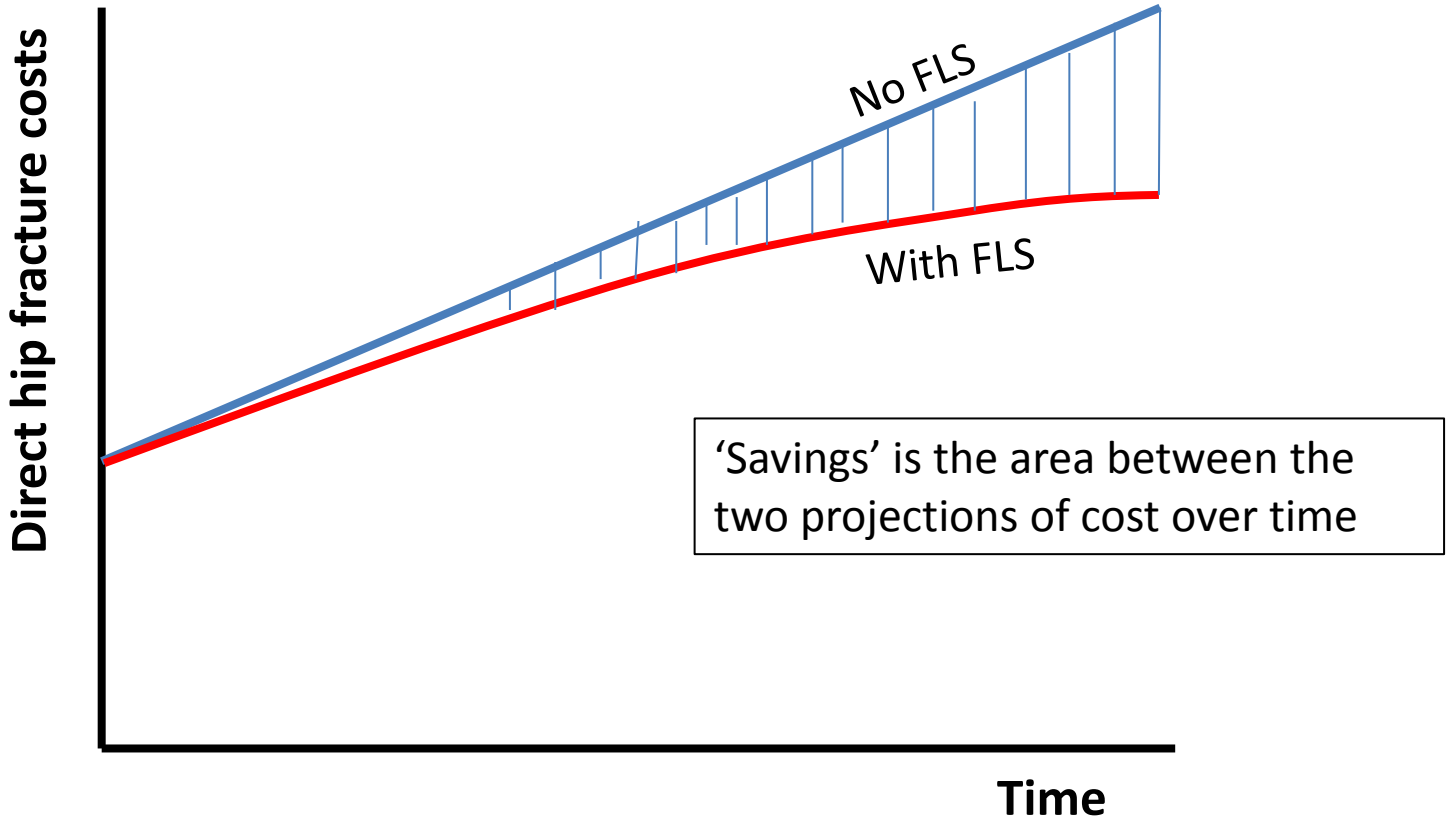
Projected savings from FLS – acute hip fracture costs



What do we mean by savings??



'Savings' is the area between the two projections of cost over time

Practical challenges

- Savings is not the same thing as budget impact, especially in the short term
- Cost of implementing an FLS may fall on a different budget/cost centre/pot of money than the one that accrues the benefit
- Jurisdictions may control personnel and other costs in different or separate ways

Recap

- FLS works better than the current way of providing care - lower mortality, fewer repeat fractures, less pain and more independence for patients. It also works better than education-based programs
- FLS costs less – because the system doesn't have to treat as many fractures
- FLS is most efficient when the cost of the dedicated FLS staff PLUS the cost of the referral resources are TOGETHER minimized
- FLS also saves operating room time, acute care bed days, and long term care admissions (over what would happen without an FLS)
- Maybe one way to phrase it is "Can your system afford NOT to implement an FLS?"

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Remember

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• Works less well, and costs less	• **Proceed with caution; not likely advisable**
• Works better, and costs more (common situation)	• **It depends…**
• Works better, and costs less Like FLS!	• **Definitely DO this!**

QUESTIONS