

Exercise for falls prevention: An inventory of exercise programs

IMPACT, the Winnipeg Regional Health Authority
2 November 2012



Falls in older adults

In one year in Canada:

- One **third** people over 65 years of age will fall
- **Half** of individuals over 80 years of age will fall
- Older adults who fall once are more than twice as likely to fall again
- Over one **third** of Canadians admitted to hospital due to a fall will be discharged to a nursing home or long-term care facility

(O'Loughlin 1993; Stalenhoef 2002; Tinetti 2005; Scott 2010)



Falls in older adults

In Winnipeg:

- About 1650 older adults are admitted to hospital due to a fall each year
- Approximately 90 seniors die from injuries associated with falling each year
- The average length of hospital stay for a fall is 33 days -- 10 days longer than that for admissions due to other injuries

(WRHA 2007)



Falls in older adults

Falls are responsible for:

- 95% of all hip fractures in older adults
- 85% of all hospitalizations from injury in Canadian seniors
- Loss of mobility and independence
- Decreased confidence, increased fear of falling and withdrawal from activities
- Caregiver stress

(Scott 2010; Ruthig 2007; Zijlstra 2007)



An inventory of exercise programs

- Aim: To create an inventory of community-based exercise programs for older adults that meet the criteria for falls prevention
 - To develop a resource to help healthcare professionals prescribe exercise
 - To develop a resource to help older adults and their families locate exercise programs in their community
 - To identify gaps in community-based exercise resources available for frail older adults that meet the criteria for falls prevention



Falls prevention criteria

- Physical activity guidelines for falls prevention exercise programs (Sherrington et al 2008; Sherrington et al 2011; NSW Falls Prevention Program 2012)
 - The exercise program contains weight-bearing exercises that challenge strength and/or balance
 - 40% of the program is spent on these exercises
 - The program is designed and supervised by a trained instructor or healthcare professional

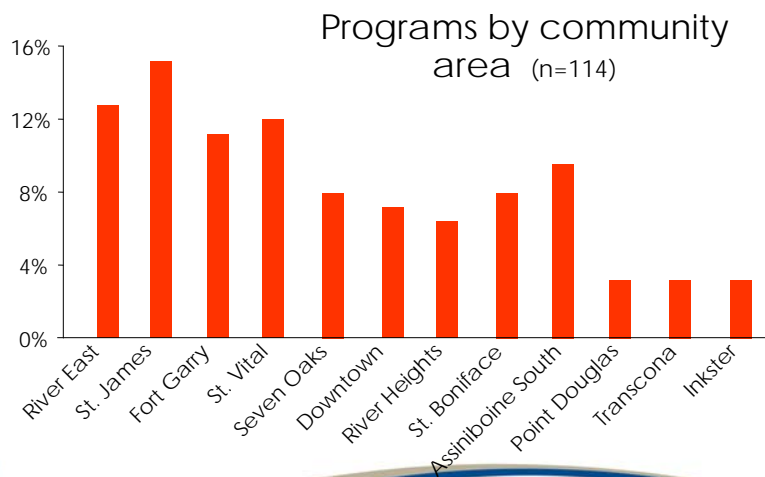


Method

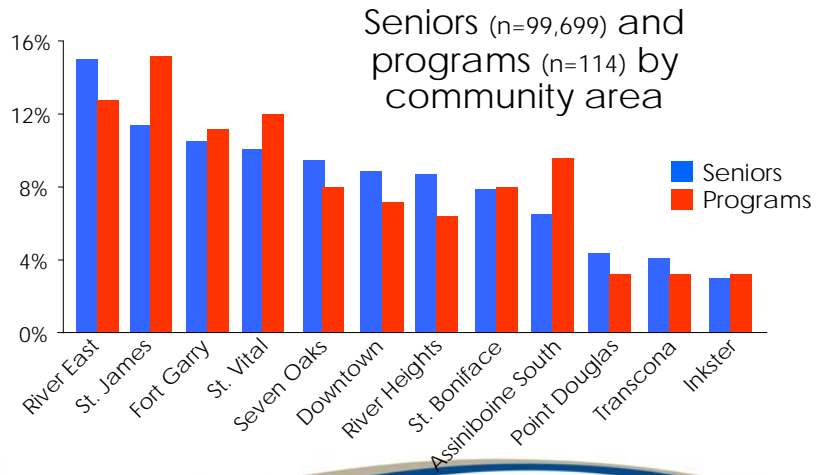
- Contacted program organizer and/or instructor for information about older adult exercise programs
 - Asked questions about program on the phone or via email
 - Observed an exercise class



Exercise programs in Winnipeg

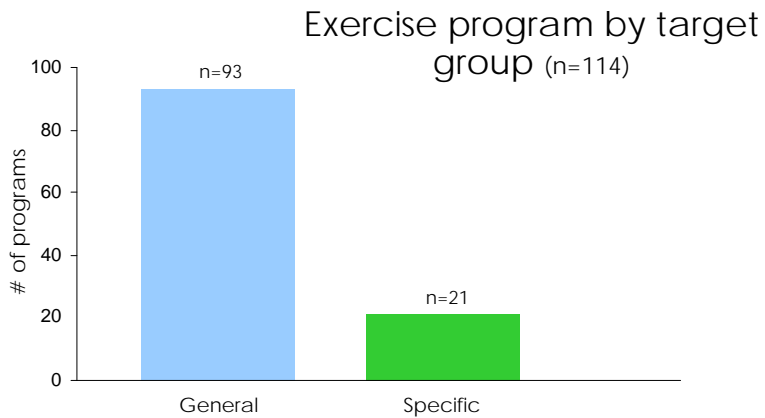


Exercise programs in Winnipeg



Population of Winnipeg RHA; June 1, 2011

Exercise programs in Winnipeg



Exercise programs in Winnipeg

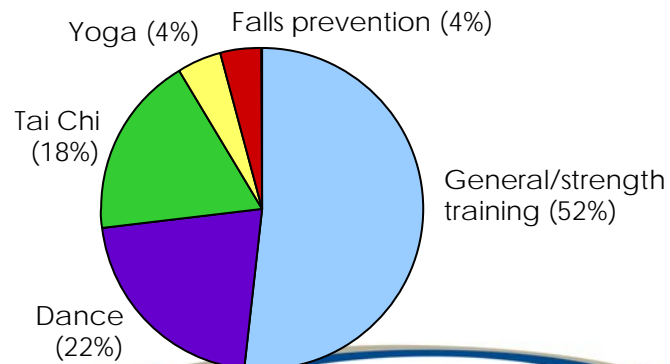
Exercise programs by target group (n=114)

- General population (82%)
- Arthritis (13%)
- Stroke (2%)
- Neurological condition (2%)
- Osteoporosis (1%)
- General disability (1%)



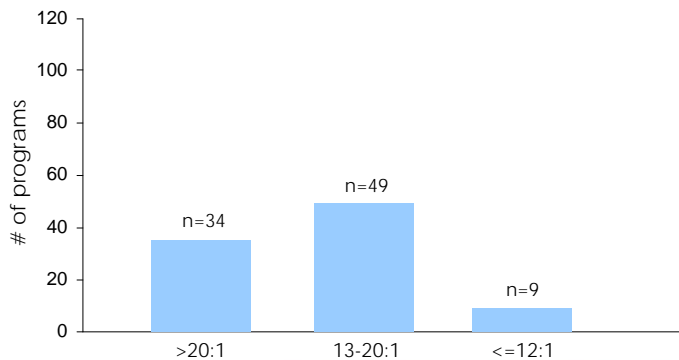
Exercise programs in Winnipeg

Types of exercise programs for the general population (n=93)

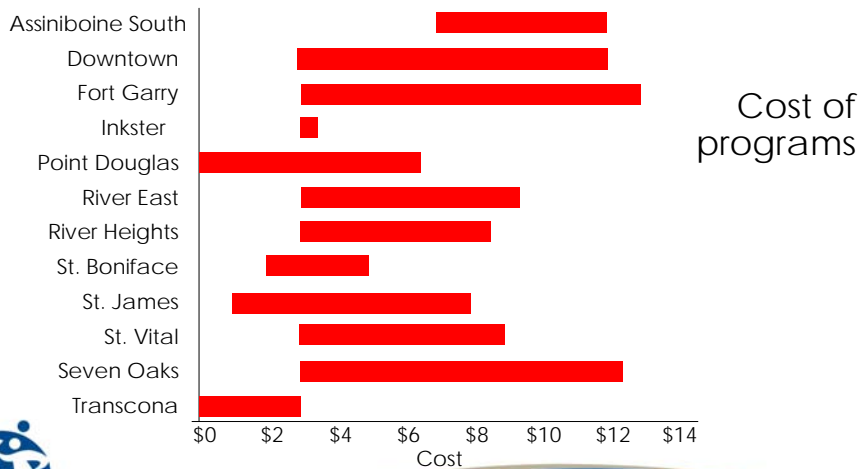


Exercise programs in Winnipeg

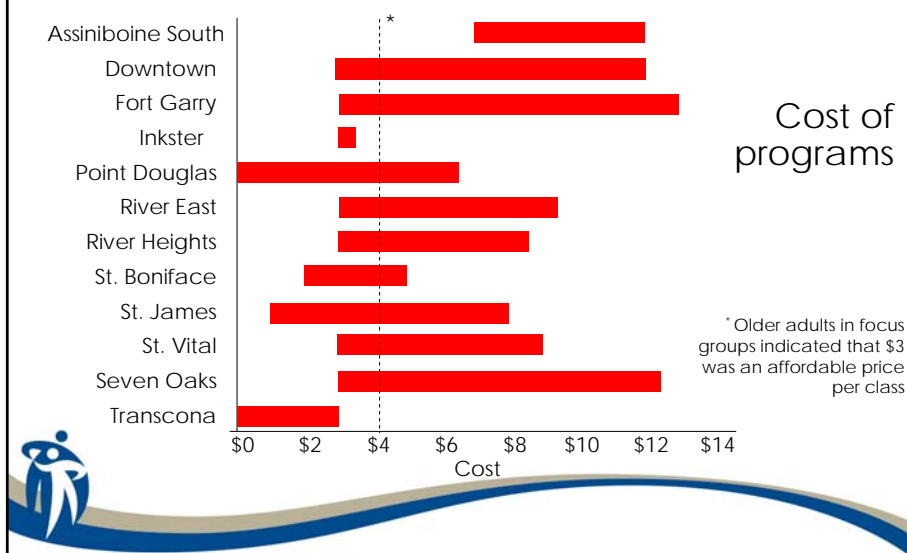
Program instructor : participant ratio for exercise programs (n=93)



Exercise programs in Winnipeg



Exercise programs in Winnipeg



Exercise programs in Winnipeg

Exercise programs that specifically aim to improve balance and prevent falls

	Instructor	Cost	Ratio
Assinaboine South (Charleswood Senior Centre)	Physiotherapist	\$7	1:15
Fort Garry (Refit)	Physiotherapist	\$13	1:4
River East (Good Neighbours Active Living Centre)	MFC certified	\$8.50	1:25
St. Boniface (Archwood 55+)	MFC certified	\$4.50	1:20

Exercise programs in Winnipeg

- The investigation of Winnipeg exercise programs suggest there is a need for:
 - Programs that specifically aim to prevent falls
 - Exercise programs with a low instructor : participant ratio
 - Falls prevention exercise programs with a low instructor : participant ratio



If you have any questions
contact:

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