



BEST PRACTICES IN POST  
FRACTURE CARE  
DECEMBER/2006  
DR. P. CIASCHINI



FORCE STUDY 2003-2006  
SAULT STE. MARIE ONTARIO

- FALLS, FRACTURE AND OSTEOPOROSIS RISK CONTROL AND EVALUATION
- “A Community Partnership”

## SYNOPSIS

- A RANDOMIZED CONTROLLED TRIAL TO EVALUATE THE EFFECT OF A COORDINATED COMMUNITY-BASED MULTI-DISCIPLINARY APPROACH FOR FALL AND FRACTURE PREVENTION IN SAULT STE. MARIE



- DR. H. LEE
- INITIATED THE FORCE STUDY WITH BACKGROUND DATA RESEARCH, STUDY DESIGN, AND STUDY LAUNCH IN 2003

## FORCE PARTNERS

- IN SAULT STE. MARIE, A NORTHERN ONTARIO COMMUNITY (78 000)
- ALGOMA COMMUNITY CARE ACCESS CENTRE
- ALGOMA HEALTH UNIT
- GROUP HEALTH CENTRE (NOT-FOR-PROFIT MULTI-DISCIPLINARY HEALTH CENTRE, ROSTERED POPULATION >44 000, ELECTRONIC MEDICAL RECORD)

## FORCE PARTNERS

- PHARMA COMPANIES (LILLY, MERCK FROSST, PROCTOR AND GAMBLE, SANOFI AVENTIS)
- SAULT AREA HOSPITAL (250 BED COMMUNITY HOSPITAL IN NORTHERN ONTARIO)
- SLIPS, TRIPS AND FALLS COMMITTEE

## FORCE STUDY

- SPONSORS--IN-KIND SUPPORT OF THE PARTNERS. PHARMA (AVENTIS AND PROCTOR AND GAMBLE, LILLY, MERCK FROSST). GREENSHIELD FOUNDATION
- SUPPORT OF PROFESSORS AT UNIVERSITY OF TORONTO, MACMASTER UNIVERSITY, LAKE SUPERIOR STATE UNIVERSITY
- ONTARIO MINISTRY OF HEALTH
- PARTICIPATION OF COMMUNITY HEALTH CARE PROVIDERS

## FORCE STUDY OBJECTIVES

- TO DETERMINE WHETHER A SUSTAINABLE COMMUNITY-BASED IMPLEMENTATION OF A MULTI-DISCIPLINARY, INTEGRATED PROTOCOL WILL IMPROVE THE DELIVERY OF EVIDENCE-BASED INTERVENTIONS PROVEN TO DECREASE THE INCIDENCE OF FALLS AND FRACTURES IN A HIGH-RISK POPULATION

## FORCE STUDY OBJECTIVES

- TO DETERMINE THE OBSTACLES AND POSSIBLE SOLUTIONS TO THE SUCCESSFUL IMPLEMENTATION OF SUCH A SUSTAINABLE PROTOCOL

## FORCE STUDY ECONOMIC SUBSTUDY

- HEALTH-CARE RESOURCES USE
- PATIENT/FAMILY RESOURCES
- WORK STATUS

## FORCE STUDY

- ENROLLED PATIENTS AGE 55 YRS OR OLDER LIVING IN THE COMMUNITY AND AT HIGH RISK FOR FALLS OR FRACTURE
- RECRUITED FROM 4 GROUPS—
- SAH FRACTURE CLINIC
- SAH EMERGENCY DEPT.
- BMD T SCORE <-2
- SELF OR PCP REFERRED AND HIGH RISK

## FORCE STUDY

- PATIENTS WERE RANDOMIZED INTO
- IMMEDIATE INTERVENTION GROUP OR
- DELAYED INTERVENTION GROUP (USUAL CARE FOR 6 MONTHS THEN OFFERED INTERVENTION)

## FORCE STUDY INTERVENTION PROTOCOL

- APPROPRIATE OSTEOPOROSIS RISK MANAGEMENT DEFINED—
- MEDICATION TREATMENTS IN ACCORDANCE WITH THE 2002 CANADIAN OSTEOPOROSIS GUIDELINES

## FORCE STUDY FALLS RISK MANAGEMENT

ASSESSMENT BY PHYSIOTHERAPY,  
ASSESSMENT BY OCCUPATIONAL  
THERAPY,  
REVIEW OF MEDICATIONS,  
MEASURE POSTURAL HYPOTENSION

## FORCE STUDY

- STAFF— “ENFORCERS” (NURSE)
- USE OF MEDICAL DIRECTIVES TO ADMINISTER THE OSTEOPOROSIS AND FALL RISK MANAGEMENT PROTOCOLS
- —CLERICAL

## FORCE STUDY

- INVOLVEMENT OF COMMUNITY PHYSIOTHERAPISTS, OCCUPATIONAL THERAPISTS, PHARMACISTS, PHYSICIANS (FAMILY PHYSICIANS AND SPECIALISTS), NURSE PRACTITIONERS, OTHER HEALTH CARE PROVIDERS

## FORCE STUDY

- 201 PATIENTS RANDOMIZED
- IMMEDIATE INTERVENTION GROUP  
101 PATIENTS
- DELAYED INTERVENTION GROUP  
100 PATIENTS

## FORCE STUDY REFERRAL SOURCES

- PATIENTS ELIGIBLE—
- SAH FRACTURE CLINIC 25
- SAH ER DEPT. WITH FX 9
- BMD T SCORE  $<-2.0$  122
- SELF OR PCP REFERRED AND  
SCREENED TO BE HIGH RISK 45

## FORCE STUDY

- RESULTS

## FORCE STUDY DEVELOPMENTS

- INTERNISTS AND RADIOLOGISTS AT GHC IMPLEMENTED STANDARDIZED BMD REPORTING—GUIDELINES OF ISCD AND CAN. RADIOLOGY ASSOC.
- GHC BMD SCHEDULED PRECISION STUDIES SINCE 1998

## FORCE STUDY DEVELOPMENTS

- CIHR APPLICATION 2006 FOR SCREENING AND ELECTRONIC RECALL TOOL FOR HIGH-RISK PATIENTS (>65 YEARS AGE) IN THE GHC ROSTERED POPULATION FOR BMD TESTING
- AND PATIENT EDUCATION THROUGH PATIENT WEB-PORTAL AND LINKS

## FORCE STUDY FUTURE INITIATIVES

- CHRONIC DISEASE MANAGEMENT PROGRAM FOR PATIENTS WITH OSTEOPOROSIS AND HIGH-RISK FOR FUTURE FRACTURES—COORDINATED MULTI-DISCIPLINARY ASSESSMENTS BY NURSE, PT, OT, DIETITIAN, PHARMACIST, PHYSICIAN AT CDM CLINIC

## FORCE STUDY FUTURE INITIATIVES

- CARE MAPS FOR SAH FRACTURE CLINIC AND ER PATIENTS WITH LOW-TRAUMA FRACTURES—  
OSTEOPOROSIS INVESTIGATION AND TREATMENT, PATIENT EDUCATION
- CARE MAPS EXPANDED TO SAH IN-PATIENTS WITH LOW-TRAUMA FRACTURES—SAME INTERVENTIONS

## FORCE STUDY FUTURE INITIATIVES

- PARTICIPATION IN KNOWLEDGE TRANSFER STUDY IN OSTEOPOROSIS
- PARTICIPATION IN CANADIAN QUALITY CIRCLE PROJECT—FAMILY PHYSICIANS CME PROGRAM

## FORCE STUDY

- COMMENTS/QUESTIONS
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