



# **The Glasgow Community Falls Prevention Programme**

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# Falls in the Elderly : Facts

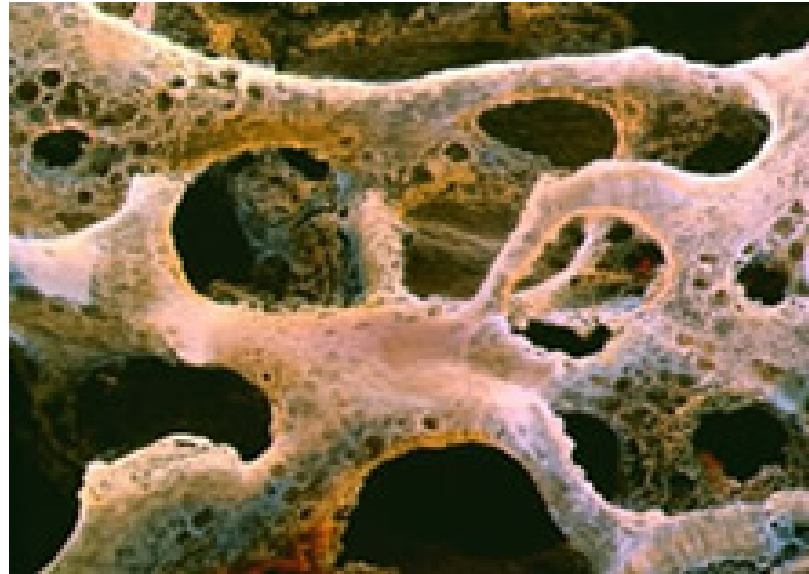
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- 30% age > 65 and 50% age > 80 fall at least once a year
- 8% of A&E attendances in >70s are due to falls
- Falls account for 10% of ambulance workload
- 5% of Medical and 20% of Geriatric Medical admissions are due to falls
- 90% of fractures result from falls
- 5 % of falls result in fractures

# Considerations in the Elderly

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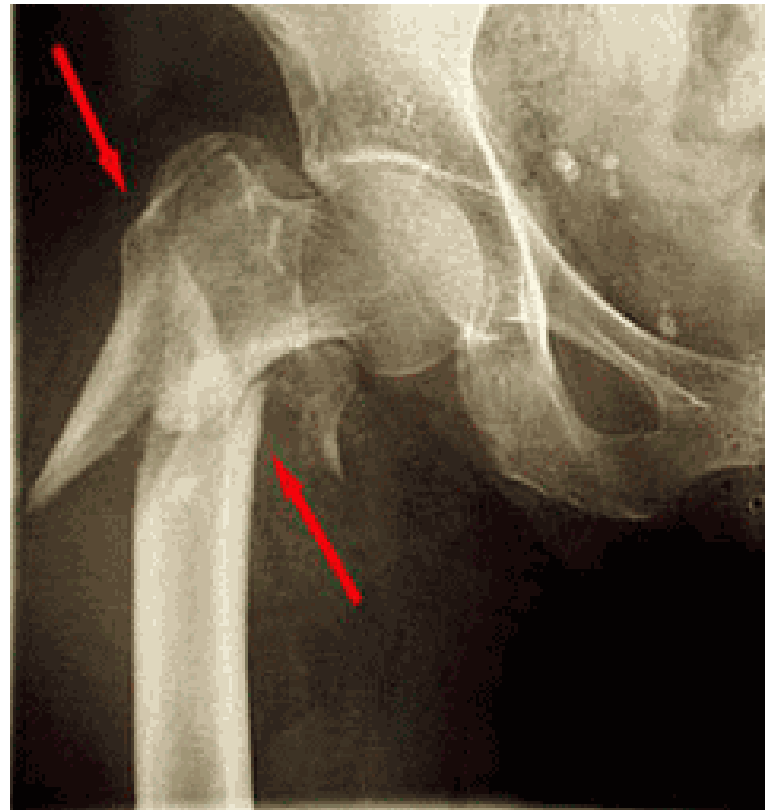
- Age related decline in in senses
- Corrective responses responses
- Co-morbidities



## Falls can be Fatal

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- Leading cause of accidental death >65 >65
- 1 death every 5 hours in UK
- 1% falls result in Hip Hip fracture





## Hip Fracture

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- 6,500 annually ( Scotland )
- 30% mortality at 1 year
- 50% require help with walking
- 20 % enter NH
- £30million hospital costs (SFHA 2002)



## “Long lie”

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- Pressure sores
- Hypothermia
- Dehydration
- Pneumonia



# Fear

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- 1/3
- Increases risk of falling
- Affects ADL
- Reduces quality of life
- Depression
- Social isolation



# Institutionalisation

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- 50 % of NH admissions
- 3 fold increase on admission of falls
- 13 - 32% of inpatients fall
- Increases morbidity , mortality and LOS





## What can we do ?

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- Be aware of risk factors
- Target the at-risk population
- Evaluate
- Specialist referral
- Intervene

## Can Falls in Older People be Prevented ?

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- Interventions are effective in reducing both the risk and monthly rate of falling
- The most effective intervention was a multifactorial falls risk assessment and management programme
- Exercise programmes were also effective in reducing the risk of falling

*Chang JT et al BMJ 2004*



# Evidence Base

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- FICSIT trials
- PROFET studies
- NSF standard 6
- A & BGS Guidelines
- NICE Guideline 21
- Guidelines for Collaborative Rehabilitation and Management of Elderly People who have Fallen

# Risk Factors for Falls

( BGS / AGS 2001 , SIGN 56 2002 , NICE 2004 )

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- Muscle weakness
- History of falls
- Gait deficit
- Balance deficit
- Use assistive device
- Visual deficit
- Environmental hazards
- Neurological disease e.g. PD , CVD
- Arthritis
- Impaired ADL
- Depression
- Cognitive impairment
- Age > 80 years
- Cardiovascular disorders
- Medication – hypnotics / sedatives / diuretics / antihypertensives

## Interventions to Prevent Falls ( BGS / AGS 2001 , NICE 2004 )

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- Gait training and advice on use of assistive devices B
- Medication review B
- Balance training exercise programmes B
- Treatment of postural hypotension B
- Treatment of cardiovascular disorders C
- Modification of environmental hazards C
- Staff education programme B





# Targeting those at risk





# History

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- North East Fall project pilot study
- January 2001
- Evident need
- Process
- Evidenced based protocols
- Sponsored
- Partnership
- Mainstream funding 2004
- Phased rollout over GG & C



## The Team

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- Lead
- 2 Snr 1 OTs
- 1 Snr 2 OT
- 2 Snr 1 PTs
- 2 Snr 2 PTs
- 4 Tech 1 OT Support workers
- 4 Tech 3 PT Support workers
- 2.5 WTE Administration staff

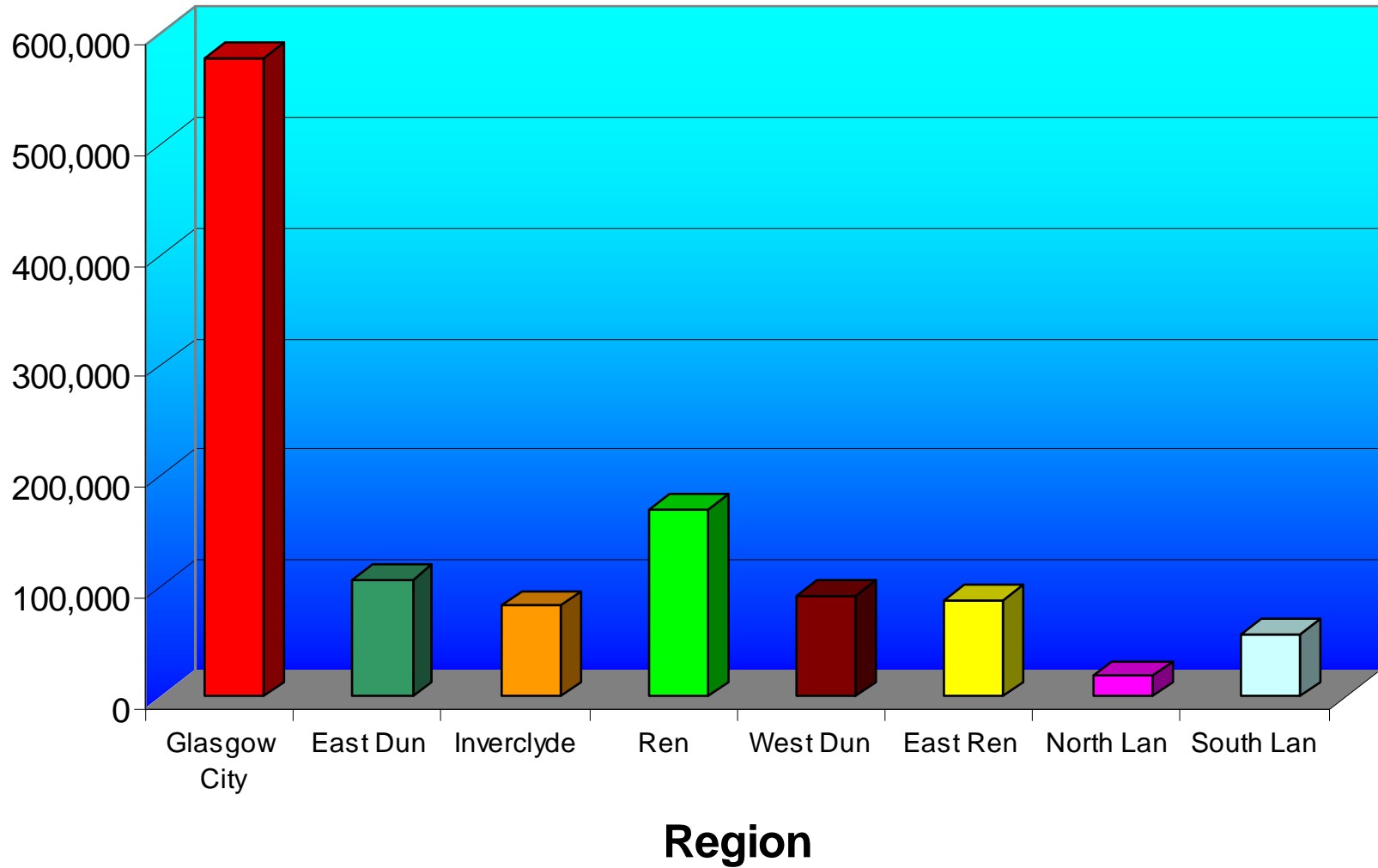


# Aim

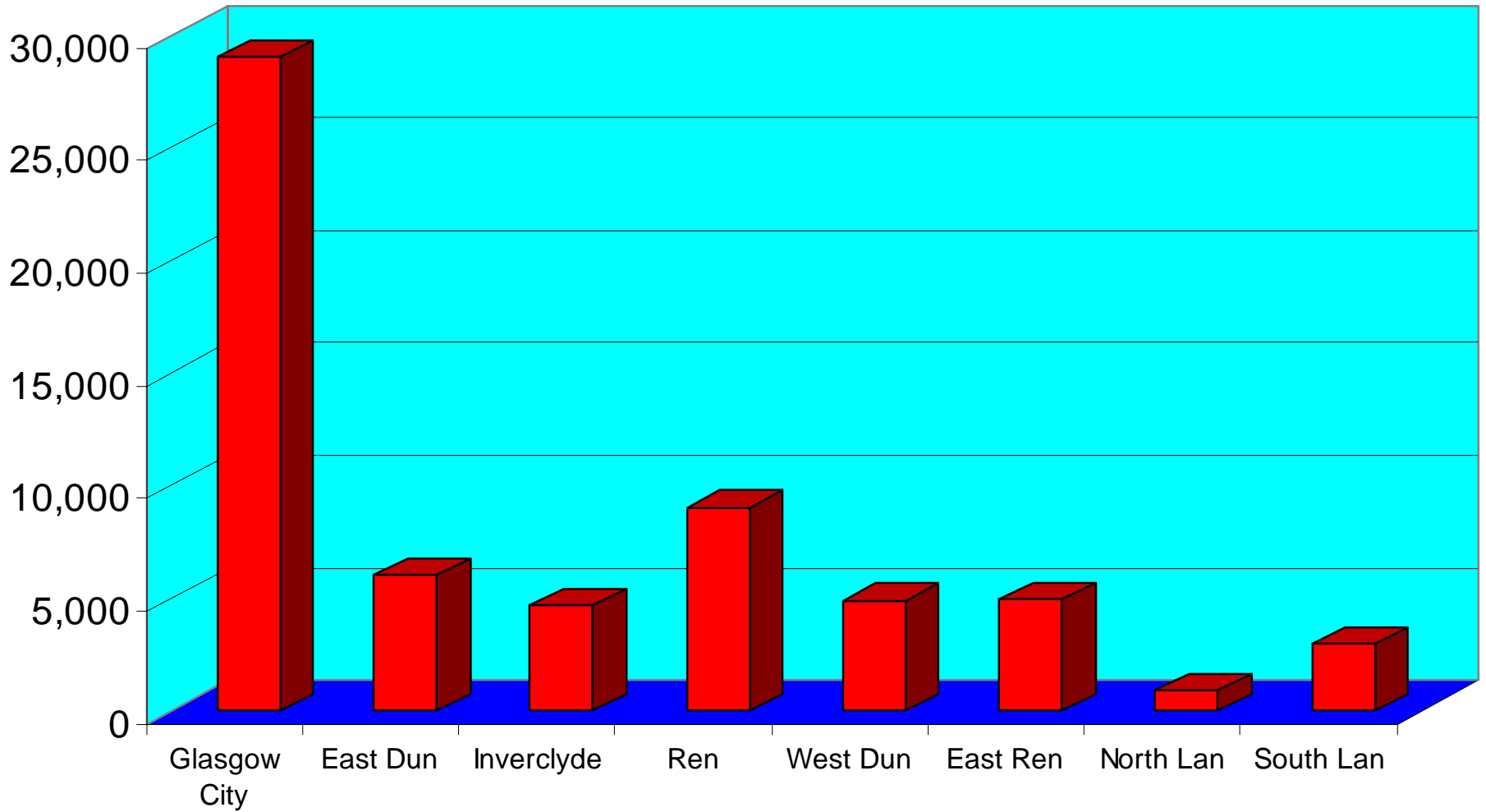
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- Identify risk factors for falling
- Intervene
- Specialist referrals
- Improve independence, confidence and QOL
- Raise awareness
- Advice and support for patients, families and carers

# Population of NHSGG&C



# Estimated >65 year old Fallers in NHSGG&C





# Target Population

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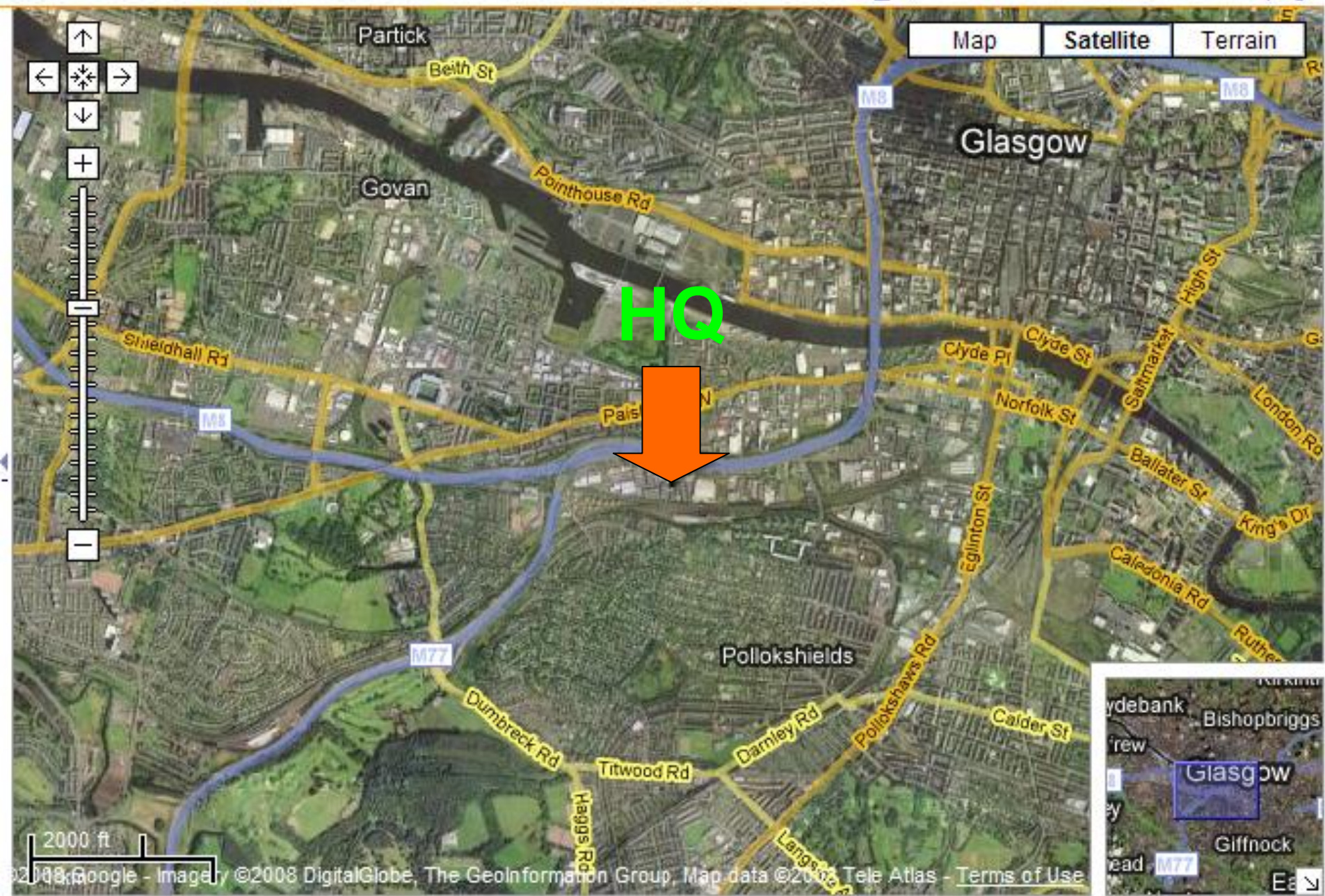
- >65
- Community dwelling in own home.
- Fall in last year



## Source of Referral

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- A&E
- Home Helps
- Community Alarm
- Community PT
- GP/ consultants
- Self referral
- DN
- Osteoporosis service
- Advertising



Map Satellite Terrain

Partick

Beith St

Glasgow

Govan

Pointhouse Rd

HQ



Shieldhall Rd

Paisley

Clyde Pl

Clyde St

Norfolk St

Ballater St

Caledonia Rd

Pollokshields

Dumbreck Rd

Titwood Rd

Darnley Rd

Calder St

Giffnock

2000 ft







## Process

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- Telephone triage
- Visit within 5 working days
- Multi factorial Screen
- Tailored action plan
- Triggered referrals
- Leaflets

# CFPP Falls Admin Centre and Triage

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- **Blackout** → **Falls Clinic**
- **Injury acute** → **A&E or GP or 999**
- **At Risk/ Rapid response** → **COPT**
- **Routine** → **CFPP Screen** → **Referral on**



## Multi factorial Screen

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- Housing Details
- Circumstances and consequences of fall
- Falls history
- Coping strategies
- General Health and lifestyle
- Medication
- Cognitive testing
- Mobility
- Home hazards assessment
- Benefit check
- Timed up and go

# Onward Referral

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- Pharmacy review
- Falls Clinic
- Day Hospital
- Physio
- O.T
- C.O.T
- Psychology
- Dietician
- Audiology
- Community exercise
- Benefits advisor
- Handy person service
- Social work
- DADS
- Optician
- Sensory impairment team
- Continence services
- Community older peoples team
- Podiatry



## Where are we now ?

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- 156 referrals (max 200) per month
- 30% referrals from GP
- Significant number of self referrals
- 1/3 refuse service
- 30% referred to Falls Clinic
- 2/3 service input



## Who to refer on to Falls Clinic

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- Single fall with preceding symptoms
- Single fall with syncope
- Recurrent falls (explained or unexplained )
- Those requiring MDT review

## CFPP Screen Triggers for Falls Clinic

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- Q7 Reason for fall " just went down " or " don't know " plus one or more of :
- Q8 Patient felt faint / sick / dizzy / off balance / palpitations just prior to the fall
- Q20 Three or more falls in the last year or 2 in the last 6 months i.e. recurrent falls
- Q30 + 49 Walking or movement limited by dizzy spells or episodes of feeling faint



## Falls Clinics

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- 5 Clinics citywide
- Comprehensive multidisciplinary assessment
- Followed by MDT Meeting to discuss exit strategies



# Falls Clinic Medical Assessment ( History )

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- Detailed medical history + focused falls history
- Fracture history + bone health
- Medication review NB “ culprit ” drugs + polypharmacy



# Falls Clinic Medical Assessment ( Examination )

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- Detailed medical examination especially CVS , CNS , locomotor
- Visual acuity measurement ( Snellen chart ) and advice
- Measurement of L&S BP
- AMT / MMSE
- BMI
- Cannard falls risk score

# Falls Clinic Medical Assessment ( Investigations )

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- Routine – bloods , 12-lead ECG
- Others as indicated – CXR , other x-rays , Echo. , CT head , 24 hour BP monitor , “R” test , referral to Syncope Clinic ( SGH ) for tilt-tests



## Pharmacy Component of CFPP

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- City-wide team of specialist pharmacists + link with local community pharmacists
- Good evidence base for impact of medication review in fallers (NICE, NSF)
  - Reduce medicines likely to cause falls
  - Minimise number of medicines
  - Identify risk factors for osteoporosis and initiate treatment



# Medication Review Process

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- Patients meet the necessary criteria + agree to review
- Medical, drug and other relevant history obtained from GP
- Face to face medication review with patient
  - Usually in the patient's own home
- Recommendations to GP + actioned
  - Also sent to falls clinic before appointment
- Follow-up and support via patient's community pharmacy

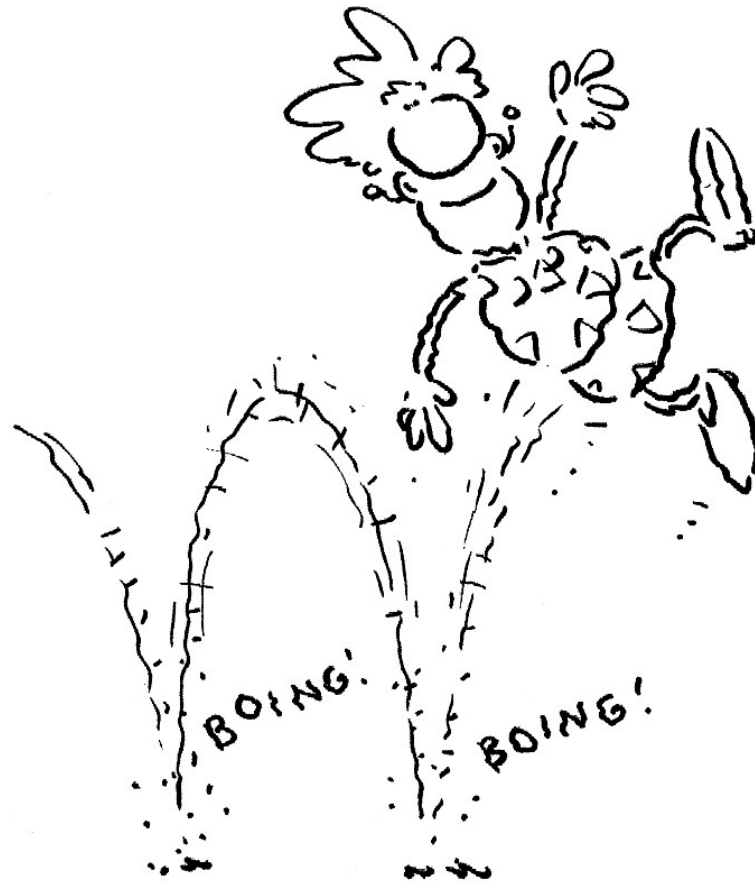
# Benefits of Pharmacy Review

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- Minimising potentially falls-inducing drugs
- Maximising osteoporosis treatment
  - Over 50% referred for DEXA were commenced on treatment
- Good response from GPs
  - 89% of recommendations agreed + actioned
- Time saving for specialist falls clinics.
  - Completed medication review available for patient's appointment

# Physiotherapy

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# Physiotherapy Assessment

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## Including

- Circumstances of the fall
- Consequences of the fall
- Coping strategies
- General health
- Tinetti Gait and Balance Assessment (EMS if <19)
- Balance status (TUSS, 4 point test, 180 degree turn)
- Timed up and go
- Confbal (Confidence in Maintaining Balance Measure)
- Pain Chart
- Mobility, Strength, ROM







# Falls Prevention Exercises:1

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Specific Components include

- Balance
- Strength
- Flexibility
- Endurance
- Backward Chaining
- Functional Floor work
- Adapted tai chi

# Physiotherapy Component of CFPP

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- Comprehensive gait and balance assessment
- Approx. 12 weeks of individually prescribed exercises
- Community based exercise classes around the city with transport provided
- Exit routes into Community and Leisure exercise classes
- A home exercise programme ' Keeping Fit and Active as you get Older' booklet or DVD



# Occupational Therapy Component of CFPP

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- 60% CFPP patients seen by Occupational Therapist
- Home environment assessment to assess all Fall Hazards
- Westmead Home Safety Assessment Tool
- Assessment of the ADL's safety
- Westmead Home Safety report prepared

# Occupational Therapy Component of CFPP

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- Equipment provision
- Rehabilitation- time limited
- Individual interventions
- Check visits
- Educational Component (11 topics)

## In Summary

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- Not an emergency service
- Visit approx 5 days following referral
- Signposting service
- Provision of Falls strength and balance classes (Tinnetti score 19+)
- Free transport to class, if required
- GP's refer to CFPP for Falls Clinic to allow screen procedure prior to patient attending the clinic