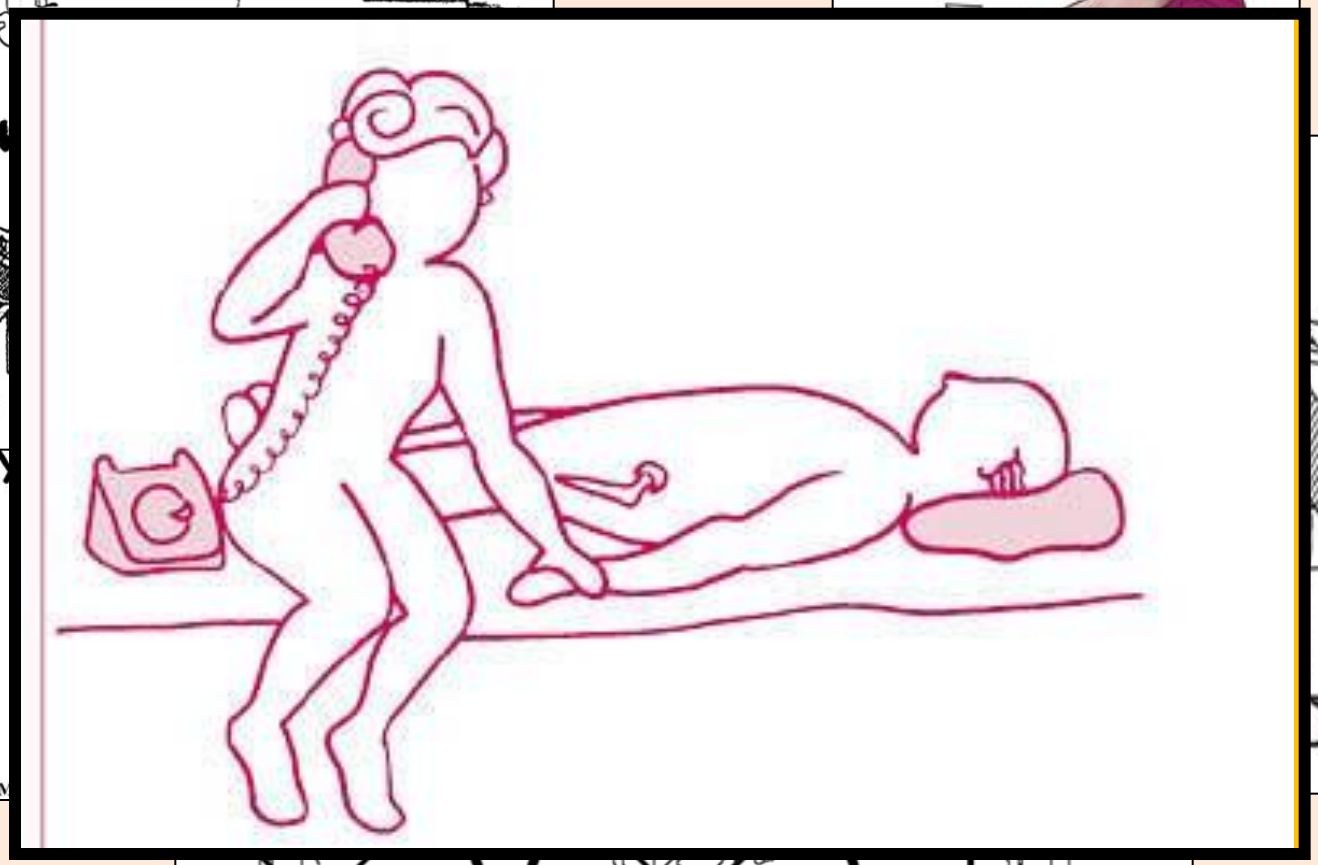
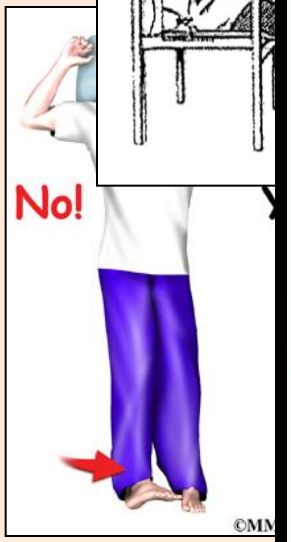
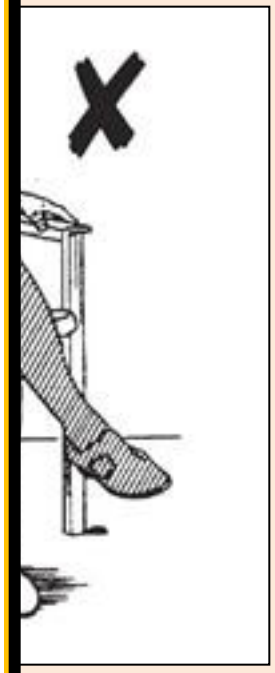
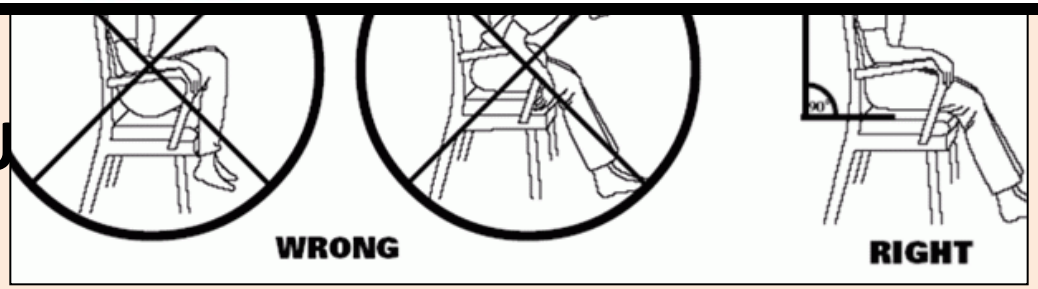
Replac









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Background

- THR dislocation occurs in 3% to 19% of primary THR.
- It is the second most common complication after aseptic loosening.
- It is physically and mentally disabling and is associated with patient dissatisfaction.
- Dislocated THRs consume considerable resources which diminishes the cost-effectiveness of a successful orthopaedic procedure.

Multi-factorial aetiology of THR Dislocation

Mechanical factors:

- Component mal-positioning
- Small femoral head sizes
- Soft tissue laxity
- Component or ar gement

Patient fac

- Ne orders
- airment
- n
- nt non-compliance

BUT WHAT CAN WE DO TO PREVENT IT????

Questions on Precautions

UK survey of occupational therapist's & physiotherapist's experiences & attitudes towards THR precautions and equipment

Smith TO, Sackley CM

KING'S College LONDON

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Purpose and Methods

27-question, self-administered online survey

UK Orthopaedic Physiotherapist & Occupational Therapist.

Survey included questions on:

- current practices in the provision of equipment & hip precautions
- PTs & OTs attitudes towards practice

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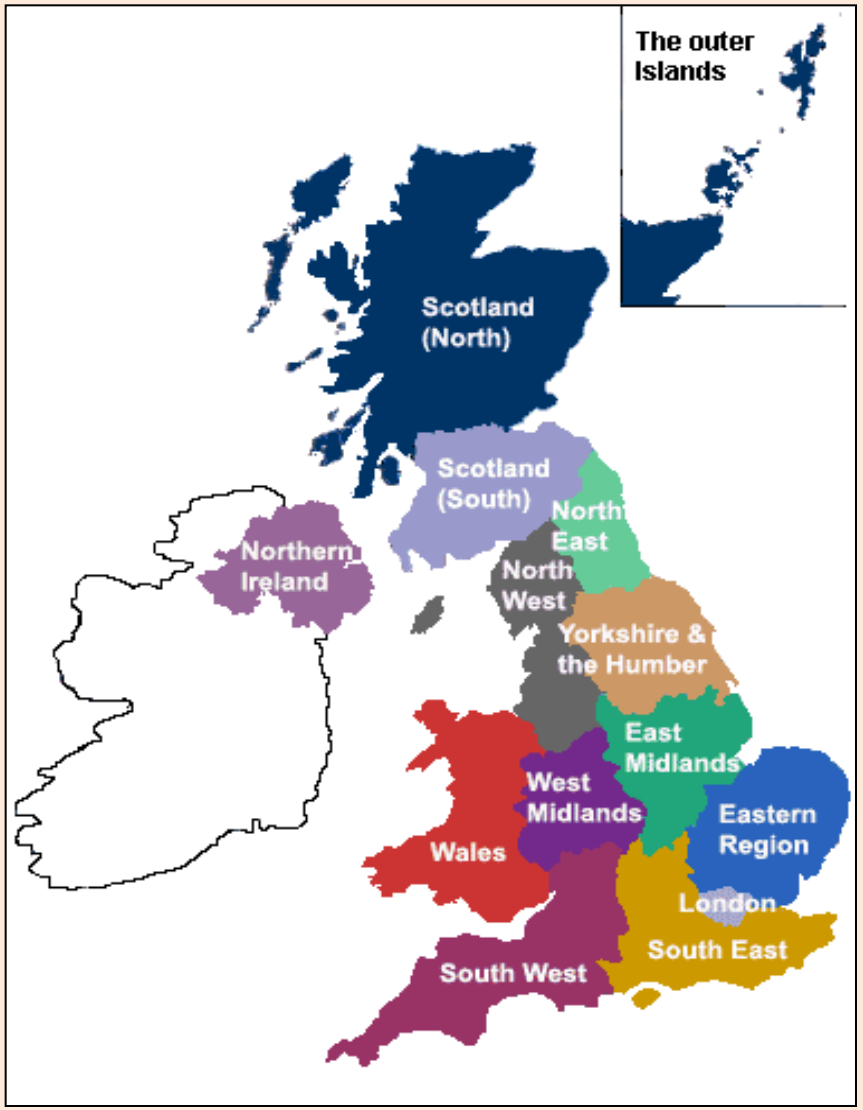
Results

N = 170 health professionals

(87 PTs & 83 OTs)

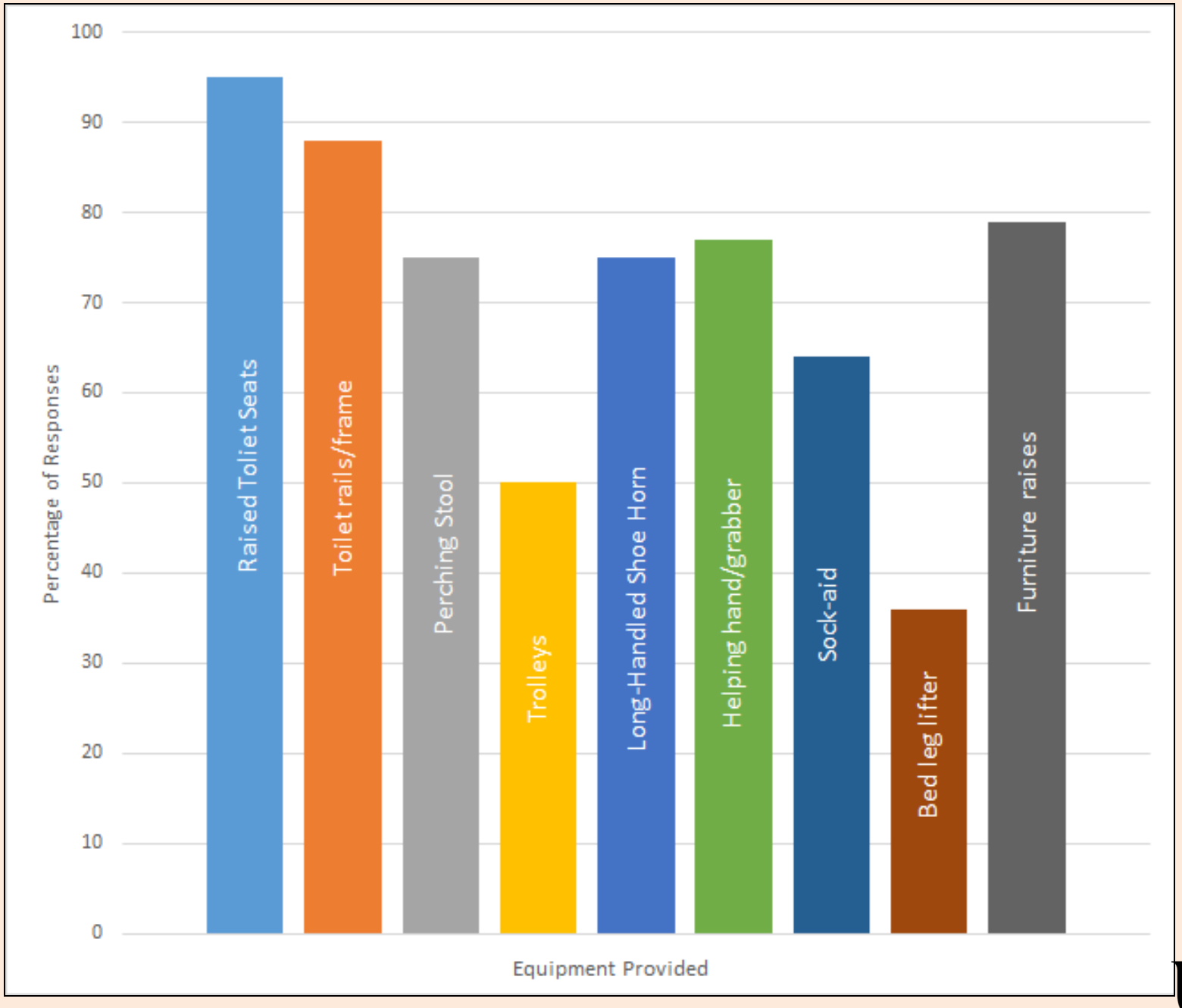
Representing 170 different health trusts in England, Wales, Scotland & Northern Ireland



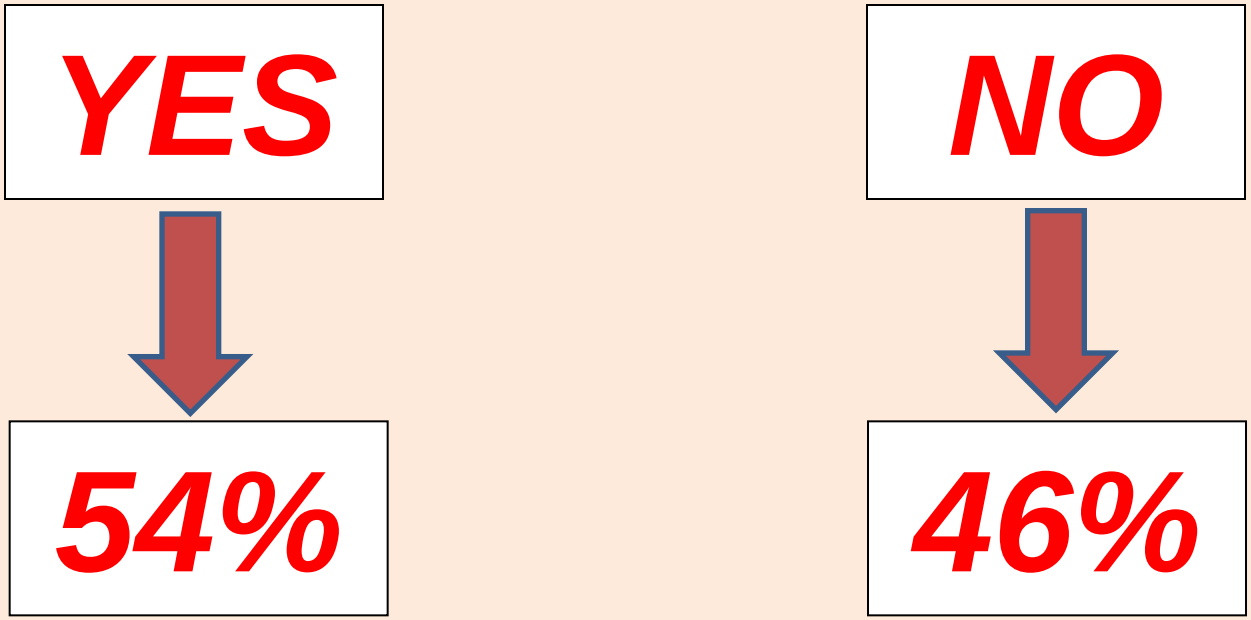
Equipment Provision

Commonly prescribed equipment:

- Raised toilet seats **95%**
- Toilet frames and rails **88%**
- Furniture raises **79%**
- Helping hands/grabbers **77%**
- Perching stools **75%**
- Long-handled shoe horns **75%**



Should people post-THR routinely received equipment?



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Precautions

Hip precautions routinely prescribed by **97%**

Movements most commonly advised to avoid:

- Hip flexion **90%**
- Hip Adduction **83%**
- Hip Rotation **82%**

Precautions

Specific activities instructed to avoid included:

- Driving a car **74%**
- Sleeping on the non-operated side **52%**
- Sleeping on the operated side **44%**
- Driving a motorbike or scooter **42%**

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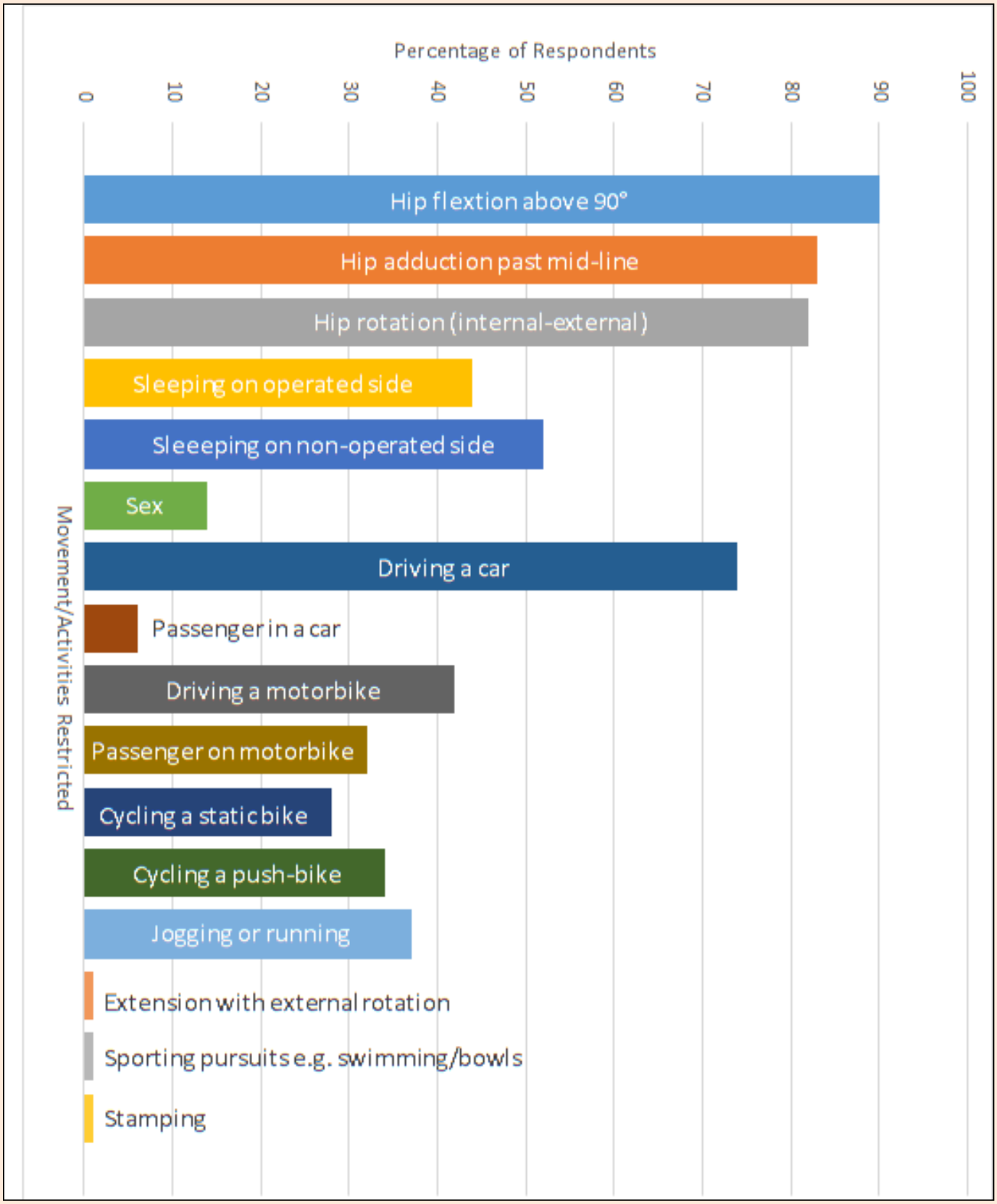
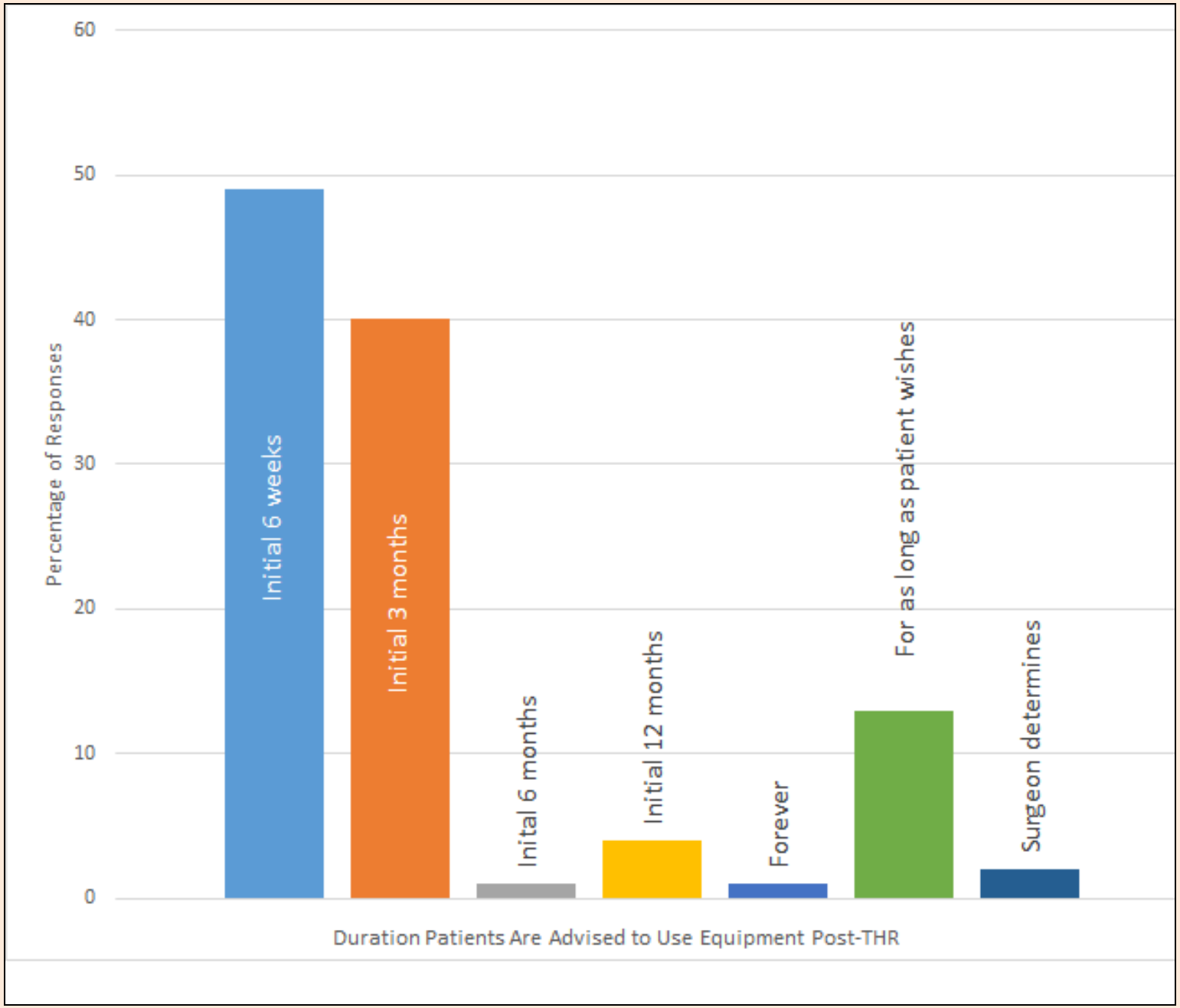

Percentage of Respondents
0
10
20
30
40
50
60
70
80
90
100
Movement/Activities Restricted
Hip flextion above 90°
Hip adduction past mid-line
Hip rotation (internal-external)
Sleeping on operated side
Sleeeping on non-operated side
Sex
Driving a car
Passenger in a car
Driving a motorbike
Passenger on motorbike
Cycling a static bike
Cycling a push-bike
Jogging or running
Extension with external rotation
Sporting pursuits e.g. swimming/bowls
Stamping

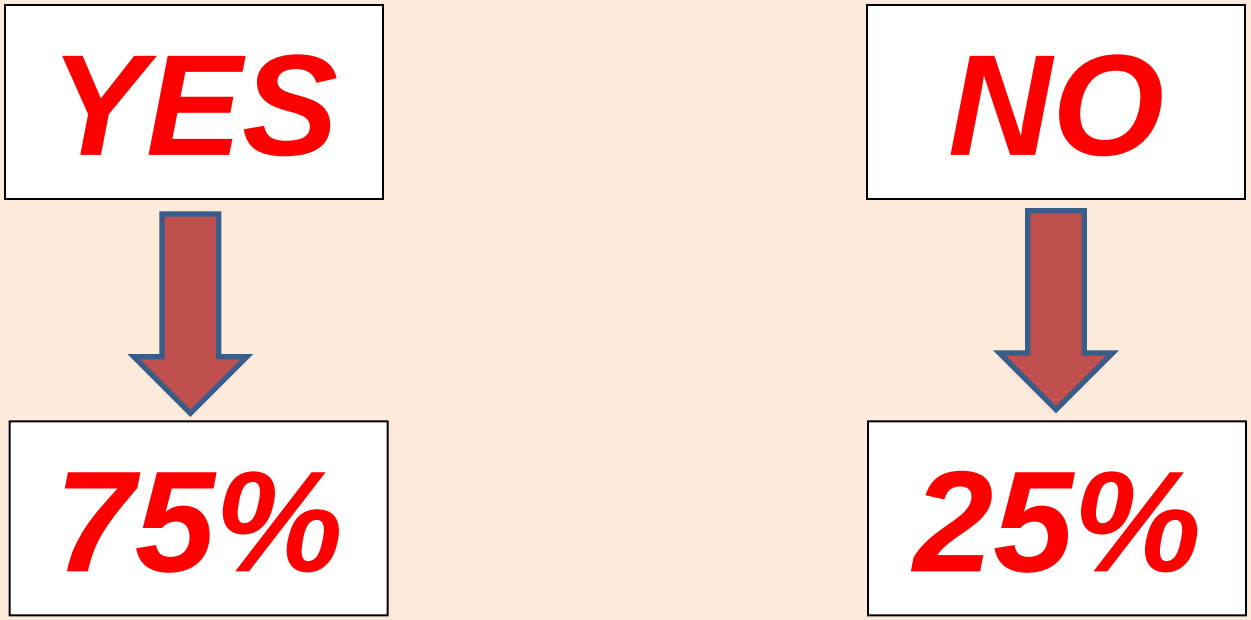
Duration of Hip Precautions

Continuation of these varied:

- First 6 post-operative weeks — **60%**
- 3 months — **39%**
- 12 months — **2%**
- % instructed patients to follow indefinitely — **4%**


60
50
40
30
20
10
0
Percentage of Responses
Initial 6 weeks
Initial 3 months
Inital 6 months
Initial 12 months
Forever
For as long as patient wishes
Surgeon determines
Duration Patients Are Advised to Use Equipment Post-THR

Should people post-THR routinely received precautions?



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Perceptions to Change

- % wanted to change practice **48%**
- % wanted to change equipment/precaution prescription to a case-by-case basis **86%**
- % want abolition of equipment & precautions **11%**
- % reported this as a research priority **66%**

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Survey Conclusions

- Standard practice in UK is provision of equipment & hip precautions.
- Physios & OTs question a ‘blanket’ prescription approach.
- This is a research priority to better understand when & how precautions & equipment should be used.

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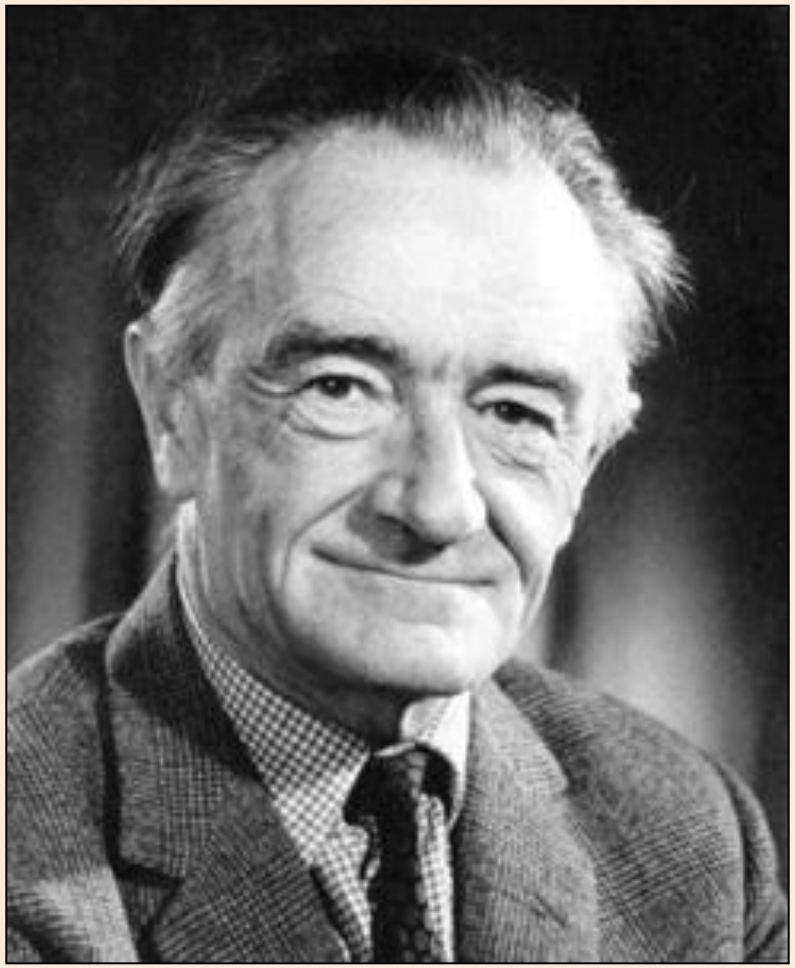
Consensus from Archie



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Assistive devices, hip precautions, environmental modifications & training to prevent dislocation & improve function after hip arthroplasty

Smith TO, Jepson P, Beswick A, Sands G, Drummond A, Davis ET, Sackley CM

Cochrane Database of Systematic Reviews 2016

Methods

Aim: To assess the effects of provision of assistive devices, education on hip precautions, environmental modifications & training in activities of daily living (ADL) and extended ADL (EADL) for people undergoing THA.

Methods: Cochrane Collaboration compliant systematic review methodology.

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Precautions, Equipment & Functional Restrictions vs. Not

One study (81 participants)

Hip precautions, equipment & functional restrictions vs no provision of hip precautions, equipment or functional restrictions.

GRADE: Low quality

No difference in Harris Hip Score, SF-12 or dislocation events.

Slower functional recovery with precautions group

- Walked with a stick (MD 3.80 days, 95% CI 0.47 to 7.13)
- Walk without a stick (MD 12.40, 95% CI 6.48 to 18.32)
- Longer time until they recommenced driving (MD 7.20, 95% CI 2.78 to 11.62)
- longer time until walked without a limp (MD 17.30, 95% CI 6.90 to 27.90)

Precautions +/- equipment & functional restrictions

- One study (265 participants; 303 THAs)
- Provision of hip precautions with vs without postoperative equipment & restrictions to functional activities.
- GRADE: very low
- Perceived satisfaction in the rate of recovery greater in those not prescribed (NNTB = 7).
- No difference in hip dislocations

Enhanced Education Promoting Function vs. Conventional

- One study (146 participants)
- Provision of an enhanced post-op education & rehab service on hospital discharge to promote functional ADL vs. conventional rehab.
- GRADE: Very low quality
- No between-group significant differences in Objective and Subjective Functional Capability Index with enhanced rehab vs. conventional rehab.

Conclusions

- Uncertain if hip precautions +/- equipment & functional restrictions are effective in preventing dislocation & improving outcomes after THA.

- Insufficient evidence to support/refute the adoption of a post-op community rehab programme for functional reintegration & education vs. conventional rehab

What to do? Evidence for Adoption?

Hip Precautions

Post-Operative Equipment

Reintegration Interventions

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Dr Gina Sands – University of Nottingham

Mr Paul Jepson – University of Birmingham

Prof Edward Davis – Royal Orthopaedic Hospital, Birmingham

Dr Andrew Beswick – University of Bristol

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