

# Emergency Department

Primary Contact  
Physiotherapy



MELBOURNE HEALTH

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# Outline

- Background
- The proposal
- Goals
- Implementation of the program
- Evaluation
- Results
- Conclusion
- The future



# Background

- **Victorian health climate**
- An ageing population with increased chronicity of disease coupled with increased expectations of health consumers have led to increased demands on Emergency Departments.
- Demand on ED projected to increase by over 4% a year.

# Background

- **HDM strategy** - to identify more cost effective and appropriate ways to meet the priorities and needs of the patient.
- It was proposed that a senior musculoskeletal physiotherapy service should be introduced to assess, manage and discharge patients presenting with musculoskeletal injuries.

# Background

- **Overseas experience**

Extended scope Physiotherapists (ESP's) were introduced in the UK in the late 1980's.

*“ A Physiotherapist whose clinical practise extends beyond the recognised scope of physiotherapy practise and where the Physiotherapist is ultimately responsible for the patients overall management.”*

*Chartered Society of Physiotherapists 2002*

# Background

- **Gardiner and Turner (2002)**

Compared the accuracy of clinical diagnosis of internal derangement of the knee by the ESP's with their medical counterparts.

Clinical diagnosis compared with arthroscopic findings.

52% of clinical diagnosis of ESP were in agreement with arthroscopic findings compared with 37% by their medical counterparts.

Arthroscopies were deemed to be 100% of therapeutic value with the ESP and 79% by their medical counterparts.

The ESP demonstrated higher standards of clinical accuracy.

# Background

- **Jibuike et al (2003)**

ESP's introduced into an emergency department to assess and manage musculoskeletal knee injuries.

59% of patients treated and discharged without a medical review.

39% of patients were referred to trauma clinic with 88% of the MRI's demonstrating a significant abnormality. (Compared with the historical accuracy of 45% by the Emergency Doctors)

The ESP demonstrated high standards of clinical accuracy.

# Background

- Extremely positive results in various studies in the UK across the board including; orthopaedic OP clinics, trauma clinics, spinal units, OA clinics and emergency departments.
- Consistently demonstrating high standards of clinical accuracy.

# Background

- Improved services to specific subgroups of patients, increased satisfaction, reduced waiting times and reduced costs.
- Improved satisfaction amongst Senior Physiotherapists, increased retention and improved clinical career path.

# The Proposal

- 6 month pilot study of Physiotherapists managing musculoskeletal injuries
- In a primary contact capacity.
- Funded by HDM
- 6 hours a day 7days a week
- March - September 2004

# Goals

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- Reduce wait time
- Reduce occupancy time
- Reduce risk of bypass
- Improve pt care of musculoskeletal injuries
- Improved utilisation of skill base (more time for doctors to manage time critical pts)

# Implementation of the Program

- Staffing
- Triage inclusion/exclusion criteria
- Minimisation of clinical risk
- Evaluation

# Staffing

- Three experienced Musculoskeletal Physiotherapists on a rotating roster.
- A Grade 4 Musculoskeletal Physiotherapist for clinical supervision/ teaching 6 hours a week.
- Unwavering support from the Director of Emergency Medicine.
- Enthusiastic and highly motivated.

# Triage Criteria

## Inclusion

- <65 years old
- Peripheral joint injury
- Neck and LBP
- Incl radicular/somatic referred pain
- Mechanical Pain

## Exclusion

- Obvious # /dislocation
- Open wounds
- Red, hot, swollen joints
- LOC, SOB, chest pain
- Headaches
- Systemic Symptoms

# Minimisation of Clinical Risk

- Clinical competencies.
- “Red” and “Yellow” flags.
- Documentation standard and Audits
- Peer review sessions.
- Consultant support

# Clinical Competencies

- Identified key clinical areas and underwent training to achieve a level of expertise.
  - Plastering
  - Radiology
  - Pharmacology
  - Advanced Musculoskeletal Assessment

## “Red” and “Yellow” flags

- Development of Red flags (Butler, 2000)
  - Handover or liase with medical consultant.
- Development of Yellow flags
  - Proceed with caution, may need to liase with medical consultant.

# Documentation Standards & Audits

- Use of assessment checklist to ensure consistency between therapists.
- Regular documentation audits to ensure accurate and high level of documentation.

# Peer Review Sessions

- Weekly forum
  - XR review
  - Patient review
  - Case Presentations
  - Clinical Reasoning and skills
  - Tutorials
  - Tests and Quiz's



# Consultant Support

- Assigned a Consultant each shift.
- Assist in clinical decision making
  - Enhanced diagnostic skills
  - Radiology reporting
  - Pharmacology provision
  - Other diagnostic's or referrals
  - Handover if presence of Red flags
  - Shared learning

# Evaluation

- Main comparisons of :
  - Wait times
  - Total time (occupancy time)
- Against historical ED data 2003 and control data 2004

# Evaluation

- Other areas :
  - Patient satisfaction (follow up call)
  - Staff satisfaction (via interviews)
  - Incident reports and complaints

# Evaluation

- Service provision data :
  - Analysis of discharge destination
  - Client types (diagnostic)
  - Types of intervention

# Results

- Patients numbers seen **457** in total
  - 383 Primary contact patients
  - 34 Inappropriate for sole Physiotherapy
  - 40 “favours” for Consultants to provide second opinion and advice.

# Results

	2003 historical	N	ESP Cases	N
<b>TotalTime Overall</b>	<b>175min</b>	<b>1699</b>	<b>84.9 min</b>	<b>383</b>
<b>Wait Time Overall</b>	<b>37min</b>	<b>1699</b>	<b>10.08 min</b>	<b>383</b>

49% reduction in occupancy time

37% reduction in wait times

# Implications of results

- Average time saving for 383 cases = 79 mins
- Total reduction in ED occupancy of 504 hrs
- Increasing capacity of ED by 3% a day = one cubicle freed up

# Homogenous Results

- Poor clinical specificity of ED data
- Homogenous groupings of ankle & knee strains and sprains
- Direct comparison to 2004 control data

# Homogenous Results

	Controls (n=287)	N	ESP Cases (n=179)	N	Z score	P value
Ankle wait time	18.7 min	91	8.6 min	61	2.166	0.03
Ankle total time	109.4 min	91	83.5 min	61	2.284	0.022
Knee wait time	18.7 min	65	8.6 min	50	3.067	0.002
Knee total time	146.9 min	65	74.9 min	50	5.572	<.001

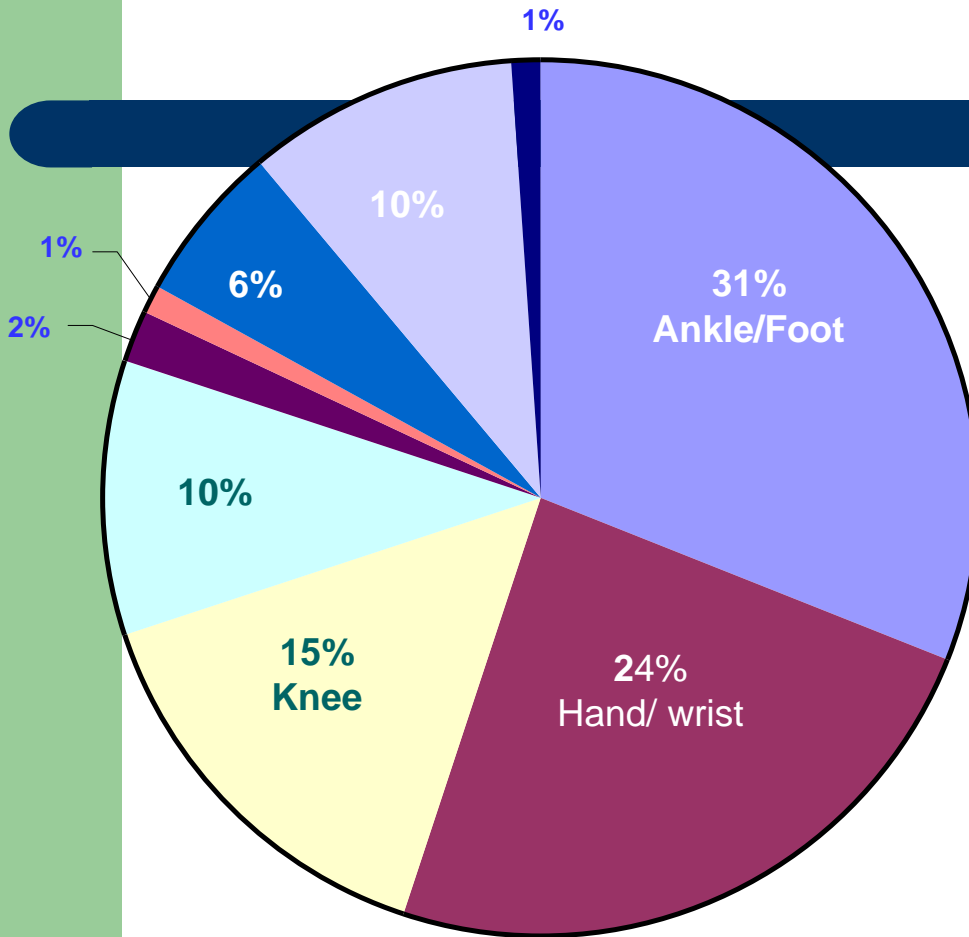
# Staff Satisfaction Results

- Consultant Focus groups
  - Very impressed with program
  - Enhances patient care
  - Highly professional and wish to use physio to take on a teaching role
  - View it as an essential part of ED

# Patient Satisfaction Results

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
Did the physio provide clear advice and information about looking after you injury	49	16	1		
When left ED you had a clear understanding of your injury / condition	44	19	3	1	
The physio satisfied your needs when you visited ED	50	16			

# Areas affected



# Conclusion

- An extended scope practitioner can reduce waiting and occupancy time for patients with musculoskeletal injuries and simple fractures.
- Permanent position now created in the ED and continues as a 7 days a week service.
- Viewed as a valuable addition to the ED team.
- Utilized as an educator for the ED registrar training program.

# The Future

DHS through the Better Skills Best Care initiative has provided funding for :

- The refinement of the evaluation tools.
- Development of a competency framework for use in other networks.
- Externally facilitated workshops with key stakeholders working in the ED

# Thank you

## Acknowledgments

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