

**Physiotherapy's role in emergency department  
settings:  
A qualitative investigation of emergency  
stakeholders' perceptions**

Thesis submitted by

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## Declaration on Ethics

The research presented and reported in this thesis was conducted within the guidelines for research ethics outlined in the *National Statement on Ethics Conduct in Research Involving Human* (1999), the *Joint NHMRC/AVCC Statement and Guidelines on Research Practice* (1997), the *James Cook University Policy on Experimentation Ethics. Standard Practices and Guidelines* (2001), and the *James Cook University Statement and Guidelines on Research Practice* (2001). The proposed research methodology received clearance from the James Cook University Human Ethics Review Committee (approval number H2396).

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## **Statement on the contribution of others**

### **Financial Assistance**

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### **Editorial Assistance**

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~ *For my boys, Jordan and Putchkey* ~

## Abstract

The principal aim of the research was to explore the varying perceptions of what physiotherapy can offer the emergency department system based on the opinions of doctors, nurses, physiotherapists and patients in that system, and opinions of the community health sector. In conjunction with existing literature and the research findings, conceptual models of emergency department (ED) physiotherapy were developed to illustrate appropriate clinical practice and integration of the position within the emergency department system. Two overarching aims were to: identify different stakeholders' expectations and interpretations of ED physiotherapy; and have stakeholders consider how physiotherapy contributes to the emergency department system. The main objective was to formulate conceptual models of physiotherapy's integration into the emergency department system based on these varying perspectives.

This study employed an interpretivist-systems theory-case study methodology; a unique direction for physiotherapy research. The qualitative data sources were continually aligned within a broader 'systems' framework. The participants represented individual elements in the emergency department system. General systems theory, combined with principles of Soft Systems Methodology, appropriately highlights pragmatic components of the research, such as what the physiotherapy role encompasses and how it influences emergency department service delivery. It is also sensitive to the meaning of social, cultural and political undercurrents embedded in participants' responses; acknowledging diverse world views and respecting the value of different voices in the research, even if they differed from the researcher's own world view. Case study method added structure to the conduct of the research, making it further amenable to qualitative data techniques.

Data collection used a variety of qualitative approaches including surveys of patients (N=80), questionnaires for community health professionals (N=35) and in-depth interviews with emergency department staff (N=12). The Townsville Hospital, Queensland, and the Austin Hospital, Victoria, were the two cases under investigation, the former having no official full-time ED physiotherapy service and the latter having used physiotherapy to treat acute patients in the department for over seven years. The varied dataset provides one of the most comprehensive qualitative perspectives on emergency department physiotherapy to date. Components of research rigour were meticulously considered and findings were intermittently realigned to systems theory principles to provide fresh insight into ED physiotherapy's professional contribution.

Stakeholders' perceptions were considered from a systems theory view, professional practice perspective and in the sphere of the broader health system. Three categories of conceptual models were built based on agreed features of ED physiotherapy across the stakeholders and two cases. The models, as abstractions, highlight appropriate integration of physiotherapy within the emergency department; core clinical competencies; and suitable ownership of ED physiotherapy to preserve its identity and accountability within the emergency system.

The participants' voices dominate the research, creating a rich, nuanced view of ED physiotherapy as an Australian practice. The conceptual models attempt to unify these voices.

The thesis is advantageous to the physiotherapy profession by not isolating opinion to a physiotherapy-only perspective and encouraging future discourse to overcome barriers, potential conflict and misconceptions of physiotherapy practice so that ED physiotherapy is better understood and appropriately implemented.

## **Publications and Presentations**

Anaf, S and Sheppard, LA (2007). Physiotherapy as a clinical service in emergency departments: a narrative literature review. *Physiotherapy*, 93 (4), pp. 243-252.

Anaf, S and Sheppard, LA (2007). Describing physiotherapy interventions in the emergency department setting: an observational, pilot study. *Accident and Emergency Nursing*, 15 (1), pp.34-39.

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Anaf, S and Sheppard, LA (2006). Mixed methodology in the middle. *IIQM 7<sup>th</sup> International Interdisciplinary Conference on Qualitative Methodology* – Gold Coast.

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# Glossary

<b>Access Block</b>	Patients in the emergency department requiring inpatient care are unable to gain access to appropriate hospital beds within a reasonable timeframe (typically greater than 8 hours) (Australasian College of Emergency Medicine, 2004a)
<b>Australasian Triage Scale</b>	An emergency department classification system to determine the severity of a patient's injury or illness. Rated by a five-level system.
<b>Australian Physiotherapy Association</b>	The professional body for Australian physiotherapists.
<b>Australian Physiotherapy Council</b>	An independent national body that monitors the quality and standards of physiotherapy teaching and knowledge. Accredits physiotherapy courses in institutions and evaluates international clinicians who wish to work in Australia.
<b>Biopsychosocial Model of Health</b>	...A multifactorial model of illness that takes into account the biological, psychological, and social factors implicated in a patient's conditions. Like the biomedical model, it focuses on the individual for diagnosis and treatment (Germov, 2002, p.14).
<b>Care Coordination Team</b>	A multidisciplinary team within the emergency department designed to facilitate treatment and discharge of patients into the community.
<b>Casemix</b>	An organisational system which allows hospital departments to classify inpatient care episodes.
<b>Closed System</b>	A system that has strongly internalised operations and reduced boundary permeability.
<b>Conceptual model</b>	A theoretical drawing designed to represent features of a system. Describes functional relationships between elements of a system.
<b>Element</b>	A component of a system that, when placed with other elements, forms relationships that influence the system's operation.
<b>Emergency Department</b>	The dedicated area in a hospital that is organised and administered to provide a high standard of emergency care to those in the community who perceive the need for or are in need of acute or urgent care including hospital admission (Australasian College for Emergency Medicine, 2001).
<b>Emergency Department Physiotherapy</b>	A physiotherapy clinician dedicated to working as a member of the emergency department team to manage patients either autonomously or in conjunction with other attending medical or nursing staff (Anaf & Sheppard, 2007c)

<b>General Systems Theory</b>	A specific systems theory that seeks a common language to unite the scientific community (Midgely, 2000). Believes that the 'whole is greater than the sum of its parts'. General Systems Theory is applicable to all manner of sciences.
<b>Homeostasis</b>	Any process which regulates or maintains a system in a stable state in relation to a changing external environment in which this system operates ("Collins Dictionary of Sociology," 2000).
<b>medTRAK</b>	An emergency department computer system which displays patient histories, triage categories, their location within the hospital and investigations being conducted.
<b>Metaphor</b>	A feature of General Systems Theory which combines theoretical concepts surrounding a system with practical features of that system. It is a way to judge the value of certain applications of systems theory to a particular real-world experience.
<b>Overbounded System</b>	A system too constricted by boundaries and disconnected from the external environment (Alderfer, 1980).
<b>Open System</b>	A system which has strong boundary permeability which allows more pronounced relationships between inputs, outputs and the environment.
<b>Soft Systems Methodology</b>	A type of systems theory that aims to strategically solve problems that are ill-defined. Soft systems are typically underbounded and it is a methodology ideally suited to poorly described, poorly researched and complex systems/ organisations.
<b>System</b>	An organised assembly of components that share a relationship with each other, creating a unique behaviour, with each component contributing to as well as being affected by it. Contains boundaries, elements, relationships and is sensitive to homeostasis (Sturmborg, 2004)
<b>Underbounded system</b>	A system with too much boundary permeability causing great entanglement with the external environment. The system risks losing direction and identity (Alderfer, 1980).
<b>Victorian Ambulatory Classification System</b>	A model that provides the emergency department with funds based on attendance to the department weighted by triage category.

## Abbreviations

<b>ACEM</b>	Australasian College for Emergency Medicine
<b>AMA</b>	Australian Medical Association
<b>ANF</b>	Australian Nursing Federation
<b>APA</b>	Australian Physiotherapy Association
<b>APC</b>	Australian Physiotherapy Council
<b>ATS</b>	Australasian Triage Scale
<b>AX</b>	Abbreviation for 'Assessment'
<b>CCT</b>	Care Coordination Team
<b>ECCT</b>	Emergency Care Coordination Team
<b>ED</b>	Emergency Department
<b>ENP</b>	Emergency Nurse Practitioner
<b>GP</b>	General Practitioner
<b>GST</b>	General Systems Theory
<b>HITH</b>	Hospital In The Home
<b>LOS</b>	Length of Stay
<b>MX</b>	Abbreviation for 'management'
<b>NHS</b>	National Health Service (UK)
<b>NRHA</b>	National Rural Health Alliance
<b>QACS</b>	Queensland Ambulatory Classification System
<b>RX</b>	Abbreviation for 'treatment'
<b>SSM</b>	Soft Systems Methodology
<b>SSOU</b>	Short Stay Observation Unit
<b>VACS</b>	Victorian Ambulatory Classification System
<b>WCPT</b>	World Confederation of Physical Therapists