# The Impact of Patient Transfers and Bedspace Moves on Nurse Workload

***Nicole Blay***

---

**2015**

A Thesis submitted in fulfilment of a PhD

*Faculty of Health, University of Technology Sydney*

*Supervisors*

Professor Christine Duffield

Professor Robyn Gallagher

Dr Michael Roche

***CERTIFICATE OF ORIGINAL AUTHORSHIP***

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

Signature of Student:

Production Note:
Signature removed prior to publication.

Date: 08/12/2015

## *Acknowledgements*

A body of work such as is presented here cannot be accomplished without the support and encouragement of many individuals. To each of you, I thank you.

I am greatly indebted to my principal supervisor Christine Duffield, for her expert guidance and patience with reading and reviewing the (very) many drafts of this thesis. Likewise for my co-supervisors, Robyn Gallagher and Michael Roche. Robyn for her boundless enthusiasm and statistical expertise and Michael for freely giving up his time, even when on sabbatical, to support me with the management of the large health administrative dataset.

I would also like to express my sincere gratitude to the nurses who have contributed in many different ways to this project. To Vicki Manning for access to the secondary data and the wards at the site hospital. Cara Dickson for downloading the data from HIE. Elle and Amanda for access to your wards and patients under your care. Special thanks must go to the nurses working on the medical and surgical wards used in Stage 2. Your enthusiasm to be observed and timed, made data collection an overwhelmingly positive experience.

Appreciation is also extended to Claudia Virdun and the Bachelor of Nursing students for permission to attend their clinical skill sessions at the Faculty of Health, Karing-gai campus. These sessions highlighted the need to modify space on the data collection tool and gave me much needed timing practise.

And finally, I am forever grateful to my family without whose support I would not have completed this study. To my husband and sons for their patience throughout the many hours that I have spent with my laptop, and to my mum for her unending encouragement to fulfil my dreams. I hope that one day you will reap the benefits of my endeavours.

*'This life is a hospital in which each patient is obsessed with the desire to change beds'*

Charles Baudelaire (1821-1867)[1]

[1] Baudelaire, C. (1867). 'Anywhere Out of the World', *Little Poems in Prose*; Spleen, Paris.

# TABLE OF CONTENTS

# LIST OF TABLES

# LIST OF FIGURES

# Abstract

This multiple methods study explores the impact of moving patients between and within wards on nursing workload. While patient transfers (between clinical units) and bedspace moves (between beds on the same ward) are a routine part of nursing practice in acute hospitals, the rate of transfers has increased in recent times, due primarily to a shortage of hospital beds and an increasing demand for health services. The organisation and preparation of the patient prior, during and post transfer or bedspace move and the related communication processes forms a component of nursing work that has not been comprehensively explored. As a consequence, the impact of patient moves on nursing workload has not been fully realised nor captured in staffing models.

A three-stage, sequential approach was used in this study. Stage 1 retrospectively examined 2008-2009 financial and patient administrative data to explore the incidence and destination of patient moves in one Australian metropolitan hospital over a financial year. Results identified that the majority of patient movements involved medical-surgical wards (n=12) and were therefore suitable contexts for more in-depth investigation.

Stage 2 consisted of a direct observational-timing study conducted over a seven week period. Based on Stage 1 results, one medical and one surgical ward with a high rate of patient moves were selected for observation. A purpose-designed data collection tool was used to record and time nursing activities associated with observed patient moves (n=75). From these observational records and field notes, two case studies were developed in Stage 3 to demonstrate in detail the sequence of nursing activities, the

role of the nurse and the factors that can impact on the time taken to transfer a patient to another ward.

The results of Stage 1 identified that at the selected hospital, 10,733 patients who remained in hospital for 48 hours or more experienced 34,715 transfers and bedspace moves in the selected year. The largest single group (48.6%, n=16,861) of these moves involved medical-surgical wards. The results from Stage 2 indicated that the average patient transfer took 65.8 minutes and bedspace moves 29.2 minutes to complete. Of this time, over 40 minutes of nurses' time was spent on patient transfers and 11 minutes on bedspace moves. This means that for medical-surgical wards alone, 3.9 FTE nurses are necessary for all the moves that occur each month.

The impact of patient transfers and bedspace moves on nurses' workload is considerable. Time spent moving patients means that less time is available for other patients and their care needs. In addition, many transfer activities could be performed by other members of the team. Given the impact on nurses' workload, it is timely for hospitals to consider strategies to minimise the frequency and improve the efficiency of patient transfers.

## Author Publications Associated with this Thesis

Blay, N., Duffield, C., Gallagher, R. & Roche, M. 2014, 'Methodological Integrative Review of the Work Sampling Technique used in Nursing Workload Research', *Journal of Advanced Nursing*, vol. 70, no. 11, pp. 2434-2449.

Blay, N., Duffield, C., Gallagher, R. & Roche, M. 2014, 'A Systematic Review of Time Studies to Assess the Impact of Patient Transfers on Nurse Workload', *International Journal of Nursing Practice*, vol. 20, no. 6, pp. 662-73.

Blay, N., Duffield, C.M. & Gallagher, R. 2012, 'Patient transfers in Australia: implications for nursing workload and patient outcomes', *Journal of Nursing Management*, vol. 20, no. 3, pp. 302-10.