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What makes a Moving and Handling People Guideline work?

A thesis presented in partial fulfilment of the requirements for the degree of

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'Only the person not reading the forecast is surprised by the storm'

– Unknown

Abstract

Moving and handling of people (MHP) is a major reason for developing musculoskeletal disorders (MSD) in the healthcare sector worldwide. To reduce MSD from MHP, many national and state level guidelines targeting MHP have been developed. However, little is known about their impact on injury claims rates, how they are intended to work, if intended users are aware of and use them, which parts of the guideline are being used, and how they are implemented.

Therefore, the overarching goal of this thesis was to contribute to understanding what makes a MHP guideline work. It was addressed by examining the effects of introducing the New Zealand Accident Compensation Corporation *‘Moving and Handling People: The New Zealand Guidelines’* (MHPG), using a mixed-methods approach in five sequential studies. An analysis of claims data (Study 1) showed that MHP related claims rates declined before, but increased after the introduction of the MHPG. A study of the MHPG programme theory (Study 2) showed that key actors for implementation were MHP coordinators, H&S managers, and therapists. The developers argued for implementing a multifaceted MHP programme where implementation of organisational systems should create the foundation for implementing the core components. A questionnaire analysis (Study 3) showed that a high proportion of MHP coordinators, H&S managers, and therapists were aware of the MHPG, while a high proportion of therapists used it. In contrast, fewer carers were aware of and used it. A second questionnaire analysis (Study 4) showed that more key actors were familiar with and used the core components compared to the organisational systems. A low proportion of actors experienced change after use. Case studies (Study 5) showed that organisational motivation to implement a MHP programme was initiated by MHP related staff injuries. The implementation process was gradual, changing MHP practices during multiple steps, and dependent on a dedicated person to drive implementation.

This thesis shows that making a MHP guideline work requires a dedicated actor, with support from management, to facilitate implementation and organisational changes needed. However, many contextual factors affect implementation, ranging from national, e.g. legislation and policies, to individual level, e.g. individuals conducting MHP.

Preface

In your hands, or on your screen, you have the thesis ‘What makes a Moving and Handling People Guideline work?’. This thesis attempts to contribute to improving our understanding of what makes a moving and handling people guideline work. This was done by examining the New Zealand Accident Compensation Corporation’s ‘*Moving and Handling People: The New Zealand Guidelines*’. The thesis investigated what parts of the guidelines worked, for whom, under what circumstances and, most interestingly, why they worked for some but not for others. The research described in the thesis was approved by the Massey University Human Ethics Committee Southern B (SOB 15/78) and conducted between October 2015 and December 2018.

I am very grateful to the many people who have supported and helped me bring this thesis to completion.

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Mark Lidegaard

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Abbreviations

ACC	New Zealand Accident Compensation Corporation
DHB	District Health Board
FCC	The Five Core Components
FTE	Full-Time Equivalent employment
H&S	Health and Safety
MHP	Moving and Handling of People
MHPG	The New Zealand Accident Compensation Corporation ' <i>Moving and Handling People: The New Zealand Guidelines</i> '
Moh	Ministry of Health
MSD	Musculoskeletal Disorders
OSC	The Organisational System Components

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List of publications and presentations

Peer-reviewed papers

1. **Lidegaard, M**, Olsen, KB, Legg, SJ, and Douwes, J. The impact of national guidelines covering moving and handling of people on injury rates and related costs. *Scandinavian Journal of Work, Environment, and Health*. E-pub ahead of print. <https://doi.org/10.5271/sjweb.3818>
2. **Lidegaard, M**, Olsen, KB, and Legg, SJ. How was a national moving and handling people guideline intended to work? The underlying programme theory. *Evaluation and Program Planning*. Apr; 73:163–75. <https://doi.org/10.1016/j.evalprogplan.2019.01.002>
3. **Lidegaard, M**, Olsen, KB, Legg, SJ, and Douwes, J. Awareness and use of a national moving and handling people guideline. (*Manuscript in preparation*)
4. **Lidegaard, M**, Olsen, KB, and Legg, SJ. Familiarity, use, and change after use of the components of a national moving and handling people guideline. (*Manuscript in preparation*)
5. **Lidegaard, M**, Olsen, KB, Legg, SJ, and Trevelyan, F. How are moving and handling people programmes implemented – learnings from three case studies. (*Manuscript in preparation*)

Peer-reviewed conference contributions

1. **Lidegaard, M**, Olsen, KB, and Legg, SJ. Identifying the program theory underlying a national intervention programme: the New Zealand Moving and Handling People Guidelines. International Scientific Conference on the Prevention of Work-Related Musculoskeletal Disorders (PREMUS) 2016. Abstract accepted for oral presentation, (presentation withdrawn)
2. Lahti, H, Legg, SJ, **Lidegaard, M**, and Olsen, KB. Effectiveness of National Moving and Handling People Programs. Human Factors and Ergonomics Society of Australia Conference (HFESA). May 2017. Abstract accepted for poster presentation
3. **Lidegaard, M**, Olsen, KB, and Legg, SJ. Uptake and use of national health guidelines on moving and handling of people- A questionnaire survey of a national health

- guideline. International Ergonomics Association Congress (IEA), August 2018. Abstract accepted for oral presentation
4. **Lidegaard, M**, Olsen, KB, and Legg, SJ. What facilitates or hinders the implementation and impact of a national health guideline - learnings from case studies in the healthcare sector. International Ergonomics Association Congress (IEA), August 2018. Abstract accepted for oral presentation
 5. Olsen, KB, **Lidegaard, M**, and Legg, SJ. Chronicle Workshops as Data Collection Method in Evaluation of National Work Environment Intervention. International Ergonomics Association Congress (IEA), August 2018. Abstract accepted for oral presentation
 6. Lahti, H, Olsen, KB, **Lidegaard, M**, and Legg, SJ. Barriers and Facilitators in Implementing a Moving and Handling People Programme –An Exploratory Study. International Ergonomics Association Congress (IEA), August 2018. Abstract accepted for oral presentation
 7. Olsen, KB, **Lidegaard, M**, and Legg, SJ. What makes a national moving and handling guideline work or not? Nordic Human Factors and Ergonomics Society Conference, August 2019. Abstract accepted for oral presentation.

Non-peer reviewed presentations

1. **Lidegaard, M**, Olsen, KB, and Legg, SJ. Uptake, Use & Impact of the ACC New Zealand Moving and Handling People Guidelines, 2012. Moving and Handling Association of New Zealand (MHANZ) Annual General Meeting May 2016. Oral presentation
2. **Lidegaard, M**, Olsen, KB, and Legg, SJ. How/Do national health guidelines work? A realist analysis of the New Zealand Moving and Handling People Guidelines. Human Factors and Ergonomics Society of New Zealand Conference (HFESNZ), September 2016. Oral presentation

3. **Lidegaard, M**, Olsen, KB, and Legg, SJ. Use of the ACC 'Moving and Handling People Guidelines, 2012 - Results from a national survey. Moving and Handling Association of New Zealand (MHANZ) Annual General Meeting, May 2017. Oral presentation
4. Lahti, H, Olsen, KB, **Lidegaard, M**, and Legg, SJ. Can guidance material about moving and handling of people help to reduce musculoskeletal discomfort in the health care sector? Human Factors and Ergonomics Society of New Zealand Conference (HFESNZ), September 2017. Oral presentation

Reports

1. Olsen, KB, **Lidegaard, M**, and Legg, SJ. Assessment of the uptake and impact of the ACC New Zealand Moving and Handling People Guidelines (2012). Report. Stage 2: Uptake and use, Part A: Descriptive analysis of questionnaire findings. New Zealand Accident Compensation Corporation, November 2016
2. Olsen, KB, **Lidegaard, M**, and Legg, SJ. Assessment of the uptake and impact of the ACC New Zealand Moving and Handling People Guidelines (2012). Report. Stage 2: Uptake and use, Part B: Analysis of questionnaire findings stratified by role in relation to moving and handling people and by sub-sector in health care. New Zealand Accident Compensation Corporation, January 2017
3. Olsen, KB, **Lidegaard, M**, and Legg, SJ. Assessment of the uptake and impact of the ACC New Zealand Moving and Handling People Guidelines (2012). Report. Stage 3: Injury claims. Trends in injury claims and claims cost related to moving and handling people 2005 - 2016. New Zealand Accident Compensation Corporation, June 2017
4. Olsen, KB, **Lidegaard, M**, and Legg, SJ. Assessment of the uptake and impact of the ACC New Zealand Moving and Handling People Guidelines (2012). Report. Stage 4: Case studies. Factors facilitating and hindering implementation and impact of the MHPG and MHP programme elements. New Zealand Accident Compensation Corporation, December 2017

5. Olsen, KB, **Lidegaard, M**, and Legg, SJ. Assessment of the uptake and impact of the ACC New Zealand Moving and Handling People Guidelines (2012). Final report, recommendations. New Zealand Accident Compensation Corporation, December 2017