



Universiteit
Leiden
The Netherlands

Polytrauma patient management: Processes and performance in the Netherlands and beyond

Dijkink, S.

Citation

Dijkink, S. (2020, October 29). *Polytrauma patient management: Processes and performance in the Netherlands and beyond*. Retrieved from <https://hdl.handle.net/1887/137986>

Version: Publisher's Version

License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

Downloaded from: <https://hdl.handle.net/1887/137986>

Note: To cite this publication please use the final published version (if applicable).

Cover Page



Universiteit Leiden



The handle <http://hdl.handle.net/1887/137986> holds various files of this Leiden University dissertation.

Author: Dijkink, S.

Title: Polytrauma patient management: Processes and performance in the Netherlands and beyond

Issue Date: 2020-10-29

Polytrauma patient management:

Processes and performance in the Netherlands and beyond

Suzan Dijkink

Polytrauma patient management:

Processes and performance in the Netherlands and beyond

© Suzan Dijkink, 2020, Leiden, The Netherlands

All rights reserved. No part of this thesis may be reproduced, stored in a retrieval system or transmitted in any form or by any means, without prior written permission of the author

ISBN: 978-94-6361-465-8

Cover Design: Erwin Timmerman

Lay-out and print: Optima Grafische Communicatie, Rotterdam, The Netherlands

Financial support for the publication of this thesis was kindly provided by Trauma Centrum West, ABN Amro Nederland and Chipsoft.

Polytrauma patient management:

Processes and performance in the Netherlands and beyond

Proefschrift

ter verkrijging van
de graad van Doctor aan de Universiteit Leiden,
op gezag van Rector Magnificus prof. mr. C.J.J.M. Stolker,
volgens besluit van het College voor Promoties
te verdedigen op donderdag 29 oktober 2020
klokke 16.15 uur

door

Suzan Dijkink
geboren te Hengelo (Ov.) op 25 juli 1992

Promotores

Prof. dr. I.B. Schipper

Prof. dr. G.C. Velmahos (Massachusetts General Hospital, Boston)

Copromotor

Dr. P. Krijnen

Leden promotiecommissie

Prof. Dr. L.P.H. Leenen (Universitair Medisch Centrum Utrecht, Utrecht)

Prof. Dr. L.P.H.J. Aarts

Prof. Dr. J.C. Goslings (OLVG, Amsterdam)

Dr. M.S. Arbous

CONTENTS

INTRODUCTION

Chapter 1	General introduction, aim and outline of the thesis	9
-----------	---	---

PART I EVALUATION OF TRAUMA CARE SYSTEMS

Chapter 2	Trauma systems around the world: A systematic overview	25
-----------	--	----

Journal of Trauma and Acute Care Surgery 2017

Chapter 3	Polytrauma patients in the Netherlands and the USA: A bi-institutional comparison of processes and outcomes of care	47
-----------	---	----

Injury 2018

Chapter 4	Differences in characteristics and outcome of patients with penetrating Injuries in the USA and the Netherlands: A multi-institutional comparison	65
-----------	---	----

World Journal of Surgery 2018

Chapter 5	Quantification of trauma center access using Geographical Information System-based technology	79
-----------	---	----

Value in Health 2020

Chapter 6	The impact of regionalized trauma care on the distribution of severely injured patients in the Netherlands	95
-----------	--	----

Submitted

PART II EVALUATION OF INDIVIDUALIZED TRAUMA CARE: MALNUTRITION IN POLYTRAUMA PATIENTS

Chapter 7	Malnutrition and its effects in severely injured trauma patients	113
-----------	--	-----

European Journal of Trauma and Emergency Surgery 2020

Chapter 8	Nutrition in the surgical intensive care unit: The cost of starting low and ramping up rates	133
-----------	--	-----

Nutrition in Clinical Practice 2016

Chapter 9	The malnutrition in polytrauma patients (MaPP) study: Research protocol	145
-----------	---	-----

Nutrition and Health 2019

DISCUSSION		169
-------------------	--	-----

Chapter 10	General discussion	191
------------	--------------------	-----

Chapter 11	Summary	
------------	---------	--

APPENDICES

Chapter 12	Samenvatting	197
Chapter 13	Curriculum Vitae	205
Chapter 14	List of publications, co-authors and presentations	209
Chapter 15	Acknowledgements	221

