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# IMPLEMENTATION SCIENCE IN HEALTHCARE TECHNOLOGY INTEGRATION

## Foreword

As we celebrate the fifth anniversary of the Eindhoven Medtech Innovation Center (e/MTIC), we reflect on our journey. The mission of e/MTIC is not merely to foster the development of ideas generated by doctors and nurses on the hospital floor. In collaboration with engineers from the technical university, we strive to transform these ideas into effective products and, with the aid of the business sector, bring them back to the workplace to benefit patients directly. Our motto, "the fast track to clinical innovation," is a testament to our commitment. However, we recognize that it typically takes an average of 17 years for an evidence-based innovation to be implemented in practice. Implementation science is the field that addresses the challenges of the dilemmas inherent in this process. This book aims to shed light on these complexities by giving voice to key figures involved in the journey from ideation to solution and product creation. We have chosen an example from clinical practice that encapsulates the entire trajectory from idea to product development and implementation in clinical settings. Specifically, this involves the development of a new monitoring system for mother and child during pregnancy and childbirth, but can be replaced by any other idea. Our journey in this case, as in many others, spanned 20 years, aligning with the typical 17-year timeframe for clinical implementation.



Château Lambrey in Haute Saône

During the third Lambrey conference, we reflected with researchers from the Fundamental Perinatology Research Group, along with representatives from the hospital, technical university, business sector, and health insurers, on the journey we have made.

We hope this book not only imparts knowledge but also sparks inspiration, motivating readers to contribute positively to the healthcare sector. Embark on this enlightening journey with us and discover the intricate dance of implementation science.

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