

## Back on track

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# Chapter 9

Valorisation addendum



## VALORISATION ADDENDUM

In this thesis, we focussed on therapy approaches delivered by primary care physiotherapists to improve the level of daily activities in patients with non-specific chronic low back pain (CLBP). We investigated whether a biopsychosocial intervention provided by a primary care physiotherapist would be effective in reducing the level of functional disability. Furthermore, we investigated whether a biopsychosocial intervention would be feasible to implement when offered as an integrated care intervention. An integrated care intervention means that the intervention is provided by a primary care physiotherapist in collaboration with a physician in rehabilitation medicine. While the previous chapters described the findings of the studies, the purpose of this chapter, the valorisation addendum, is to describe the relevance of the thesis findings and describe to whom the results are applicable, how research findings can be translated into innovative products and activities, and how implementation can be realised.

### RELEVANCE OF THE FINDINGS

Although the studies described in this thesis were performed from a scientific point of view, the research findings about which physiotherapy approach is most beneficial for patients with CLBP is useful to optimize current health care. Patients benefit from optimized health care as they will improve their level of functional disability to a greater extent and will perform better at home and at work. This in turn can have a significant impact at the individual, societal and economic level. Based on the research findings described in this thesis, we concluded that, for patients with a psychosocial profile of low complexity, the current primary care physiotherapy seems to suffice and therefore does not need to be transformed into a more holistic approach which requires extra (biopsychosocial) training and supervision of physiotherapists. For patients with a psychosocial profile of moderate complexity, promising results were found for our biopsychosocial care intervention when offered as an integrated care approach. This subgroup of patients usually receives multidisciplinary care in a secondary care setting (e.g. hospital or rehabilitation clinic). The integrated care intervention significantly improved the level of functional disability in this subgroup of patients. Furthermore, after training, primary care physiotherapists were able to deliver a biopsychosocial intervention in a qualitative sufficient way. Based on these findings, a biopsychosocial integrated care intervention might be a good alternative for the (more expensive and intensive) multidisciplinary care usually provided. Although these two interventions need to be compared in a future longitudinal study preferably using a randomised controlled study design and cost-effectiveness analysis, the next sections will describe what kind of impact a biopsychosocial integrated care intervention could have and for whom it could be implemented in daily practice.

## TARGET GROUP

Implementing a biopsychosocial integrated care intervention in future can affect different kinds of populations. Examples are patients who receive the intervention, primary care physiotherapists who deliver the intervention, physicians in rehabilitation medicine, general practitioners (GPs) or other health care specialists who refer patients (and partly deliver the intervention), and health care insurance companies who fund the intervention.

Regarding patients, it should be mentioned that CLBP is a broad concept. Previous chapters already explained that within the population of patients with CLBP different psychosocial complaints and different levels of functional disability can be present. The integrated care intervention was specifically developed for patients with a psychosocial profile of moderate complexity. Implementing an integrated care intervention will therefore be applicable to this group of patients only. Some speculations can be made regarding the advantages of implementation for this group of patients. First, patients might be able to start rehabilitation at an earlier point in time. Hospitals or rehabilitation clinics often deal with a waiting list, while physiotherapy practices (in which the integrated care intervention will be offered) often do not. When patients can start therapy directly, patients will start rehabilitation at an earlier moment stimulating earlier return to work and social activities. A second advantage for patients is the shorter distance to a physiotherapy practice than a rehabilitation clinic or hospital. This leads to less traveling time and traveling costs.

Regarding physiotherapists working in primary care physiotherapy settings it should be mentioned that many physiotherapists have no or less experience with providing a protocolled biopsychosocial intervention and often have a more biomedical than biopsychosocially oriented attitude regarding back pain. Furthermore, regular applied physiotherapy sessions are generally provided individually (no group therapy) and with limited or no cooperation with other health care specialists. Implementing a biopsychosocial intervention with an integrated care approach can therefore have large impact on the current practice of primary care physiotherapists. Effort from physiotherapists is required to follow an educational programme, to become more biopsychosocially oriented and to achieve sufficient competence in providing biopsychosocial treatment elements. Also throughout the intervention, physiotherapists need to pay attention to adhere to the protocol, to plan and organise the protocolled (group) sessions, and to keep the level of communication sufficient with the physician in rehabilitation medicine. Although implementing a biopsychosocial intervention requires effort from physiotherapists, they might benefit from it as well. Working according the latest scientific evidence and being in close contact with the health care specialist likely increases the quality of care and satisfaction of patients as well as their own work satisfaction. On the long term, positive experiences of patients and professional colleagues might result in an increased number of (referred) patients to their practice.

In addition to the physiotherapists, implementation of the integrated care intervention affects the referring health care specialists, i.e. the physician in rehabilitation medicine. The physician in rehabilitation medicine provides medical education (prepares a patient for a biopsychosocial approach) and refers the patient to the therapy. During the biopsychosocial integrated care intervention, the physician supports the rehabilitation process throughout. Since therapy

is provided at different therapy settings and not within the same institute as usually would be the case, it requires some extra time and effort to keep in close contact with the patient and the treating physiotherapist.

Another target population that will be involved when implementing the biopsychosocial integrated care intervention are the group of health insurance companies. They pay for biopsychosocial integrated care intervention. A potential advantage of the biopsychosocial integrated care intervention is that the costs per session will be lower than the costs per session of the multidisciplinary intervention in which multiple care providers are involved. Implementation is therefore expected to reduce the direct medical costs. Furthermore, the protocolled integrated care intervention consists of a restricted number of sessions, which prevents from extensive (likely unnecessary) treatments and the quicker start of treatment might prevent further chronification and even more difficult to treat disabilities. Whether or not the integrated care intervention will be eventually cost-effective as compared to the usual multidisciplinary care needs to be investigated still.

## INNOVATIVE PRODUCTS

An integrated care approach is a novel approach that receives increasingly attention in the Netherlands. Until recently, health care was more or less subdivided into primary, secondary or tertiary care. Patients were referred to that specific health care which would fit best, based on the needs of the patient. In the last years, however, a new approach started to become more often used; the integrated care approach. The reason for developing such approach was that the number of patients treated in secondary and tertiary care settings increased quickly in the last years, causing the cost of specialized treatments provided in secondary and tertiary care settings to rise exponentially. It is expected that the increase in number of patients and associated costs will continue even further due to the aging population and the more demanding society. As described in chapter 6, an integrated care approach was developed as strategy to control the increasing costs and to offer patients an intervention with a similar biopsychosocial approach as would usually be offered within a multidisciplinary (secondary health care) programme. The idea of the Back on Track intervention was to provide the biopsychosocial intervention by trained physiotherapists within a primary physiotherapy practice, but under close direction and supervision of the referring physician in rehabilitation medicine; i.e. an integrated care approach.

### *Network*

To be able to implement an integrated care approach, first a team of health care professionals should be recruited who are interested in being involved in an integrated care approach for patients with CLBP. Ideally, a small network within one area should be created as a starting point. This for example may include few GP's, physiotherapists, a department of rehabilitation medicine of a hospital and a rehabilitation centre. Each setting should appoint one leader who acts as primary contact, who stimulates the integrated care approach within their setting and takes overall responsibility.

### *Protocol*

One of the most important products necessary for implementation is the biopsychosocial integrated care intervention itself. Chapter 3 presented a detailed description of the Back on Track intervention. As presented in chapter 6 (feasibility study), the Back on Track intervention may use slight adaptations based on the recommendations provided. For example, an additional individual session (pain education) might be added and the physiotherapist may indicate whether a protocolled exposure session is required or not.

### *Education programmes*

In order to be sure that physiotherapists deliver the protocol in a qualitatively sufficient way, it is important that physiotherapists have a biopsychosocial attitude (instead of a biomedical one) and are well informed about the procedure of an integrated care approach. One way to facilitate physiotherapists to work according to the protocol is by providing an education programme. Based on the findings of chapter 2 (systematic review) and chapter 6 (feasibility study), an education programme containing a few meetings only (2 or 3 sessions; 12 hours in total) can suffice, but only if physiotherapists receive additional support. Support can consist of a treatment protocol, video examples of complex situations, a website with information and frequently asked questions, and supervision over time to discuss difficulties (e.g. follow-up booster sessions). Within the education programme itself, physiotherapists need to be guided into how biopsychosocial elements can be practically provided and how to respond to certain situations. Discussing core-beliefs, cognitions, emotions, behaviour may be difficult. Therefore, the education programme should anticipate on this by providing practical training (e.g. role playing). The education program, which has previously been used for the Back on Track intervention, can be used in future with some small adaptations as just described. The education program should be offered as a program accredited by the Royal Dutch Society for Physical Therapy (KNGF) and offered by two experts minimally. Ideally, these experts have been involved in the development of the integrated care intervention and have clinical experience in providing interventions with a biopsychosocial approach.

Health care professionals involved in the integrated care network (e.g. GPs and physicians in rehabilitation medicine) also need to be educated about the biopsychosocial model of pain, the content of the biopsychosocial intervention as well as the role they have in the integrated care approach. It is of importance for the physician to know which patient to refer (what biopsychosocial profile), how patients need to be prepared for the intervention (what information to provide), when to contact the patient and physiotherapist during the intervention, and how to communicate (i.e. by phone, email, or digital communication system). One educational meeting for physicians prior to the start may suffice. This educational meeting needs to be developed and should be provided by the education team that is involved in the education programme of physiotherapists. After the physicians have received the education, it is important that the leader of each setting/department gains (and keeps) insight in the competence of each physician and contacts the educational team if additional training is necessary.

While above described education programmes are relevant for working professionals, these are also relevant for upcoming health care professionals such as Physiotherapy students. Education about the biopsychosocial model should be well integrated in the curriculum to facilitate the development of a biopsychosocial orientation and attitude of students directly at the beginning of their study and career. To understand to what extent the biopsychosocial model is already merged into existing curricula, Universities of Applied Sciences should be contacted as a starting point. An overview should be created about what theory, practicums or other types of lessons are provided, and to what extent students learn from it and develop a biopsychosocial orientation and attitude. It is expected that such an overview will update our understanding about what role education about the biopsychosocial model has in existing curricula, and what is needed to maintain or improve it in future.

### *Digital communication system*

As previously mentioned, an integrated care intervention requires collaboration of health care providers working in different institutes. In order to stimulate collaboration, good communication and transparency is required. Communication can be optimized with a digital communication tool. This digital communication tool should have a clear and easy to handle reporting format, enabling professionals to provide a quick overview of patient information and information about the progress of the therapy. In addition, this digital communication tool should include validated measurement instruments to evaluate the progress and quality of care. As soon as all health care professionals involved in the intervention have access to this communication tool, it will optimize transparency, and quality of care, and will furthermore lower the burden for patients. Due to the fact multiple digital communication tools already exist and different health care providers use different communication tools, it should first be identified which tools are already in use. It should be decided whether or not existing tools can be linked or a new tool needs to be developed.

## **PLANNING & REALISATION**

Before actually implementing a biopsychosocial integrated care intervention, a new study should be performed to compare the cost-effectiveness with a usual (multidisciplinary) secondary care intervention. One prerequisite for conducting a cost-effectiveness study is funding. At national level, organizations might be interested such as health care insurance companies, KNGF, or ZonMw which stimulates innovative research. In addition, other researchers and clinicians should be stimulated to apply for funding and to evaluate similar interventions. Increasing people's interest in this topic can be done (and is done) by transferring the available knowledge and findings at national and international conferences and symposia. The thesis findings are already presented at conferences such as the Pain Science in Motion Meetings (PSIM) in Brussels (Belgium) and Stockholm (Sweden); the 10th Congress of the European Pain Federation (EFIC) in Copenhagen (Denmark); International Back and Neck Pain Forum in Buxton (United Kingdom) and Oslo (Norway), and the symposium "Bruggen bouwen: vernieuwingen in de pijnrevalidatie" in Heerlen

(the Netherlands). Apart from applying for funding and conducting a longitudinal study which may take several years, implementing an integrated care intervention will take a few more years. Within the first year, the network should be created by contacting and informing health care professionals. Furthermore, the Back on Track intervention should be revised, the education programme and the digital communication tool should be developed, and agreements should be made about the financial organization with the health care insurance companies. Within the subsequent years, professionals should be educated after which the Back on Track integrated care intervention can be implemented in daily practice.