

## Editorial

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# Approaching digital interventions for musculoskeletal rehabilitation

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Dear colleagues,

Aiming at enhancing musculoskeletal rehabilitation for patients with back and musculoskeletal pain complaints, the current issue of the *Journal of Back and Musculoskeletal Rehabilitation* (JBMR) combines articles that a) enhance the knowledge on the assessment and management of specific problems [1–3], b) evaluate treatment effects [4–6], and c) add new information evaluating the benefits of novel applications of biomedical technologies in therapeutic treatment [7–9]. In particular, the paper by Lee et al. shows great potential and has thus been selected as the Editor’s Choice for this issue and has been made freely available. In presenting these issues, this issue of JBMR represents the current awareness and focus of research in this medical field.

However, as a computer scientist by education, I’ll use this editorial to turn your attention towards the recent advancements in the field of health informatics and data analytics and highlight some of the potential implications these might have for your field.

Considering the increase in accuracy of data analytics in recent fields and the usability and omnipresence of apps, the availability of medical applications that address the musculoskeletal rehabilitation field was inevitable. With apps such as Vivira (<https://www.vivira.com/>) or “HelloBetter ratiopharm chronischer Schmerz” (<https://ratiopharm.hellobetter.de/>) having received medical device regulation certification, and having confirmed a treatment benefit for patients, in Germany we now have digital treatments available on a

broad scale that can be subscribed to and are billing with health insurance companies on a daily basis. While the treatment benefits are so far shown for a specific disease, we might expect also benefits for similar disease patterns, an aspect which holds wide research potential.

We can expect a further increase of the available digital interventions and the rate of subscriptions. While the current available digital interventions mainly act as a supplement to classical treatments, we can foresee an increasing degree of personalization of such interventions. Consequently, they might even gain relevance in substituting classical in-person treatments; a tendency which might benefit especially residents of rural regions.

However, this envisioned development opens up substantial research needs in the field of musculoskeletal rehabilitation, including the evaluation of the treatment effects for specific diseases and differentiated (e.g., gender- and age-specific) patient groups – a task that I would invite you to consider in your future research.

## References

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