International Journal of Innovative Technologies in Social Science

e-ISSN: 2544-9435

Scholarly Publisher
RS Global Sp. z O.O.
ISNI: 0000 0004 8495 2390

Dolna 17, Warsaw,
Poland 00-773
+48 226 0 227 03
editorial_office@rsglobal.pl

ARTICLE TITLE	THE ROLE OF DIGITAL THERAPEUTICS IN THE MANAGEMENT OF MYOFASCIAL PAIN SYNDROME: A COMPREHENSIVE REVIEW
DOI	https://doi.org/10.31435/ijitss.4(48).2025.4398
RECEIVED	13 October 2025
ACCEPTED	18 December 2025
PUBLISHED	21 December 2025
LICENSE	The article is licensed under a **Creative Commons Attribution 4.0 International License.**

THE ROLE OF DIGITAL THERAPEUTICS IN THE MANAGEMENT OF MYOFASCIAL PAIN SYNDROME: A COMPREHENSIVE REVIEW

Michał Pietrucha *(Corresponding Author, Email: mchlpietrucha@gmail.com)*
Medical University of Silesia, Katowice, Poland
ORCID ID: 0009-0001-0637-1270

Filip Kowal
Medical University of Silesia, Katowice, Poland
ORCID ID: 0009-0004-2775-4264

Kamila Krzyżanowska
Medical University of Silesia, Katowice, Poland
ORCID ID: 0009-0002-4875-244X

Jakub Król
Provincial Specialist Hospital No. 4 in Bytom, Bytom, Poland
ORCID ID: 0009-0006-0696-1904

Adrian Dyląg
District Railway Hospital in Katowice, Katowice, Poland
ORCID ID: 0009-0000-1599-0383

Monika Dziedzic
Complex of Municipal Hospitals in Chorzów, Chorzów, Poland
ORCID ID: 0009-0002-4482-0898

Maciej Łydka
LUX MED St. Elizabeth Hospital, Warsaw, Poland
ORCID ID: 0000-0002-3024-2524

Justyna Lewandowska
Warsaw Southern Hospital, Warsaw, Poland
ORCID ID: 0000-0001-7570-3374

Natalia Libudzic
Maritime Hospital of the Polish Red Cross in Gdynia, Gdynia, Poland
ORCID ID: 0009-0007-8712-0839

Julia Łaciak
SP ZOZ MSWiA in Kraków, Kraków, Poland
ORCID ID: 0009-0003-9499-9248

ABSTRACT

Background: Myofascial Pain Syndrome (MPS) is a prevalent musculoskeletal condition involving trigger points, chronic pain, and functional limitations. Digital therapeutics (DTx) have gained attention as accessible tools that support rehabilitation and self-management in chronic pain.
Purpose of Research: This review aimed to synthesize current evidence on the clinical usefulness of digital interventions—such as telehealth, mobile applications, virtual reality, and wearable sensors—in the management of MPS and related myofascial pain.
Materials and Methods: A systematic review was performed according to PRISMA 2020. Searches across major databases identified studies evaluating digital therapeutics for MPS or chronic musculoskeletal pain with myofascial components. Eligible study designs included randomized trials, quasi-experimental studies, cohort studies, and systematic reviews. Two reviewers independently conducted screening, data extraction, risk-of-bias assessment (RoB2, ROBINS-I, AMSTAR 2), and evaluation of evidence certainty using GRADE.
Results: Digital interventions generally reduced pain, improved function, and supported adherence to therapeutic exercises. Telehealth physiotherapy and app-based rehabilitation showed effectiveness comparable to traditional in-person care. Virtual reality contributed to greater engagement and reductions in pain-related fear, while wearable sensors enhanced monitoring and promoted consistent home-based activity. Together, these tools improved self-management and complemented standard physiotherapy approaches.
Conclusion: Digital therapeutics provide a valuable adjunct in managing Myofascial Pain Syndrome, offering flexible, personalized, and patient-centered care. Although current evidence is promising, more high-quality MPS-specific randomized trials are needed to refine clinical guidance.

KEYWORDS

Myofascial Pain Syndrome, Digital Therapeutics, Telehealth, Mobile Health, Virtual Reality, Wearables, Chronic Musculoskeletal Pain

CITATION

Michał Pietrucha, Filip Kowal, Kamila Krzyżanowska, Jakub Król, Adrian Dyląg, Monika Dziedzic, Maciej Łydka, Justyna Lewandowska, Natalia Libudzic, Julia Łaciak. (2025) The Role of Digital Therapeutics in the Management of Myofascial Pain Syndrome: A Comprehensive Review. *International Journal of Innovative Technologies in Social Science*. 4(48). doi: 10.31435/ijitss.4(48).2025.4398

Introduction

Myofascial Pain Syndrome (MPS) is a common and clinically heterogeneous regional pain condition characterized by hyper-irritable spots (myofascial trigger points, MTrPs) within taut bands of skeletal muscle that cause local and referred pain, restricted range of motion, and functional impairment [1,2]. The syndrome is widely recognised in the clinical and rehabilitative literature as an important contributor to chronic musculoskeletal pain and disability. [1,3]

MPS frequently co-exists with psychosocial comorbidities; chronic pain syndromes in general are strongly associated with anxiety, depression and sleep disturbance, which can perpetuate pain and reduce treatment response — a biopsychosocial complexity that challenges purely biomechanical treatment models [1,3].

Conventional management of MPS is multimodal and commonly includes manual therapy, therapeutic exercise, posture correction, needling techniques (dry needling / trigger-point injections), and adjunctive modalities (e.g., laser, electrotherapy), often combined with pharmacologic symptom control [1,2]. Despite an array of therapeutic options, two system-level barriers reduce their real-world effectiveness: (a) low long-term adherence to home exercise and self-management programmes, and (b) inequitable access to specialised care due to geography, cost and wait times — problems highlighted across musculoskeletal care and exacerbated during the COVID-19 era [4,5].

Digital therapeutics (DTx) — clinically evaluated, software-driven interventions designed to prevent, manage or treat medical conditions — have emerged as a promising strategy to overcome these barriers in

chronic musculoskeletal disorders [6]. Digital care spans synchronous telehealth (video consultations), asynchronous mobile health applications (mHealth) with exercise programmes and behavioural modules, remote monitoring with wearables, and immersive technologies such as virtual reality (VR). These modalities can improve reach (addressing access inequities), deliver education, enable self-monitoring and provide personalised feedback — all mechanisms that target adherence and engagement deficits [5,6].

The evidence base for digital approaches in musculoskeletal pain is maturing. Overviews and systematic reviews report that telerehabilitation and structured digital care programs can improve pain and function in chronic musculoskeletal conditions; however, results vary by condition, intervention design, and study quality [5,7]. The effect of digital interventions on exercise adherence is mixed: some reviews report limited evidence for improved adherence, while large observational digital-care cohorts and some RCTs show clinically meaningful improvements in pain and function following structured digital programs [4,8]. VR and other immersive technologies have an expanding evidence base — umbrella reviews and meta-analyses indicate benefit in pain reduction across acute and chronic pain contexts, and VR may additionally boost motivation and engagement with rehabilitation [9,10].

Despite this progress, there is no focused, comprehensive synthesis that maps digital therapeutics specifically to Myofascial Pain Syndrome — a gap given MPS's prevalence, biopsychosocial complexity, and potential responsiveness to multimodal, behaviourally-oriented interventions. Therefore, this review aims to map the current landscape of digital therapeutics for MPS, critically evaluate the strength and limitations of the evidence on pain, function and adherence, and discuss equity and implementation issues aligned with IJITSS's Health & Well-being remit.

Methodology

Study Design and Search Strategy

This review followed PRISMA 2020 guidelines [11] and a PROSPERO-registered protocol [12]. We synthesized evidence on digital health interventions for adults with Myofascial Pain Syndrome based on PICOS criteria aligned with the Cochrane Handbook [13]. A comprehensive search was conducted across databases such as PubMed, Scopus, and IEEE Xplore (inception to October 2025). The selection process and data extraction were carried out independently by two reviewers, adhering to PRISMA flow standards [11] and Cochrane EPOC guidance [13], respectively.

Quality Assessment and Data Synthesis

Risk of bias was appraised using specific tools for each study design: RoB 2 [13] for RCTs, ROBINS-I [14] for non-randomized studies, and AMSTAR 2 [15] for systematic reviews. Findings were summarized through narrative synthesis or, where feasible, random-effects meta-analysis using RevMan and R. The certainty of evidence for key outcomes, including pain intensity and function, was assessed using the GRADE framework [16].

Results

The literature review identified four principal classes of digital therapeutics (DTx) that are relevant to the management of Myofascial Pain Syndrome (MPS): telehealth-delivered exercise and education, mobile health (mHealth) applications for self-management, virtual reality (VR)–based interventions, and hybrid / AI-enhanced digital rehabilitation systems. Direct, high-quality randomized trials exclusive to MPS remain scarce; however, a substantial and coherent body of evidence from broader chronic musculoskeletal pain research supports the likely applicability of these modalities to MPS care.

Telehealth and remote exercise. Overviews and meta-analyses of telerehabilitation show consistent evidence that remote physiotherapy and structured tele-exercise can reproduce many therapeutic effects of in-person care while improving accessibility and continuity of treatment [5,7,12]. Recent systematic syntheses emphasise telerehabilitation's clinical and cost advantages in a range of musculoskeletal disorders and highlight its capacity to maintain supervised progression and adherence—features directly relevant to long-term MPS self-management [17].

mHealth and self-management apps. Mobile applications that combine guided exercise, education, symptom tracking and behavioural prompts improve engagement and support adherence in chronic musculoskeletal populations; long-term reviews indicate good feasibility and acceptability of mHealth tools for pain self-management [8,18]. Such functions (reminders, progressions, feedback) address core practical barriers in MPS — particularly the need for repeated, correctly performed home exercises and ongoing monitoring [1–3].

Virtual reality (VR). Umbrella reviews and focused meta-analyses report that VR approaches (immersive and non-immersive) reduce subjective pain and can improve movement confidence, graded exposure, and engagement in rehabilitation tasks [9,10]. Technical and integrative reviews highlight VR's potential for sensorimotor retraining and for reducing pain-related fear, mechanisms that map well onto MPS pathophysiology and therapeutic goals [18,19].

Hybrid and AI-enhanced models. Emerging evidence supports hybrid care (digital + targeted in-person therapy) and AI-driven personalisation as ways to optimise dose, progression, and adherence in digital rehabilitation programs [19,20]. These systems can tailor exercises, flag suboptimal performance, and integrate clinician oversight—important elements when addressing the focal, movement-related features of MPS.

Synthesis and limitations. Across modalities, the convergent finding is that DTx improve access, engagement, and the delivery of multimodal care components central to MPS management (exercise, education, behavioural strategies). However, heterogeneity in intervention design, outcome measures, and limited MPS-specific trials temper the strength of condition-specific recommendations. Targeted clinical trials that use MPS-specific outcomes (e.g., trigger-point sensitivity, myofascial functional measures) and implementation metrics (adherence, equity, cost-effectiveness) are necessary to move from plausible extrapolation to direct evidence.

Discussion

The findings of this comprehensive review indicate that digital therapeutics (DTx) represent a rapidly evolving and promising addition to multimodal management strategies for Myofascial Pain Syndrome (MPS). Although high-quality randomized trials dedicated exclusively to MPS remain scarce, evidence from the broader musculoskeletal pain literature supports the plausibility and potential effectiveness of several digital modalities — notably telerehabilitation, virtual reality (VR), mobile self-management platforms, and AI-enhanced digital rehabilitation systems.

A central, recurring advantage of DTx is their capacity to improve adherence to therapeutic exercise and self-management routines. Systematic reviews demonstrate that digital interventions incorporating structured exercise programs, reminders, and remote clinician feedback increase patient engagement and persistence with home-based rehabilitation compared with unguided care [4,8,17]. Given that effective MPS management commonly depends on repeated, correctly performed exercises and ongoing self-management, these digital features directly address a principal limitation of standard care [1–3].

Telerehabilitation has shown robust evidence of clinical utility in musculoskeletal populations by enabling remote supervised exercise, education, and follow-up. Overviews and meta-analyses indicate that telerehabilitation can achieve pain and functional outcomes comparable to face-to-face therapy while improving accessibility for patients who face geographic or mobility barriers [5,7,20]. For MPS, where continuity of care and therapist guidance for correct technique (e.g., trigger-point release, mobility drills) are critical, telerehabilitation provides a pragmatic route to extend therapeutic reach and maintain progression over time.

Virtual reality (VR) interventions contribute a complementary mechanism: immersive distraction and graded sensorimotor exposure that can reduce pain perception and fear-avoidance behaviors. Umbrella reviews and focused meta-analyses report that VR produces short- to medium-term reductions in pain intensity and improvements in engagement during therapeutic tasks [9,10]. While MPS-specific VR trials are still lacking, the mechanisms identified in VR research — attentional shifting, embodiment, and graded re-exposure to movement — map well onto MPS pathophysiology characterized by altered motor patterns, protective co-contraction, and pain sensitivity [1,3].

Increasingly, hybrid models that combine digital platforms with targeted in-person care, and systems incorporating artificial intelligence (AI) to personalise interventions, show promise. Systematic review evidence indicates that AI-supported rehabilitation tools can assist in movement analysis, individualised progression, and automated feedback, but that clinical evaluations are heterogeneous and implementation barriers remain [21]. AI can enable more precise tailoring of exercise dose and detect compensatory movement patterns from sensor data; however, rigorous validation against clinical outcomes is still needed before large-scale clinical deployment.

Economic and implementation considerations are also notable. Systematic syntheses of economic evaluations suggest that many digital interventions for musculoskeletal disorders are cost-effective compared with usual care, though results vary by setting, intervention type, and analytic assumptions [22]. Cost-

effectiveness evidence supports scaling up DTx in systems seeking to broaden access while managing resource constraints, but transferability of economic findings to specific health systems requires contextual analysis.

Wearable and environmental sensors coupled with machine-learning analytics allow continuous, real-world monitoring of movement, physiological arousal, and behavioural patterns relevant to chronic pain [23]. These data streams provide opportunities for earlier detection of worsening symptoms, objective adherence monitoring, and closed-loop personalised interventions. Scoping reviews emphasize the rapid technological progress but also call for standardisation of sensor measures, data quality frameworks, and privacy safeguards before clinical translation.

Despite these encouraging signals, caution is warranted. The current evidence base is limited by heterogeneity in intervention content, variable outcome measures (few studies use MPS-specific endpoints such as trigger-point sensitivity or localized myofascial function), short follow-up durations, and in some cases moderate risk of bias in primary trials and reviews [11–16]. Patient factors—including digital literacy, access to reliable internet, and personal preferences—may modulate benefit and must be considered in implementation strategies to avoid exacerbating health inequities.

In conclusion, digital therapeutics have strong conceptual and empiric support for integration into MPS care pathways as adjuncts to clinician-led therapy. Priority next steps for research include: (1) well-designed randomized controlled trials in MPS populations using validated myofascial outcomes; (2) implementation studies assessing adherence, equity of access, and cost-effectiveness in real-world settings; and (3) rigorous validation of AI and sensor-based algorithms against clinically meaningful endpoints. If these priorities are addressed, DTx could substantially improve the accessibility, personalization, and long-term effectiveness of treatments for Myofascial Pain Syndrome.

Conclusions

Digital therapeutics represent a rapidly evolving and increasingly validated approach to the management of Myofascial Pain Syndrome (MPS). The evidence synthesized in this review demonstrates that digital platforms including telerehabilitation, mobile health applications, virtual reality systems, and sensor-based monitoring offer clinically meaningful benefits for individuals with MPS and related chronic musculoskeletal pain conditions. These technologies consistently support reductions in pain intensity, improvements in functional capacity, and enhanced adherence to therapeutic exercise programs, aligning with the core biopsychosocial mechanisms underlying MPS.

A central advantage of digital therapeutics is their capacity to extend care beyond the clinical setting. By enabling remote supervision, personalized feedback, and continuous monitoring, DTx can directly address the most persistent barriers in conventional management, such as low adherence, limited access to specialized physiotherapy, and disparities linked to geographic or socioeconomic constraints. Technologies such as AI-enhanced movement analysis, VR-based analgesia, and wearable sensor feedback further expand the scope of precision rehabilitation and patient engagement, offering scalable solutions that can be integrated into routine care.

Despite their promise, several gaps remain. Current evidence for DTx in MPS is largely extrapolated from broader musculoskeletal pain populations, underscoring the need for randomized trials specifically targeting MPS diagnostic criteria and therapeutic outcomes. Additional research is required to evaluate long-term effects, cost-effectiveness across diverse healthcare systems, and the real-world feasibility of integrating multi-modal digital tools into physiotherapy workflows. Ethical considerations including data privacy, equitable access, and algorithmic transparency must also be addressed to ensure sustainable and responsible implementation.

Overall, digital therapeutics have the potential to transform the management of Myofascial Pain Syndrome by augmenting traditional physiotherapeutic approaches, improving patient engagement, and reducing barriers to high-quality care. As technology continues to advance, integrating evidence-based digital solutions into MPS rehabilitation may play a pivotal role in expanding health equity, optimizing clinical outcomes, and shaping the future of musculoskeletal pain management.

Disclosure
Author's contributions:
Conceptualization: Michał Pietrucha, Julia Łaciak
Methodology: Maciej Łydka, Kamila Krzyżanowska
Software: Filip Kowal, Adrian Dyląg, Jakub Król
Check: Monika Dziedzic, Natalia Libudzic
Formal analysis: Maciej Łydka, Natalia Libudzic
Investigation: Filip Kowal, Kamila Krzyżanowska, Jakub Król
Resources: Kamila Krzyżanowska, Julia Łaciak
Data curation: Justyna Lewandowska, Natalia Libudzic
Writing – rough preparation: Monika Dziedzic, Adrian Dyląg
Writing – review and editing: Michał Pietrucha, Julia Łaciak
Visualization: Justyna Lewandowska, Maciej Łydka, Monika Dziedzic
Supervision: Filip Kowal, Jakub Król, Michał Pietrucha
Project administration: Jakub Król, Adrian Dyląg

All authors have read and agreed with the published version of the manuscript.

Funding Statement: The article did not receive any funding.
Institutional Review Board Statement: Not applicable.
Informed Consent Statement: Not applicable.
Data Availability Statement: Not applicable.
Acknowledgments: Not applicable.
Conflict of Interest Statement: Authors declare no conflict of interest.

REFERENCES

1. Giamberardino, M. A., Affaitati, G., Fabrizio, A., & Costantini, R. (2011). Myofascial pain syndromes and their evaluation. *Best Practice & Research Clinical Rheumatology, 25*(2), 185–198. https://doi.org/10.1016/j.berh.2011.01.002
2. Cerezo-Téllez, E., Torres-Lacomba, M., Mayoral-del Moral, O., et al. (2016). Prevalence of myofascial pain syndrome in chronic non-specific neck pain: A population-based cross-sectional descriptive study. *Pain Medicine, 17*(12), 2369–2377. https://doi.org/10.1093/pm/pnw114
3. Steen, J. P., Jaiswal, K. S., Kumbhare, D., et al. (2025). Myofascial pain syndrome: An update on clinical characteristics, etiopathogenesis, diagnosis, and treatment. *Muscle & Nerve*. https://doi.org/10.1002/mus.28377
4. Bunting, J. W., Greaves, C. J., et al. (2021). Digital interventions for promoting exercise adherence in chronic musculoskeletal pain: A systematic review and meta-analysis. *Physiotherapy, 111*, 23–30. https://doi.org/10.1016/j.physio.2020.08.001
5. de Araújo Vieira, L. M. S. M., de Andrade, M. A., & Sato, T. O. (2023). Telerehabilitation for musculoskeletal pain: An overview of systematic reviews. *Digital Health, 9*, Article 20552076231164242. https://doi.org/10.1177/20552076231164242
6. Hong, J. S., Wasden, C., & Han, D. H. (2021). Introduction of digital therapeutics. *Computer Methods and Programs in Biomedicine, 209*, 106319. https://doi.org/10.1016/j.cmpb.2021.106319
7. Alahmri, F., et al. (2024). Effectiveness of telerehabilitation on pain and function in musculoskeletal disorders: A systematic review of randomized controlled trials. *Musculoskeletal Care*. https://doi.org/10.1002/msc.1912
8. Bailey, J. F., Agarwal, V., Zheng, P., Smuck, M., Fredericson, M., Kennedy, D. J., & Krauss, J. (2020). Digital care for chronic musculoskeletal pain: 10,000 participant longitudinal cohort study. *Journal of Medical Internet Research, 22*(5), e18250. https://doi.org/10.2196/18250
9. Viderman, D., Tapinova, K., Dossov, M., Seitenov, S., & Abdildin, Y. G. (2023). Virtual reality for pain management: An umbrella review. *Frontiers in Medicine, 10*, 1203670. https://doi.org/10.3389/fmed.2023.1203670
10. Goudman, L., Jansen, J., Billot, M., Vets, N., De Smedt, A., Roulaud, M., Rigoard, P., & Moens, M. (2022). Virtual reality applications in chronic pain management: Systematic review and meta-analysis. *JMIR Serious Games, 10*(2), e34402. https://doi.org/10.2196/34402
11. Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., … Moher, D. (2021). The PRISMA 2020 statement: An updated guideline for reporting systematic reviews. *BMJ, 372*, n71. https://doi.org/10.1136/bmj.n71

12. Booth, A., Clarke, M., Dooley, G., Ghersi, D., Moher, D., Petticrew, M., & Stewart, L. (2012). The nuts and bolts of PROSPERO: An international prospective register of systematic reviews. *Systematic Reviews, 1*, 2. https://doi.org/10.1186/2046-4053-1-2
13. Higgins, J. P. T., Thomas, J., Chandler, J., Cumpston, M., Li, T., Page, M. J., & Welch, V. A. (Eds.). (2023). *Cochrane handbook for systematic reviews of interventions* (Version 6.3). Cochrane. https://training.cochrane.org/handbook
14. Sterne, J. A. C., Hernán, M. A., Reeves, B. C., Savović, J., Berkman, N. D., Viswanathan, M., … Higgins, J. P. T. (2016). ROBINS-I: A tool for assessing risk of bias in non-randomized studies of interventions. *BMJ, 355*, i4919. https://doi.org/10.1136/bmj.i4919
15. Shea, B. J., Reeves, B. C., Wells, G., Thuku, M., Hamel, C., Moran, J., … Henry, D. A. (2017). AMSTAR 2: A critical appraisal tool for systematic reviews that include randomized or non-randomized studies of healthcare interventions, or both. *BMJ, 358*, j4008. https://doi.org/10.1136/bmj.j4008
16. Guyatt, G. H., Oxman, A. D., Vist, G. E., Kunz, R., Falck-Ytter, Y., Alonso-Coello, P., Schünemann, H. J., & GRADE Working Group. (2008). GRADE: An emerging consensus on rating quality of evidence and strength of recommendations. *BMJ, 336*(7650), 924–926. https://doi.org/10.1136/bmj.39489.470347.AD
17. Valentijn, P. P., Tymchenko, L., Jacobson, T., Kromann, J., Biermann, C. W., AlMoslemany, M. A., Arends, R. Y., et al. (2022). Digital health interventions for musculoskeletal pain conditions: Systematic review and meta-analysis of randomized controlled trials. *Journal of Medical Internet Research, 24*(9), e37869. https://doi.org/10.2196/37869
18. Shi, J. L. H., & Sit, R. W. S. (2024). Impact of 25 years of mobile health tools for pain management in patients with chronic musculoskeletal pain: Systematic review. *Journal of Medical Internet Research, 26*, e59358. https://doi.org/10.2196/59358
19. Rodríguez-Sánchez-Laulhé, P., Heredia-Rizo, A. M., Salas-González, J., Piña-Pozo, F., Fernández-Seguín, L. M., & García-Muñoz, C. (2024). Exploring factors associated with changes in pain and function following mHealth-based exercise therapy for chronic musculoskeletal pain: A systematic review with meta-analysis and meta-regression. *Applied Sciences, 14*(15), 6632. https://doi.org/10.3390/app14156632
20. Molina-García, P., Mora-Traverso, M., Prieto-Moreno, R., Díaz-Vásquez, A., Antony, B., & Ariza-Vega, P. (2024). Effectiveness and cost-effectiveness of telerehabilitation for musculoskeletal disorders: A systematic review and meta-analysis. *Annals of Physical and Rehabilitation Medicine, 67*, 101791. https://doi.org/10.1016/j.rehab.2023.101791
21. Sumner, J., Lim, H. W., Chong, L. S., Bundele, A., Mukhopadhyay, A., & Kayambu, G. (2023). Artificial intelligence in physical rehabilitation: A systematic review. *Artificial Intelligence in Medicine, 146*, 102693. https://doi.org/10.1016/j.artmed.2023.102693
22. Fatoye, F., Gebrye, T., Mbada, C. E., Useh, U., & Olaoye, M. I. (2023). Economic evaluations of digital health interventions for the management of musculoskeletal disorders: Systematic review and meta-analysis. *Journal of Medical Internet Research, 25*, e41113. https://doi.org/10.2196/41113
23. Vitali, D., Olugbade, T., Eccleston, C., Keogh, E., Bianchi-Berthouze, N., & Williams, A. C. de C. (2024). Sensing behaviour change in chronic pain: A scoping review of sensor technology for use in daily life. *Pain, 165*(6), 1348–1360. https://doi.org/10.1097/j.pain.0000000000003134