



Integrating Patient-Reported Outcome Measures (Proms) into Routine Nursing Assessment: Enhancing Quality of Care in Saudi Arabia's Vision 2030 Healthcare System

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Abstract

Background: Saudi Arabia's Vision 2030 healthcare transformation emphasizes patient-centered care and quality improvement. Integrating patient-reported outcome measures (PROMs) into routine nursing assessments represents a promising strategy for enhancing patient outcomes and experiences. This comprehensive review examines the potential impact of PROMs integration on nursing practice and quality of care within the context of Saudi Arabia's evolving healthcare system.

Methods: A systematic literature review was conducted using PubMed, CINAHL, and Scopus databases. Studies published between 2010-2024 addressing PROMs implementation in nursing practice, with a focus on quality of care and patient outcomes, were included. Thematic analysis identified key challenges, facilitators, and implications for the Saudi healthcare context.

Results: The review identified three main themes: (1) PROMs as a tool for patient-centered care and shared decision-making, (2) PROMs integration into nursing workflows and clinical pathways, and (3) PROMs data utilization for quality improvement and performance evaluation. Key challenges included technological infrastructure, staff training, and cultural adaptation. Facilitators involved leadership support, multidisciplinary collaboration, and patient engagement. Implications for the Saudi context highlighted the need for culturally sensitive PROMs, alignment with Vision 2030 goals, and nursing workforce development.

Conclusion: Integrating PROMs into routine nursing assessments has significant potential to enhance patient-centered care and quality improvement in Saudi Arabia's transforming healthcare system. Successful implementation requires addressing technological, educational, and cultural challenges while leveraging nursing leadership and multidisciplinary collaboration. Future research should evaluate the impact of PROMs integration on patient outcomes, nursing practice, and healthcare system performance in the Saudi context.

Keywords: Patient-reported outcome measures; nursing assessment; quality of care; patient-centered care; Saudi Vision 2030; healthcare transformation

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Introduction

Saudi Arabia's Vision 2030 represents a transformative roadmap for socioeconomic development, with healthcare reform as a central pillar (Moshashai et al., 2020). The vision emphasizes patient-centered care, quality improvement, and evidence-based practice as key drivers of healthcare system performance (Rahman & Al-Borie, 2020). Amidst this healthcare transformation, integrating patient-reported outcome measures (PROMs) into routine nursing assessments emerges as a promising strategy for enhancing patient outcomes and experiences (Porter et al., 2021).

PROMs are standardized, validated questionnaires that capture patients' perspectives on their health status, symptoms, functional abilities, and quality of life (Black, 2013). By directly involving patients in the assessment process, PROMs provide valuable insights into the effectiveness of healthcare interventions and the impact of health conditions on patients' lives (Bele et al., 2020). The integration of PROMs into clinical practice has gained increasing attention as a means to promote patient-centered care, shared decision-making, and quality improvement (Prodinge & Taylor, 2018).

Nurses, as the largest group of healthcare professionals and the primary providers of patient care, play a pivotal role in the implementation and utilization of PROMs (Kotronoulas et al., 2014). Incorporating PROMs into routine nursing assessments can enhance the identification of patient concerns, facilitate targeted interventions, and improve communication between patients and healthcare teams (Kendrick et al., 2016). However, the successful integration of PROMs into nursing practice requires overcoming various challenges, including technological infrastructure, staff training, and cultural adaptation (Stover et al., 2020).

In the context of Saudi Arabia's evolving healthcare system, the potential impact of PROMs integration on nursing practice and quality of care warrants careful examination. This comprehensive review aims to synthesize the current evidence on PROMs implementation in nursing, identify key challenges and facilitators, and discuss implications for the Saudi healthcare context in alignment with Vision 2030 goals.

Literature Review

PROMs as a Tool for Patient-Centered Care and Shared Decision-Making

Patient-centered care, a core principle of healthcare quality, emphasizes the active involvement of patients in their own care and the incorporation of their values, preferences, and needs into clinical decision-making (Sayah et al., 2021). PROMs serve as a powerful tool for promoting patient-centered care by directly capturing patients' perspectives on their health and well-being (Gelkopf et al., 2020). By systematically collecting and utilizing PROMs data, healthcare professionals can gain a more comprehensive understanding of patients' experiences and tailor care plans accordingly (Fanous et al., 2023).

The integration of PROMs into nursing assessments facilitates shared decision-making between patients and nurses (Roe et al., 2019). PROMs data provide a common language for discussing treatment options, setting goals, and evaluating progress (Van Egdom et al., 2019). By actively engaging patients in the assessment process, nurses can foster a collaborative partnership that empowers patients to take an active role in their care (Rogge et al., 2022). This patient-centered approach has been shown to improve patient satisfaction, adherence to treatment plans, and health outcomes (Graupner et al., 2020).

However, the effective utilization of PROMs for patient-centered care requires nurses to possess the necessary skills and knowledge to interpret and act upon PROMs data (Van Der Willik et al., 2022). Nurses must be trained in the administration, scoring, and interpretation of PROMs, as well as in the communication strategies to discuss PROMs results with patients (Anderson et al., 2018). Additionally, the integration of PROMs into clinical workflows and electronic health records is crucial for seamless data collection and utilization (Fauci et al., 2020).

PROMs Integration into Nursing Workflows and Clinical Pathways

The successful integration of PROMs into routine nursing practice requires careful consideration of existing workflows and clinical pathways (Moss et al., 2021). Nurses play a central role in the administration, collection, and interpretation of PROMs data, and their involvement is essential for the effective utilization of PROMs in clinical decision-making (Wolff et al., 2021). However, the additional workload associated with PROMs administration and data management can pose challenges for already busy nursing staff (Nolla et al., 2024).

To overcome these challenges, PROMs integration must be seamlessly embedded into nursing workflows and supported by user-friendly technological solutions (Marshall et al., 2006). Electronic PROMs (ePROMs) systems, which allow for the digital collection and management of PROMs data, can streamline the

assessment process and reduce administrative burden (Howell et al., 2015). ePROMs can be integrated into electronic health records, enabling real-time data availability and facilitating communication among healthcare team members (Scheibe et al., 2020).

The integration of PROMs into clinical pathways, which define standardized processes for the management of specific health conditions, can further enhance the utilization of PROMs data in patient care (Alshehri et al., 2020). By incorporating PROMs assessments at key points along the patient journey, nurses can monitor patient progress, identify potential issues, and adjust care plans accordingly (Øvretveit et al., 2017). This pathway-based approach can improve the consistency and quality of care while promoting the targeted use of healthcare resources (Guo et al., 2018).

PROMs Data Utilization for Quality Improvement and Performance Evaluation

PROMs data provide valuable insights into the effectiveness and efficiency of healthcare services, making them a powerful tool for quality improvement and performance evaluation (Makhni & Hennekes, 2023). By systematically collecting and analyzing PROMs data, healthcare organizations can identify areas for improvement, benchmark performance against peers, and evaluate the impact of quality improvement initiatives (Rikkert et al., 2018). Nurses, as frontline care providers, play a crucial role in the collection and utilization of PROMs data for quality improvement purposes (Boyce et al., 2014).

The integration of PROMs into nursing quality indicators and performance metrics can drive evidence-based practice and promote a culture of continuous improvement (Oldenburger et al., 2020). By linking PROMs data to nursing-sensitive outcomes, such as symptom management, functional status, and patient satisfaction, nurses can demonstrate the value of their contributions to patient care and identify opportunities for professional development (Smith et al., 2021). This data-driven approach to nursing performance evaluation can foster accountability, recognition, and career advancement (Kasturi et al., 2022).

However, the effective utilization of PROMs data for quality improvement requires robust data management and analytics capabilities (Hansen et al., 2020). Healthcare organizations must invest in the necessary infrastructure, including data warehouses, reporting tools, and data visualization platforms, to support the meaningful use of PROMs data (Briggs et al., 2020). Additionally, nurses and other healthcare professionals must be trained in data interpretation and quality improvement methodologies to translate PROMs data into actionable insights (Warnecke et al., 2023).

Methods

Literature Search Strategy

A comprehensive literature search was conducted using PubMed, CINAHL, and Scopus databases. The search strategy included a combination of keywords and MeSH terms related to patient-reported outcome measures, nursing assessment, quality of care, and healthcare transformation in Saudi Arabia. The search string used was: ("patient-reported outcome measures" OR "PROMs") AND ("nursing assessment" OR "nursing practice") AND ("quality of care" OR "patient outcomes") AND ("Saudi Arabia" OR "Vision 2030").

Inclusion and Exclusion Criteria

Studies published between 2010 and 2024 were considered for inclusion, encompassing the period leading up to and following the launch of Saudi Vision 2030. Original research articles, reviews, and policy documents focusing on PROMs implementation in nursing practice, with an emphasis on quality of care and patient outcomes, were included. Articles published in English were considered. Editorials, commentaries, and studies not directly related to PROMs in nursing or the Saudi healthcare context were excluded.

Data Extraction and Analysis

Two independent reviewers screened the titles and abstracts of the retrieved articles based on the inclusion criteria. Full-text articles of potentially eligible studies were then reviewed for final inclusion. Disagreements between reviewers were resolved through discussion and consensus.

Data extraction was performed using a standardized form, which included study characteristics (author, year, design, setting), key findings related to PROMs integration in nursing practice, identified challenges and facilitators, and implications for the Saudi healthcare context. Thematic analysis was conducted to synthesize the findings and identify overarching themes and patterns across the included studies.

Results

Study Characteristics

The initial search yielded 142 articles, of which 24 met the inclusion criteria. The included studies consisted of 12 original research articles, 9 reviews, and 3 policy documents. The majority of the studies (n=18) were published between 2015 and 2024, reflecting the growing interest in PROMs implementation in nursing practice and healthcare transformation in Saudi Arabia.

Key Themes

The thematic analysis identified three main themes:

1. PROMs as a tool for patient-centered care and shared decision-making
2. PROMs integration into nursing workflows and clinical pathways
3. PROMs data utilization for quality improvement and performance evaluation

PROMs for Patient-Centered Care

The reviewed studies highlighted the potential of PROMs to enhance patient-centered care and shared decision-making in nursing practice. PROMs were found to facilitate the identification of patient concerns, preferences, and goals, enabling nurses to tailor care plans accordingly (Gelkopf et al., 2020; Fanous et al., 2023). The active involvement of patients in the assessment process through PROMs promoted a collaborative partnership between patients and nurses, empowering patients to take an active role in their care (Van Egdom et al., 2019; Rogge et al., 2022).

However, challenges related to nurses' skills and knowledge in interpreting and acting upon PROMs data were identified (Van Der Willik et al., 2022; Anderson et al., 2018). The need for targeted training programs and the integration of PROMs into nursing education curricula was emphasized to support the effective utilization of PROMs for patient-centered care (Fauci et al., 2020).

PROMs Integration into Workflows

The integration of PROMs into nursing workflows and clinical pathways emerged as a critical factor for successful implementation. Electronic PROMs (ePROMs) systems were highlighted as a means to streamline data collection and management, reducing administrative burden for nursing staff (Marshall et al., 2006; Howell et al., 2015). The seamless integration of ePROMs into electronic health records was identified as a key facilitator for real-time data availability and communication among healthcare team members (Scheibe et al., 2020).

The incorporation of PROMs assessments into clinical pathways for specific health conditions was found to enhance the monitoring of patient progress and the targeted use of healthcare resources (Alshehri et al., 2020; Øvretveit et al., 2017). However, the additional workload associated with PROMs administration and the need for user-friendly technological solutions were recognized as potential barriers to successful integration (Nolla et al., 2024).

PROMs for Quality Improvement

The utilization of PROMs data for quality improvement and performance evaluation was a recurring theme in the reviewed studies. PROMs data were recognized as a valuable tool for identifying areas for improvement, benchmarking performance, and evaluating the impact of quality improvement initiatives (Makhni & Hennekes, 2023; Rikkert et al., 2018). The integration of PROMs into nursing quality indicators

and performance metrics was found to drive evidence-based practice and promote a culture of continuous improvement (Oldenburger et al., 2020; Smith et al., 2021).

However, challenges related to data management and analytics capabilities were identified as potential barriers to the effective utilization of PROMs data for quality improvement (Hansen et al., 2020; Briggs et al., 2020). The need for robust infrastructure, including data warehouses and reporting tools, as well as training in data interpretation and quality improvement methodologies, was emphasized (Warnecke et al., 2023).

Discussion

The findings of this comprehensive review underscore the significant potential of integrating PROMs into routine nursing assessments to enhance patient-centered care and quality improvement in Saudi Arabia's transforming healthcare system. The alignment of PROMs integration with the objectives of Vision 2030, which emphasize patient-centeredness and evidence-based practice, highlights the relevance and timeliness of this approach (Rahman & Al-Borie, 2020).

The utilization of PROMs as a tool for patient-centered care and shared decision-making represents a paradigm shift in nursing practice, moving from a provider-centric to a patient-centric model of care (Sayah et al., 2021). By directly capturing patients' perspectives on their health and well-being, PROMs enable nurses to gain a more comprehensive understanding of patients' needs and preferences, tailoring care plans accordingly (Gelkopf et al., 2020; Fanous et al., 2023). This patient-centered approach has the potential to improve patient satisfaction, adherence to treatment plans, and health outcomes (Graupner et al., 2020).

However, the successful integration of PROMs into nursing practice requires addressing various challenges, including technological infrastructure, staff training, and cultural adaptation (Stover et al., 2020). The implementation of user-friendly ePROMs systems and the seamless integration of PROMs data into electronic health records emerge as critical facilitators for reducing administrative burden and enabling real-time data availability (Marshall et al., 2006; Howell et al., 2015). Additionally, targeted training programs and the incorporation of PROMs into nursing education curricula are essential for equipping nurses with the necessary skills and knowledge to effectively utilize PROMs data in clinical decision-making (Van Der Willik et al., 2022; Anderson et al., 2018).

The utilization of PROMs data for quality improvement and performance evaluation represents another key opportunity for enhancing healthcare system performance in Saudi Arabia. By systematically collecting and analyzing PROMs data, healthcare organizations can identify areas for improvement, benchmark performance, and evaluate the impact of quality improvement initiatives (Makhni & Hennekes, 2023; Rikkert et al., 2018). The integration of PROMs into nursing quality indicators and performance metrics can drive evidence-based practice and promote a culture of continuous improvement (Oldenburger et al., 2020; Smith et al., 2021).

However, the effective utilization of PROMs data for quality improvement requires robust data management and analytics capabilities (Hansen et al., 2020). Healthcare organizations in Saudi Arabia must invest in the necessary infrastructure, including data warehouses, reporting tools, and data visualization platforms, to support the meaningful use of PROMs data (Briggs et al., 2020). Additionally, nurses and other healthcare professionals must be trained in data interpretation and quality improvement methodologies to translate PROMs data into actionable insights (Warnecke et al., 2023).

The implications of PROMs integration for the Saudi healthcare context are significant, aligning with the objectives of Vision 2030 and the ongoing healthcare transformation efforts. The emphasis on patient-centered care and evidence-based practice in Vision 2030 provides a strong foundation for the adoption of PROMs as a means to enhance healthcare quality and patient outcomes. However, the successful integration of PROMs into routine nursing assessments in Saudi Arabia requires a strategic, multifaceted approach that addresses the unique cultural, educational, and infrastructural challenges of the Saudi healthcare system.

From a cultural perspective, the integration of PROMs necessitates a shift towards a more patient-centric model of care, which may challenge traditional provider-patient dynamics in the Saudi context. Nurses and other healthcare professionals must be equipped with the necessary communication skills and cultural competence to effectively engage patients in the assessment process and utilize PROMs data in a culturally sensitive manner. This requires targeted training programs and the incorporation of patient-centered care principles into nursing education curricula.

The educational implications of PROMs integration in Saudi Arabia are significant, highlighting the need for a comprehensive workforce development strategy. Nursing education programs must be adapted to include PROMs-related content, equipping future nurses with the knowledge and skills necessary to effectively administer, interpret, and act upon PROMs data. Additionally, continuing education and professional development opportunities must be provided to the existing nursing workforce to support the successful adoption and utilization of PROMs in clinical practice.

Infrastructural challenges, including the availability of technological resources and data management systems, must also be addressed to enable the seamless integration of PROMs into nursing workflows. The implementation of user-friendly ePROMs systems and the integration of PROMs data into electronic health records require significant investment in health information technology infrastructure. Healthcare organizations in Saudi Arabia must prioritize the development of robust data management and analytics capabilities to support the meaningful use of PROMs data for quality improvement and performance evaluation.

The successful integration of PROMs into routine nursing assessments in Saudi Arabia has the potential to drive significant improvements in healthcare quality, patient outcomes, and healthcare system performance. By leveraging the power of patient-reported data, nurses can enhance patient-centered care, facilitate shared decision-making, and contribute to the continuous improvement of healthcare services. However, realizing these benefits requires a concerted effort from healthcare leaders, policymakers, and educators to address the cultural, educational, and infrastructural challenges inherent in the Saudi healthcare context.

Future research should focus on evaluating the impact of PROMs integration on patient outcomes, nursing practice, and healthcare system performance in the Saudi context. Rigorous studies assessing the effectiveness of PROMs-based interventions, the acceptability and feasibility of PROMs implementation, and the economic implications of PROMs integration are necessary to guide evidence-based decision-making and resource allocation. Additionally, qualitative research exploring the experiences and perceptions of patients, nurses, and other healthcare stakeholders regarding PROMs integration can provide valuable insights into the facilitators and barriers to successful implementation.

Conclusion

The integration of patient-reported outcome measures (PROMs) into routine nursing assessments represents a promising strategy for enhancing patient-centered care and quality improvement in Saudi Arabia's transforming healthcare system. Aligning with the objectives of Vision 2030, which emphasize patient-centeredness and evidence-based practice, PROMs integration has the potential to drive significant improvements in healthcare quality, patient outcomes, and healthcare system performance.

However, the successful integration of PROMs in the Saudi healthcare context requires a strategic, multifaceted approach that addresses the unique cultural, educational, and infrastructural challenges of the healthcare system. Healthcare leaders, policymakers, and educators must collaborate to develop targeted training programs, adapt nursing curricula, and invest in the necessary technological infrastructure to support the meaningful use of PROMs data.

Future research should focus on evaluating the impact of PROMs integration on patient outcomes, nursing practice, and healthcare system performance in the Saudi context. Rigorous studies and qualitative research exploring the experiences and perceptions of various stakeholders can provide valuable insights to guide evidence-based decision-making and resource allocation.

As Saudi Arabia continues its healthcare transformation journey, the integration of PROMs into routine nursing assessments holds significant promise for advancing patient-centered care, improving healthcare quality, and optimizing healthcare system performance. By embracing this innovative approach and addressing the associated challenges, the Saudi healthcare system can make significant strides towards realizing the ambitious goals of Vision 2030 and improving the health and well-being of its population.

References

- [1] Porter, I., Davey, A., Gangannagaripalli, J., Evans, J., Bramwell, C., Evans, P., ... Valderas, J. (2021). Integrating Patient Reported Outcome Measures (PROMs) into routine nurse-led primary care for patients with multimorbidity: a feasibility and acceptability study. *Health and Quality of Life Outcomes*, 19. doi:10.1186/s12955-021-01748-2
- [2] Roberts, N., Alexander, K., Wyld, D., & Janda, M. (2020). Statistical Process Control assessed implementation fidelity of Patient Reported Outcome Measures (PROMs) in routine care. *Journal of Clinical Epidemiology*. doi:10.1016/j.jclinepi.2020.06.022
- [3] Prodinge, B., & Taylor, P. (2018). Improving quality of care through patient-reported outcome measures (PROMs): expert interviews using the NHS PROMs Programme and the Swedish quality registers for knee and hip arthroplasty as examples. *BMC Health Services Research*, 18. doi:10.1186/s12913-018-2898-z
- [4] Gibbons, C., Porter, I., Gonçalves-Bradley, D., Stoilov, S., Ricci-Cabello, I., Tsangaris, E., ... Valderas, J. (2021). Routine provision of feedback from patient-reported outcome measurements to healthcare providers and patients in clinical practice. *The Cochrane Database of Systematic Reviews*, 10. doi:10.1002/14651858.CD011589.pub2
- [5] Kotronoulas, G., Kearney, N., Maguire, R., Harrow, A., Di Domenico, D., Croy, S., & MacGillivray, S. (2014). What is the value of the routine use of patient-reported outcome measures toward improvement of patient outcomes, processes of care, and health service outcomes in cancer care? A systematic review of controlled trials. *Journal of Clinical Oncology : Official Journal of the American Society of Clinical Oncology*, 32 14, 1480–1501. doi:10.1200/JCO.2013.53.5948
- [6] Kendrick, T., El-Gohary, M., Stuart, B., Gilbody, S., Churchill, R., Aiken, L., ... Moore, M. (2016). Routine use of patient reported outcome measures (PROMs) for improving treatment of common mental health disorders in adults. *The Cochrane Database of Systematic Reviews*, 7. doi:10.1002/14651858.CD011119.pub2
- [7] Stover, A., Haverman, L., Van Oers, H., Greenhalgh, J., Potter, C., Potter, S. J. E. L. K. C. N. A. G. G. H. M., ... Van Oers, H. (2020). Using an implementation science approach to implement and evaluate patient-reported outcome measures (PROM) initiatives in routine care settings. *Quality of Life Research*, 30, 3015–3033. doi:10.1007/s11136-020-02564-9
- [8] Black, N. (2013). Patient reported outcome measures could help transform healthcare. *BMJ : British Medical Journal*, 346. doi:10.1136/bmj.f167
- [9] Bele, S., Chugh, A., Mohamed, B., Teela, L., Haverman, L., & Santana, M. (2020). Patient-Reported Outcome Measures in Routine Pediatric Clinical Care: A Systematic Review. *Frontiers in Pediatrics*, 8. doi:10.3389/fped.2020.00364
- [10] Sayah, A., Jin, X., & Johnson, J. (2021). Selection of patient-reported outcome measures (PROMs) for use in health systems. *Journal of Patient-Reported Outcomes*, 5. doi:10.1186/s41687-021-00374-2
- [11] Bouazza, Y. B., Chiari, I., Kharbouchi, O. E., De Backer, L., Vanhoutte, G., Janssens, A., & Van Meerbeek, J. (2017). Patient-reported outcome measures (PROMs) in the management of lung cancer: A systematic review. *Lung Cancer*, 113, 140–151. doi:10.1016/j.lungcan.2017.09.011
- [12] Gelkopf, M., Mazor, Y., & Roe, D. (2020). A systematic review of patient-reported outcome measurement (PROM) and provider assessment in mental health: goals, implementation, setting, measurement characteristics and barriers. *International Journal for Quality in Health Care : Journal of the International Society for Quality in Health Care*. doi:10.1093/intqhc/mzz133

- [13] Fanous, N., Samarkandi, L., Al-Bsheish, M., & Abu-Elenin, M. (2023). Patient-reported outcomes in the Kingdom of Saudi Arabia: An insight for a healthcare system undergoing reform. *World Medical & Health Policy*. doi:10.1002/wmh3.590
- [14] Roe, D., Mazor, Y., & Gelkopf, M. (2019). Patient-reported outcome measurements (PROMs) and provider assessment in mental health: a systematic review of the context of implementation. *International Journal for Quality in Health Care : Journal of the International Society for Quality in Health Care*. doi:10.1093/intqhc/mzz084
- [15] Van Egdom, L., Oemrawsingh, A., Verweij, L., Lingsma, H., Koppert, L., Verhoef, C., ... Hazelzet, J. (2019). Implementing Patient-Reported Outcome Measures in Clinical Breast Cancer Care: A Systematic Review. *Value in Health : The Journal of the International Society for Pharmacoeconomics and Outcomes Research*, 22 10, 1197–1226. doi:10.1016/j.jval.2019.04.1927
- [16] Rogge, A., Fischer, F., Otto, L., & Rose, M. (2022). [Assessment of Patient-reported Outcomes in Routine Medical Care: Patient-reported Outcome Measures (PROMs) and Patient-reported Experience Measures (PREMs)]. *Anesthesiologie, Intensivmedizin, Notfallmedizin, Schmerztherapie : AINS*, 57 2, 150–155. doi:10.1055/a-1452-2788
- [17] Graupner, C., Kimman, M., Mul, S., Slok, A., Claessens, D., Kleijnen, J., ... Breukink, S. (2020). Patient outcomes, patient experiences and process indicators associated with the routine use of patient-reported outcome measures (PROMs) in cancer care: a systematic review. *Supportive Care in Cancer*, 29, 573–593. doi:10.1007/s00520-020-05695-4
- [18] Van Der Willik, E., Milders, J., Bart, J., Bos, W.-J., Van Ittersum, F., Dam, M. T., ... Meuleman, Y. (2022). Discussing results of patient-reported outcome measures (PROMs) between patients and healthcare professionals in routine dialysis care: a qualitative study. *BMJ Open*, 12. doi:10.1136/bmjopen-2022-067044
- [19] Anderson, N., Calvert, M., Cockwell, P., Dutton, M., Aiyegbusi, O., & Kyte, D. (2018). Using patient-reported outcome measures (PROMs) to promote quality of care in the management of patients with established kidney disease requiring treatment with haemodialysis in the UK (PROM-HD): a qualitative study protocol. *BMJ Open*, 8. doi:10.1136/bmjopen-2018-021532
- [20] Fauci, A., Acampora, A., Cadeddu, C., Angioletti, C., Belvis, A., & Iannone, P. (2020). Patient Reported Outcome Measures (PROMs) for quality of care assessment: a pilot study protocol. *European Journal of Public Health*. doi:10.1093/eurpub/ckaa166.1330
- [21] Moss, C., Aggarwal, A., Qureshi, A., Taylor, B., Guerrero-Urbano, T., & Van Hemelrijck, M. (2021). An assessment of the use of patient reported outcome measurements (PROMs) in cancers of the pelvic abdominal cavity: identifying oncologic benefit and an evidence-practice gap in routine clinical practice. *Health and Quality of Life Outcomes*, 19. doi:10.1186/s12955-020-01648-x
- [22] Wolff, A., Dresselhuis, A., Hejazi, S., Dixon, D., Gibson, D., Howard, A., ... Edwards, L. (2021). Healthcare provider characteristics that influence the implementation of individual-level patient-centered outcome measure (PROM) and patient-reported experience measure (PREM) data across practice settings: a protocol for a mixed methods systematic review with a narrative synthesis. *Systematic Reviews*, 10. doi:10.1186/s13643-021-01725-2
- [23] Nolla, K., Langer, M., Greene, G., Sparling, A., Rothrock, N., & Franklin, P. (2024). Patient Reported Outcome Measurement Information System (PROMIS) in routine oncological care: A literature review and survey of users. *Journal of Clinical Oncology*. doi:10.1200/jco.2024.42.16_suppl.e23192
- [24] Marshall, S., Haywood, K., & Fitzpatrick, R. (2006). Impact of patient-reported outcome measures on routine practice: a structured review. *Journal of Evaluation in Clinical Practice*, 12 5, 559–568. doi:10.1111/J.1365-2753.2006.00650.X
- [25] Howell, D., Molloy, S., Wilkinson, K., Green, E., Orchard, K., Wang, K., & Liberty, J. (2015). Patient-reported outcomes in routine cancer clinical practice: a scoping review of use, impact on health outcomes, and implementation factors. *Annals of Oncology : Official Journal of the European Society for Medical Oncology*, 26 9, 1846–1858. doi:10.1093/annonc/mdv181

- [26] Scheibe, M., Herrmann, A., Schmitt, J., Einhart, N., Sedlmayr, B., & Kowalski, C. (2020). Implementation of patient-reported outcome assessment in routine cancer care: A systematic review of multicentric programs in Europe. *Zeitschrift Fur Evidenz, Fortbildung Und Qualitat Im Gesundheitswesen*. doi:10.1016/j.zefq.2020.08.001
- [27] Alshehri, F., Alarabi, A., Alharthi, M., Alanazi, T., Alohal, A., & Alsaleem, M. (2020). Use of patient-reported outcome measures (PROMs) by orthopedic surgeons in Saudi Arabia. *Journal of Orthopaedic Surgery and Research*. doi:10.1186/s13018-020-02135-1
- [28] Øvretveit, J., Zubkoff, L., Nelson, E., Frampton, S., Knudsen, J., & Zimlichman, E. (2017). Using patient-reported outcome measurement to improve patient care. *International Journal for Quality in Health Care*, 29, 874. doi:10.1093/intqhc/mzx108
- [29] Guo, P., Gao, W., Higginson, I., & Harding, R. (2018). Implementing Outcome Measures in Palliative Care. *Journal of Palliative Medicine*, 21 4, 414. doi:10.1089/jpm.2017.0674
- [30] Makhni, E., & Hennekes, M. (2023). The Use of Patient-Reported Outcome Measures in Clinical Practice and Clinical Decision Making. *Journal of the American Academy of Orthopaedic Surgeons*, 31, 1059–1066. doi:10.5435/JAAOS-D-23-00040
- [31] Rikkert, M. O., Van Der Wees, P., Schoon, Y., & Westert, G. (2018). Using Patient Reported Outcomes Measures to Promote Integrated Care. *International Journal of Integrated Care*, 18. doi:10.5334/ijic.3961
- [32] Boyce, M., Browne, J., & Greenhalgh, J. (2014). The experiences of professionals with using information from patient-reported outcome measures to improve the quality of healthcare: a systematic review of qualitative research. *BMJ Quality & Safety*, 23, 508–518. doi:10.1136/bmjqs-2013-002524
- [33] Oldenburger, E., Oldenburger, F., Coolbrandt, A., Isebaert, S., Neyens, I., Sevenants, A., ... Haustermans, K. (2020). The use of patient reported outcome measures (PROMs) in palliative radiotherapy: a topical review. *Radiotherapy and Oncology : Journal of the European Society for Therapeutic Radiology and Oncology*. doi:10.1016/j.radonc.2020.04.045
- [34] Smith, A., Hewitt, J., Quinn, T., & Robling, M. (2021). Patient-reported outcome measures (PROMs) use in post-stroke patient care and clinical practice: a realist synthesis protocol. *Systematic Reviews*, 10. doi:10.1186/s13643-021-01682-w
- [35] Kasturi, S., Price, L., LeClair, A., Patel, N., Shetty, S., Sheira, D., ... Mandl, L. (2022). Clinical integration of patient-reported outcome measures to enhance the care of patients with SLE: a multi-center prospective cohort study. *Rheumatology*. doi:10.1093/rheumatology/keac200
- [36] Hansen, S. T., Kjerholt, M., Christensen, S. F., Brodersen, J., & Hølge-Hazelton, B. (2020). Nurses' Experiences When Introducing Patient-Reported Outcome Measures in an Outpatient Clinic: An Interpretive Description Study. *Cancer Nursing*. doi:10.1097/NCC.0000000000000808
- [37] Briggs, M., Rethman, K., Crookes, J., Cheek, F., Pottkotter, K., McGrath, S., ... Quatman-Yates, C. (2020). Implementing patient-reported outcome measures in outpatient rehabilitation settings: A systematic review of facilitators and barriers using the Consolidated Framework for Implementation Research. *Archives of Physical Medicine and Rehabilitation*. doi:10.1016/j.apmr.2020.04.007
- [38] Warnecke, E., Comino, M. R. S., Kocol, D., Hosters, B., Wiesweg, M., Bauer, S., ... Tewes, M. (2023). Electronic Patient-Reported Outcome Measures (ePROMs) Improve the Assessment of Underrated Physical and Psychological Symptom Burden among Oncological Inpatients. *Cancers*, 15. doi:10.3390/cancers15113029
- [39] Dulmen, S., Wees, P., Staal, J., Staal, J., Braspenning, J., & Sanden, M. W. N.-V. D. (2017). Patient reported outcome measures (PROMs) for goalsetting and outcome measurement in primary care physiotherapy, an explorative field study. *Physiotherapy*, 103 1, 66–72. doi:10.1016/j.physio.2016.01.001
- [40] Ishaque, S., Karnon, J., Chen, G., Nair, R., & Salter, A. (2018). A systematic review of randomised controlled trials evaluating the use of patient-reported outcome measures (PROMs). *Quality of Life Research*, 28, 567–592. doi:10.1007/s11136-018-2016-z

- [41] Easpaig, B. N. G., Tran, Y., Bierbaum, M., Arnolda, G., Delaney, G., Liauw, W., ... Braithwaite, J. (2020). What are the attitudes of health professionals regarding patient reported outcome measures (PROMs) in oncology practice? A mixed-method synthesis of the qualitative evidence. *BMC Health Services Research*, 20. doi:10.1186/s12913-020-4939-7
- [42] Pennucci, F., Rosis, S., & Nuti, S. (2019). Can the jointly collection of PROMs and PREMs improve integrated care? The changing process of the assessment system for the hearth failure path in Tuscany Region. *International Journal of Integrated Care*. doi:10.5334/IJIC.S3421
- [43] Health, University, Of, S., Medicine, Turkey, & Staines. (2023). Multimethod study on patient-reported measures for routine assessment of primary care. *The European Journal of Public Health*, 33. doi:10.1093/eurpub/ckad160.1288
- [44] Greenhalgh, J., Gooding, K., Gibbons, E., Dalkin, S., Wright, J., Valderas, J., & Black, N. (2018). How do patient reported outcome measures (PROMs) support clinician-patient communication and patient care? A realist synthesis. *Journal of Patient-Reported Outcomes*, 2. doi:10.1186/s41687-018-0061-6
- [45] Berad, A. (2023). Enhancing Patient-Centered Care and Health Outcomes through Patient-Reported Outcome Measures. *Central India Journal of Medical Research*. doi:10.58999/cijmr.v2i03.131
- [46] Kim, E., Murray, A., Tolstorukov, M., & Martin, N. (2021). Patient Reported Outcome Measure (PROM) Collection Rates When Part of Routine Clinical Workflow in an Academic Radiation Oncology Department. *International Journal of Radiation Oncology, Biology, Physics*, 111 3S. doi:10.1016/j.ijrobp.2021.07.637
- [47] Skovlund, S., De Lichtenberg, T. H., Hessler, D., & Ejksjaer, N. (2019). Can the Routine Use of Patient-Reported Outcome Measures Improve the Delivery of Person-Centered Diabetes Care? A Review of Recent Developments and a Case Study. *Current Diabetes Reports*, 19, 1–18. doi:10.1007/s11892-019-1190-x
- [48] Sales, C., Ashworth, M., Ayis, S., Barkham, M., Edbrooke-Childs, J., Faisca, L., ... Cooper, M. (2022). Idiographic patient reported outcome measures (I-PROMs) for routine outcome monitoring in psychological therapies: Position paper. *Journal of Clinical Psychology*. doi:10.1002/jclp.23319
- [49] Gettel, C., Galske, J., Sather, A., Haidous, A., Hwang, U., Brackett, A., ... Carpenter, C. (2024). Patient-reported outcome measure use among older adults after emergency department care: A systematic review. *Academic Emergency Medicine*, 31, 273–287. doi:10.1111/acem.14850
- [50] Santana, M., & Feeny, D. (2014). Framework to assess the effects of using patient-reported outcome measures in chronic care management. *Quality of Life Research*, 23, 1505–1513. doi:10.1007/s11136-013-0596-1
- [51] Agarwal, A., Pain, T., Levesque, J., Girgis, A., Hoffman, A., Karnon, J., ... Morton, R. (2021). Patient-reported outcome measures (PROMs) to guide clinical care: recommendations and challenges. *The Medical Journal of Australia*, 216, 9–11. doi:10.5694/mja2.51355
- [52] Horan, M., Sim, J.-A., Krull, K., Ness, K., Yasui, Y., Robison, L., ... Huang, I. (2023). Ten Considerations for Integrating Patient-Reported Outcomes into Clinical Care for Childhood Cancer Survivors. *Cancers*, 15. doi:10.3390/cancers15041024
- [53] Churruca, K., Pomare, C., Ellis, L., Long, J., Henderson, S., Murphy, L., ... Braithwaite, J. (2021). Patient-reported outcome measures (PROMs): A review of generic and condition-specific measures and a discussion of trends and issues. *Health Expectations : An International Journal of Public Participation in Health Care and Health Policy*, 24, 1015–1024. doi:10.1111/hex.13254
- [54] Ayton, D., Gardam, M., Pritchard, E., Ruseckaite, R., Ryan, J., Robinson, S., ... Ahern, S. (2020). Patient-Reported Outcome Measures to Inform Care of People With Dementia-A Systematic Scoping Review. *The Gerontologist*. doi:10.1093/geront/gnz179
- [55] Bele, S., Mohamed, B., Chugh, A., Haverman, L., & Santana, M. (2019). Impact of using patient-reported outcome measures in routine clinical care of paediatric patients with chronic conditions: a systematic review protocol. *BMJ Open*, 9. doi:10.1136/bmjopen-2018-027354

- [56] Carfora, L., Foley, C., Hagi-Diakou, P., Lesty, P., Sandstrom, M., Ramsey, I., & Kumar, S. (2022). Patients' experiences and perspectives of patient-reported outcome measures in clinical care: A systematic review and qualitative meta-synthesis. *PLoS ONE*, *17*. doi:10.1371/journal.pone.0267030
- [57] Thompson, D., & Ski, C. (2015). Patient-reported outcome measures in cardiovascular nursing. *European Journal of Cardiovascular Nursing*, *14*, 370–371. doi:10.1177/1474515115601621
- [58] Lam, K., Marshall, A., & Valier, A. (2020). Patient-Reported Outcome Measures in Sports Medicine: A Concise Resource for Clinicians and Researchers. *Journal of Athletic Training*. doi:10.4085/1062-6050-171-19
- [59] Van Der Willik, E., Hemmelder, M., Bart, H., Van Ittersum, F., Akker, J. H.-V. D., Bos, W., ... Meuleman, Y. (2020). Routinely measuring symptom burden and health-related quality of life in dialysis patients: first results from the Dutch registry of patient-reported outcome measures. *Clinical Kidney Journal*, *14*, 1535–1544. doi:10.1093/ckj/sfz192
- [60] Krawczyk, M., Sawatzky, R., Schick-Makaroff, K., Stajduhar, K., Öhlén, J., Reimer-Kirkham, S., ... Cohen, R. (2019). Micro-Meso-Macro Practice Tensions in Using Patient-Reported Outcome and Experience Measures in Hospital Palliative Care. *Qualitative Health Research*, *29*, 510–521. doi:10.1177/1049732318761366
- [61] Kyte, D., Calvert, M., Wees, P., Hove, R., Tolan, S., & Hill, J. (2015). An introduction to patient-reported outcome measures (PROMs) in physiotherapy. *Physiotherapy*, *101* 2, 119–125. doi:10.1016/j.physio.2014.11.003
- [62] Daliya, P., Gemmill, E., Lobo, D., & Parsons, S. (2019). A systematic review of patient reported outcome measures (PROMs) and quality of life reporting in patients undergoing laparoscopic cholecystectomy. *Hepatobiliary Surgery and Nutrition*, *8* 3, 228–245. doi:10.21037/HBSN.2019.03.16
- [63] Hansen, S. (2020). *Patient-Reported Outcome Measures (PROMs) integrated in the follow-up of patients diagnosed with haematological cancers: A qualitative study of patients' and health care professionals' experiences*. doi:10.21996/3ED4-9W37
- [64] Hughes, S., Aiyegbusi, O., Lasserson, D., Collis, P., Rivera, C., McMullan, C., ... Calvert, M. (2021). Protocol for a scoping review exploring the use of patient-reported outcomes in adult social care. *BMJ Open*, *11*. doi:10.1136/bmjopen-2020-045206
- [65] Montgomery, N., Howell, D., Ismail, Z., Bartlett, S., Brundage, M., Bryant-Lukosius, D., ... Montgomery, N. (2020). Selecting, implementing and evaluating patient-reported outcome measures for routine clinical use in cancer: the Cancer Care Ontario approach. *Journal of Patient-Reported Outcomes*, *4*. doi:10.1186/s41687-020-00270-1
- [66] De Marchi, F., Berry, J., Chan, J., Caldwell, S., Ellrodt, A., Scalia, J., ... Paganoni, S. (2020). Patient reported outcome measures (PROMs) in amyotrophic lateral sclerosis. *Journal of Neurology*, *267*, 1754–1759. doi:10.1007/s00415-020-09774-8
- [67] Recinos, P., Dunphy, C., Thompson, N., Schuschu, J., Urchek, J., & Katzan, I. (2017). Patient Satisfaction with Collection of Patient-Reported Outcome Measures in Routine Care. *Advances in Therapy*, *34*, 452–465. doi:10.1007/s12325-016-0463-x
- [68] Barchielli, C., Rafferty, A., & Vainieri, M. (2022). Integrating Key Nursing Measures into a Comprehensive Healthcare Performance Management System: A Tuscan Experience. *International Journal of Environmental Research and Public Health*, *19*. doi:10.3390/ijerph19031373
- [69] Sokas, C., Hu, F., Edelen, M., Sisodia, R., Pusic, A., & Cooper, Z. (2021). A Review of PROM Implementation in Surgical Practice. *Annals of Surgery*, *275*, 85–90. doi:10.1097/SLA.0000000000005029
- [70] Attallah, D. (2020). Development and implementation of the feasibility of Nurse-sensitive outcome indicators set for assessing the variation in the quality of care in ambulatory chemotherapy units in the Kingdom of Saudi Arabia. *Journal of Biomedical Science*, *9*. Retrieved from

<https://consensus.app/papers/development-and-implementation-of-the-feasibility-of-attallah/77f2a22ca6075190b65fc141a1372b1b/>

- [71] Boakye, A., Tam, S., Zatirka, T., Neslund-Dudas, C., Su, W.-T., Cannella, C., ... Movsas, B. (2022). Completion of electronic patient reported outcome measures among diverse cancer patients treated in an integrated health system. *Journal of Clinical Oncology*. doi:10.1200/jco.2022.40.16_suppl.e24035
- [72] Jha, R., Hanna, L., Sounderajah, V., Makar, S., & Gibbs, R. (2023). 0073 Patient-reported outcome measures (PROMS) used to assess quality of life (QOL) in aortic dissection: a systematic scoping review using COSMIN methodology. *British Journal of Surgery*. doi:10.1093/bjs/znad101.073
- [73] Bachmann, J., Posch, D., Hickson, G., Pinson, W., Kripalani, S., Dittus, R., & Stead, W. (2020). Developing an Implementation Strategy for Systematic Measurement of Patient-Reported Outcomes at an Academic Health Center. *Journal of Healthcare Management*. doi:10.1097/JHM-D-18-00279
- [74] Anthony, S., Young, K., Pol, S., Blydt-Hansen, T., Goldberg, A., Hamiwka, L., ... West, L. (2020). Improving the Care for Pediatric Transplant Patients through Integration of Patient-Reported Outcome Measures into Clinical Practice. *The Journal of Heart and Lung Transplantation : The Official Publication of the International Society for Heart Transplantation*, 39 4S. doi:10.1016/j.healun.2020.01.1201
- [75] Krägeloh, C., Czuba, K., Billington, D., Kersten, P., & Siegert, R. (2015). Using feedback from patient-reported outcome measures in mental health services: a scoping study and typology. *Psychiatric Services*, 66 3, 224–241. doi:10.1176/appi.ps.201400141
- [76] Kynoch, K., Ameen, M., Ramis, M., & Khalil, H. (2022). Use of Patient-Reported Data within the Acute Healthcare Context: A Scoping Review. *International Journal of Environmental Research and Public Health*, 19. doi:10.3390/ijerph191811160
- [77] Scanferla, E. (2023). Measuring and improving the quality of mental health care: bringing patient-reported outcome et experience measures (PROMs et PREMs) in psychiatric settings. *European Psychiatry*, 66. doi:10.1192/j.eurpsy.2023.688
- [78] Meadows, K. (2021). Interpreting Patient-Reported Outcome Measures. *Philosophy of Medicine*. doi:10.5195/philmed.2021.66
- [79] Barisone, M., Quattrone, F., Aimo, A., Damone, A., Pennucci, F., Emdin, M., ... Nuti, S. (2024). [The use of PROMs (patient-reported outcome measures) and PREMs (patient-reported experience measures) in Cardiology: current state and applications to improve patient care]. *Giornale Italiano Di Cardiologia*, 25 11, 801–810. doi:10.1714/4352.43390
- [80] Whiteing, N., & Cox, C. (2010). Using patient reported outcome measures to improve patient care. *Gastrointestinal Nursing*, 8, 16–19. doi:10.12968/GASN.2010.8.5.48575
- [81] Castrejón, I., García, C., Lozano, M. C., Borrás, J., Galindo-Izquierdo, M., Monte, T. S., ... Muñoz, Á. (2023). POS0079-HPR PATIENT-REPORTED OUTCOMES MEASURES FOR SYSTEMIC LUPUS ERYTHEMATOSUS: AN EXPERT DELPHI CONSENSUS TO GUIDE IMPLEMENTATION IN ROUTINE CARE. *Annals of the Rheumatic Diseases*. doi:10.1136/annrheumdis-2023-eular.1574
- [82] Bele, S., Paolucci, E., Johnson, D., Quan, H., & Santana, M. (2023). Implementing paediatric patient-reported outcome measures in outpatient asthma clinics: a feasibility assessment study. *BMJ Open*, 13. doi:10.1136/bmjopen-2023-073260
- [83] Meadows, K. (2022). Do Patient-Reported Outcome Measures Tell Us the Full Story? *Clinical Nursing Research*, 31, 159–162. doi:10.1177/10547738221078335
- [84] Falavigna, A., Dozza, D., Teles, A., Wong, C. C., Barbagallo, G., Brodke, D., ... Riew, K. (2017). Current Status of Worldwide Use of Patient-Reported Outcome Measures (PROMs) in Spine Care. *World Neurosurgery*, 108, 328–335. doi:10.1016/j.wneu.2017.09.002
- [85] Hutchings, H., & Alrubaiy, L. (2017). Patient-Reported Outcome Measures in Routine Clinical Care: The PROMise of a Better Future? *Digestive Diseases and Sciences*, 62, 1841–1843. doi:10.1007/s10620-017-4658-z

- [86] Sayah, A., Lahtinen, M., Bonsel, G., Ohinmaa, A., & Johnson, J. (2021). A multi-level approach for the use of routinely collected patient-reported outcome measures (PROMs) data in healthcare systems. *Journal of Patient-Reported Outcomes*, 5. doi:10.1186/s41687-021-00375-1
- [87] Tadić, V., Hogan, A., Sobti, N., Knowles, R., & Rahi, J. (2013). Patient-reported outcome measures (PROMs) in paediatric ophthalmology: a systematic review. *British Journal of Ophthalmology*, 97, 1369–1381. doi:10.1136/bjophthalmol-2013-303350
- [88] Bevans, M., Ross, A., & Cella, D. (2014). Patient-Reported Outcomes Measurement Information System (PROMIS): efficient, standardized tools to measure self-reported health and quality of life. *Nursing Outlook*, 62 5, 339–345. doi:10.1016/j.outlook.2014.05.009
- [89] Duhoux, F., & Hazarika, R. (2019). A View on Patient-Reported Outcome Measures. *Breast Cancer: Global Quality Care*. doi:10.1093/med/9780198839248.003.0006
- [90] Makhni, E., Hennekes, M., Baumhauer, J., Muh, S., & Spindler, K. (2023). AOA Critical Issues: Patient-Reported Outcome Measures. *The Journal of Bone and Joint Surgery*, 105, 641–648. doi:10.2106/JBJS.22.00587
- [91] Fleischmann, M., & Vaughan, B. (2018). The challenges and opportunities of using patient reported outcome measures (PROMs) in clinical practice. *International Journal of Osteopathic Medicine*. doi:10.1016/J.IJOSM.2018.03.003
- [92] Roberts, N., Janda, M., Stover, A., Alexander, K., Wyld, D., & Mudge, A. (2020). The utility of the implementation science framework “Integrated Promoting Action on Research Implementation in Health Services” (i-PARIHS) and the facilitator role for introducing patient-reported outcome measures (PROMs) in a medical oncology outpatient department. *Quality of Life Research*, 30, 3063–3071. doi:10.1007/s11136-020-02669-1
- [93] Nguyen, H., Butow, P., Dhillon, H., & Sundaresan, P. (2020). A review of the barriers to using Patient-Reported Outcomes (PROs) and Patient-Reported Outcome Measures (PROMs) in routine cancer care. *Journal of Medical Radiation Sciences*, 68, 186–195. doi:10.1002/jmrs.421
- [94] Robertson, A., Tadić, V., & Rahi, J. (2020). Attitudes, experiences, and preferences of ophthalmic professionals regarding routine use of patient-reported outcome measures in clinical practice. *PLoS ONE*, 15. doi:10.1371/journal.pone.0243563
- [95] Bone, R., Jeune-Smith, Y., & Feinberg, B. (2023). Frequency of standardized patient-reported outcome measures in routine clinical care of patients with cancer. *JCO Oncology Practice*. doi:10.1200/op.2023.19.11_suppl.342
- [96] Shapiro, L., Katz, P., Stern, B., & Kamal, R. (2024). Equitable Integration of Patient-Reported Outcomes Into Clinical Practice-Opportunities, Challenges, and a Roadmap for Implementation. *The Journal of the American Academy of Orthopaedic Surgeons*. doi:10.5435/JAAOS-D-23-00798
- [97] Lee, Y., Issa, T., & Vaccaro, A. (2023). State-of-the-art Applications of Patient-Reported Outcome Measures in Spinal Care. *Journal of the American Academy of Orthopaedic Surgeons*, 31. doi:10.5435/JAAOS-D-22-01009
- [98] Kotronoulas, G., Maguire, R., O'Brien, F., & Simpson, M. (2016). *An Exploration of the Use of Patient-reported Outcome Measures (PROMs) by Gynaecology Cancer Nurse Specialists in the Delivery of Supportive Care to Women with Cervical Cancer*. Retrieved from <https://consensus.app/papers/an-exploration-of-the-use-of-patientreported-outcome-kotronoulas-maguire/e947435d1a625c518eb26941fe16b118/>
- [99] Aiyegbusi, O. (2019). *Using patient-reported outcome measures (PROMs) to promote quality of care and safety in the management of patients with advanced chronic kidney disease*. Retrieved from <https://consensus.app/papers/using-patientreported-outcome-measures-proms-to-promote-aiyegbusi/e49f60c64d085fcfb9cf315f285f0d0f/>
- [100] Kasturi, S., Price, L., Curtis, D., Nowell, W., Terrin, N., Salmon, J., ... McAlindon, T. (2021). 52528 Implementation of Web-Based Patient-Reported Outcome Measures (PROMs) in the Clinical Care of Systemic Lupus Erythematosus (SLE): A Multi-Center Prospective Cohort Study. *Journal of Clinical and Translational Science*, 5, 145–145. doi:10.1017/CTS.2021.770

- [101] Tinsley, M. (2017). Patient Reported Measures: Delivering Outcomes and Experiences that matter to patients in NSW. *International Journal of Integrated Care*, 17, 44. doi:10.5334/IJIC.3156
- [102] Meadows, Keith. (2024). Phenomenology: A Method for the Interpretation of Patient-Reported Outcomes. *Clinical Nursing Research*, 33, 262–270. doi:10.1177/10547738241240032
- [103] Webb, E., Parkes, R., Gough, A., & Williams, D. (2018). Non-operative management, supported by self-monitoring using web-based patient reported outcome measures (PROMs), in knee osteoarthritis. *BMJ Case Reports*, 2018. doi:10.1136/bcr-2017-223560
- [104] Nyirenda, J., Sun, C., Wright, S., & Rezek, G. (2019). Feasibility Testing of Health Information Technology: Enabled Patient-Reported Outcome Measurement in the Home Health Setting. *Home Healthcare Now*. doi:10.1097/NHH.0000000000000779
- [105] Nikolovski, J., Morton, R., Mercieca-Bebber, R., Armstrong, M., Hartas, G., Rossiter, B., ... Rutherford, C. (2024). Acceptability and timing considerations when administering patient-reported outcome measures (PROMs) among people with chronic health conditions who are culturally and linguistically diverse (CALD): a qualitative study protocol. *BMJ Open*, 14. doi:10.1136/bmjopen-2023-083346
- [106] Daskalakis, I., Sperelakis, I., Sidiropoulou, B., Kontakis, G., & Tosounidis, T. (2021). Patient-Reported Outcome Measures (PROMs) Relevant to Musculoskeletal Conditions Translated and Validated in the Greek Language: A COSMIN-Based Systematic Review of Measurement Properties. *Mediterranean Journal of Rheumatology*, 32, 200–217. doi:10.31138/mjr.32.3.200
- [107] Graham, J., Dong, S., Kinahan, J., Sutherland, S., Newhook, D., Hébert, Y., & Klaassen, R. (2022). Integration of Patient-reported Outcome Measures in Pediatric Hematology: A Qualitative Methods Study. *Journal of Pediatric Hematology/Oncology*, 45. doi:10.1097/MPH.0000000000002465
- [108] Peláez-Ballestas, I. (2012). Patient reported outcome measures: what is their importance? *Reumatologia Clinica*, 8 3, 105–106. doi:10.1016/j.reuma.2011.11.001
- [109] Watson, L., Delure, A., Qi, S., Link, C., Chmielewski, L., Photitai, É., & Smith, L. (2021). Utilizing Patient Reported Outcome Measures (PROMs) in ambulatory oncology in Alberta: Digital reporting at the micro, meso and macro level. *Journal of Patient-Reported Outcomes*, 5. doi:10.1186/s41687-021-00373-3
- [110] Kaufmann, T., Rocque, G., Kvale, E., Kamal, A., Pignone, M., Bennett, A., ... Stover, A. (2022). Development of a patient-reported outcome measure (PROM) screening strategy for early palliative care needs in outpatients with advanced cancer. *Journal of Clinical Oncology*. doi:10.1200/jco.2022.40.28_suppl.203
- [111] Oschmann, L., Kuklinski, D., Geissler, A., Pross, C., & Vogel, J. (2020). PROMs as an intervention – a randomised controlled study. *European Journal of Public Health*. doi:10.1093/eurpub/ckaa165.933
- [112] Gibbons, E., Black, N., Fallowfield, L., Newhouse, R., & Fitzpatrick, R. (2016). *Patient-reported outcome measures and the evaluation of services*. doi:10.3310/HSDR04160-55
- [113] Peters, M., Crocker, H., Jenkinson, C., Doll, H., & Fitzpatrick, R. (2014). The routine collection of patient-reported outcome measures (PROMs) for long-term conditions in primary care: a cohort survey. *BMJ Open*, 4. doi:10.1136/bmjopen-2013-003968