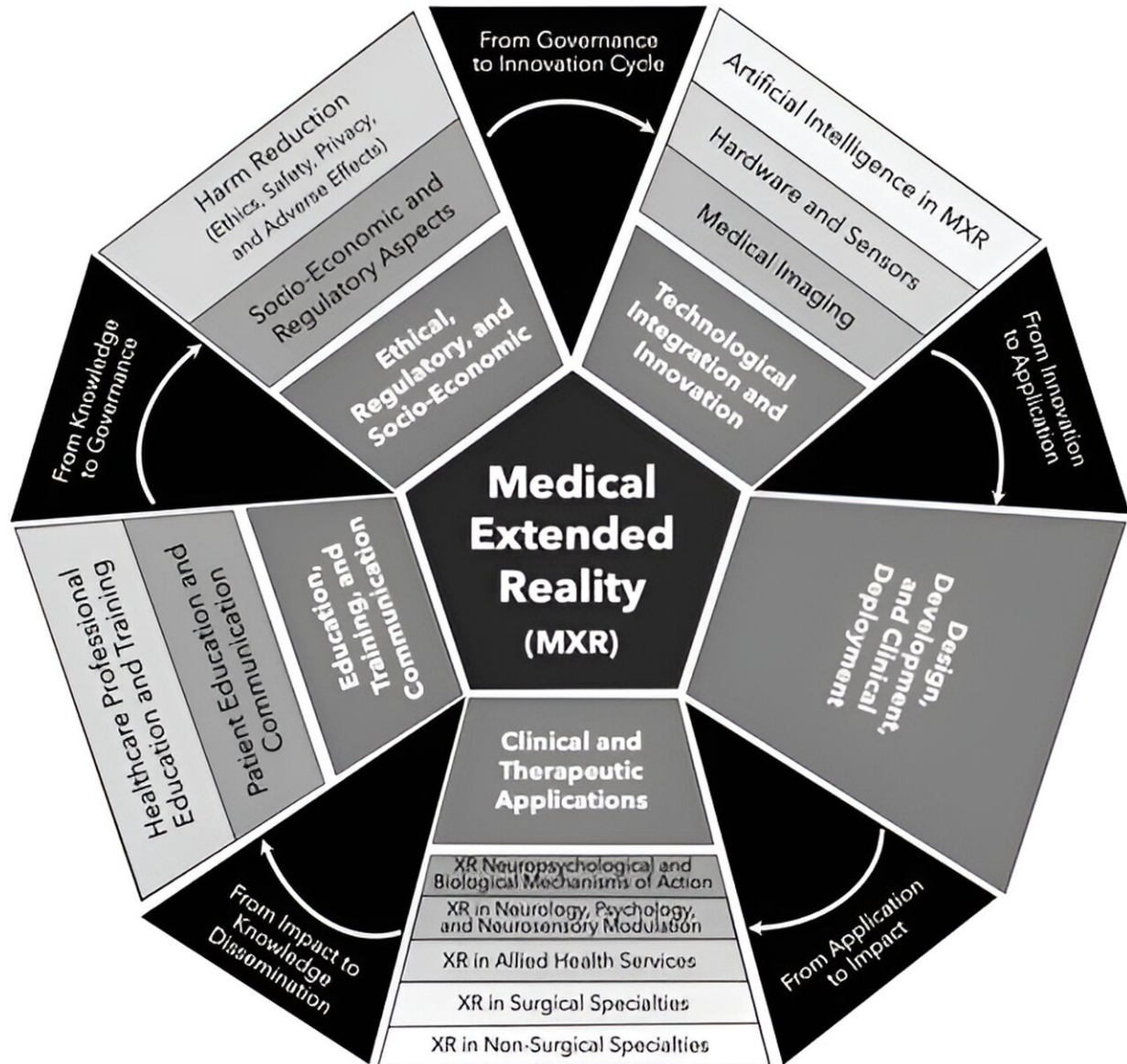


A new guideline for medical extended reality

January 29 2024



Visual depiction of the MXR taxonomy. At its core, MXR encompasses five broad domains. These core domains expand into 13 primary topics, which then explode into the 180 secondary topics presented in Table 1. See text for more

information about the emergent narrative depicted by the transition phrases between domains. MXR, medical extended reality. Credit: *Journal of Medical Extended Reality* (2024). DOI: 10.1089/jmxr.2023.0012

The American Medical Extended Reality Association (AMXRA), in partnership with the editorial board of the *Journal of Medical Extended Reality*, has developed a new guideline to help define the emerging field of Medical Extended Reality (MXR). The document is [published](#) in the *Journal of Medical Extended Reality*.

MXR has emerged as a dynamic field at the intersection of [health care](#) and immersive technology, encompassing virtual, augmented, and mixed-reality applications across a wide range of medical disciplines. The field lacked a standardized [framework](#) to categorize its diverse research and applications. Brennan Spiegel, MD, MSHS, from Cedars-Sinai, and co-authors present the new guideline, which seeks to standardize terminology, categorize existing work, and provide a structured framework for future research development in MXR.

At the core of the new framework are five overarching domains: technological integration and innovation; design, development, and deployment; clinical and therapeutic applications; education, training, and communication; and ethical, regulatory, and socio-economic considerations.

"With this work, we have formulated an initial taxonomy with five core domains, encompassing 13 primary topics and a comprehensive set of 180 secondary topics," stated the authors. "This taxonomy offers a tool for researchers, practitioners, funders, industry, and other groups to systematically classify and navigate the complexities of the MXR field."

"This blueprint serves as a crucial tool for harmonizing [communication](#) and collaboration among researchers, clinicians, educators, and policymakers, and it establishes a common language and structure that will support the field's continued growth and integration into health care," says Dr. Spiegel, Editor-in-Chief of *Journal of Medical Extended Reality*.

More information: Brennan M.R. Spiegel et al, What Is Medical Extended Reality? A Taxonomy Defining the Current Breadth and Depth of an Evolving Field, *Journal of Medical Extended Reality* (2024). [DOI: 10.1089/jmxr.2023.0012](https://doi.org/10.1089/jmxr.2023.0012)

Provided by Mary Ann Liebert, Inc

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