

# ***Special Issue on Improving Health-Related Quality of Life (HRQOL) Through Safe Human-Robot Collaboration***

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Scope: In an aging society with a declining birthrate, technological development aimed at improving individuals' quality of life is extremely important, and there are high expectations for robots that support people's medical care. In this special issue, we call for papers on robot technologies that support a wide range of health and medical care, from treatment support robots (surgical support robots) that help sustain life to assistive robotics. A wide range of topics is invited, including not only robot mechanisms and control technologies, safe human-robot interaction (HRI) for medical applications but also safe interaction technologies between humans and robots holding medical devices, environmental perception technologies for medical support robotic applications in real environments, and field demonstration studies.

Keywords: medical support robot, home medical care/health support, field demonstration

We also welcome survey and short papers that clarify current essential topics in medical/health care robot applications. Prospective contributed papers are invited to cover, but are not limited to, the following topics:

- Medical support robots / Assistive robotics
- Surgical robotic systems
- Home medical care/health support
- Medical information technology
- Image processing and visualization for medical support robot systems
- Safe human-robot interaction for medical applications
- Environmental perception technologies for medical support robotic applications
- Haptics and multimodal devices in medical applications
- Field demonstration studies
- Soft robotics for healthcare

**Submission:** The full-length manuscript (either PDF file or MS word file) should be sent by **31 March 2024** to the office of Advanced Robotics, the Robotics Society of Japan through the homepage of Advanced Robotics (<https://www.rsj.or.jp/pub/ar/submission.html>). Instructions for authors and manuscript template are available at the homepage.