The **Neurodivergent Scale for Interacting with Robots (NSIR)** and **Li's (2024)** review of healthcare robotics provide two distinct but intersecting lenses for evaluating the future of medical technology. While Li provides a broad overview of the **functional roles** and **operational identities** of robots in healthcare, the NSIR offers a framework for assessing the **psychological and social quality** of those robotic interactions for a specific, vulnerable population.

The application of the NSIR to Li's 2024 framework can be analyzed through three key dimensions:

1. Functional Roles vs. Social Identity

Li (2024) categorizes robots based on their physical and task-oriented roles, such as surgical robots, telemedicine agents, and pharmacy service automation.

- **The Identity Shift:** Li highlights that robots are evolving from mere tools to "mobile medical assistants" and "socially useful" entities.
- **Applying the NSIR:** For a robot to successfully inhabit these "socially useful" roles, it must achieve the **Anthropomorphic Connection/Kinship (Factor 2)** measured by the NSIR. For example, a robot identified by Li as a "cleaning" or "delivery" robot might be a tool to a neurotypical user, but a neurodivergent user might score high on NSIR **Item 1** ("The robot is more like me than anyone else I know"), fundamentally shifting the robot's "identity" from a service tool to a social partner.

2. Standardizing the "Human-Robot Interaction" (HRI)

Li underscores that a comprehensive understanding of the many functions robots play is crucial for informing future development.

- **Bridging the Gap:** While Li focuses on the "physical tasks" performed by robots, the NSIR provides the qualitative metrics to measure the "sociotechnical obstacles" Li mentions.
- **Trust and Transparency:** Li notes that robots ensure "accuracy and transparency" in tasks. The NSIR's **Factor 1 (Social Comfort/Trust Safety)** measures the emotional result of that transparency. **Item 8** ("I believe that my robot is the same with me as it is with anyone") measures whether the predictable, logical nature of the robots described by Li translates into a feeling of safety for the user.

3. Patient-Centered AI and Subjective Comfort

Li (2024) discusses the potential for AI-driven robots to personalize treatment and monitor patient deterioration.

- **The "Internal" Metric:** Li's review focuses on external benefits like "reducing manpower demands" and "improving clinical outcomes".

- **The NSIR Contribution:** The NSIR provides a "first-person" metric for these outcomes. If an AI robot is used for "remote patient examination" (as Li suggests), NSIR **Item 7** ("I feel comfortable undressing in front of my robot") and **Item 5** ("My robot can tell what I am feeling") become critical KPIs for the success of that "remote" medical identity.

Comparison of Frameworks

Role in Li (2024) Review	NSIR (2025) Application
Identity as a "Physical Task Performer"	**Identity as a "Social Mirror"**: Measured by Item 1 ("The robot is more like me").
Role in "Telepresence/Remote Care"	**Role in "Privacy Preservation"**: Measured by Item 7 (Comfort in private settings).
Goal of "Increasing Efficiency"	**Goal of "Increasing Social Bond"**: Measured by Item 4 ("Together forever").
"Mobile Medical Assistant" Role	**"Emotional Intelligence" Requirement**: Measured by Item 5 (Sensing sadness).

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In summary, the NSIR serves as a specialized evaluation tool that can be "plugged into" Li's broad review. It ensures that as healthcare robots expand their **roles** (from surgical to social), their **identity** remains aligned with the unique social and trust-based needs of neurodivergent patients.