

Standardization of evacuation methods in facilities for the elderly in the event of a disaster using nursing care robots

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Nursing care robots such as autonomous driving wheelchairs, which are being introduced to daily nursing care, are used in experiments assuming evacuation of people who have difficulty evacuating on their own in facilities such as elderly care facilities in the event of a disaster such as a fire. It presents the requirements to be implemented, design guidelines for facilities that utilize these, standard evacuation methods using nursing care robots, and required functions. Based on interviews with elderly care facilities, the general concept of evacuation guidance methods in the event of a fire is shown. We also conducted an experiment simulating the movement of an autonomous wheelchair through the corridors and elevators of the facility, and verified the corridor width and door width necessary for the movement of the robot.