

## **Data mining of Care Life Log by the level of care required**

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In the present study, to classify the vast amount of Care Life Log data that occurs in nursing in one Miyazaki Hospital Long-term Health Care Facility by level of care required, data mining was carried out. The characteristic vocabulary from the Long-term Health Care Facility's Care Life Log was used to integrate and analyze the level of care required.

There are five levels of care, with Level 1 vocabulary including recreation, toilet, morning, afternoon, etc. The level of care gradually increases from Level 1 to Level 5, which has vocabulary that includes tube, danger, treatment, removal, and discovery. The higher the level, the worse the health condition and therefore the greater care required. These levels allow for a clear analysis of a patient's condition. This analysis has led to an improvement in Quality of Life as well as a decrease in mismatches between the level of care required for patients and the level of care given by caretakers.

The nursing field requires efficiency in health care services. Because of this, improvement and continuous data collection are important. There is a need for the collection of data as a whole in the long-term building of health care services as well as large-scale data collection.

In the future, we aim to develop an electronic medical record that can be created semi-automatically in accordance with the level of care required.