

Exploring the Clinical Benefits of the ISO/IWA1 Healthcare Service Management System in the Department of Nuclear Medicine

Jui-Jen Chen¹, Ya-Yen Chiu²

¹ *Department of Nuclear Medicine, Chang Gung Memorial Hospital, Kaohsiung Medical Center, Chang Gung University College of Medicine*

² *Department of Information Management, Chang Jung Christian University*

Abstract

As the global population grows, diseases and medical needs are increasing daily. The three-year COVID-19 pandemic has further intensified the challenges faced of the medical industry. The Department of Nuclear Medicine has established a foundation for resilient care and rapid staff recovery by obtaining ISO/IWA1 certification for healthcare service management system, enabling the institution to achieve sustainable operations. The department establishes relevant procedure manuals and work instructions to create standard operating procedures. In line with the ISO principle of "consistency in saying, writing, and doing," we implement internal audits and quality is continuously improved through RCA (Root Cause Analysis) and Plan, Do, Check, Act (PDCA) cycle. The department tracks annual quality goals and continuously revises target values, benchmarks, and thresholds to internalize these practices into daily clinical operations. In the first three years of implementing internal audits, there were numerous deficiencies in various processes, averaging about 11 issues. After improvements, the number of deficiencies significantly decreased, with an average of only 4.5 issues per year by 2021. Statistics from 2015 to 2022 regarding the correction of abnormal events show a yearly decrease in incidents, dropping from an initial 8 occurrences to 3. In 2013, the department obtained ISO/IWA1:2005 healthcare service management system certification. The standard operating procedures have greatly improved the quality of medical care. The routinization of standard operating procedures has become the best tool for external audits and hospital evaluation. Looking ahead, the next goal will be to achieve ISO 15189 medical laboratory certification, continuing the efforts to improve and enhance the quality of medical services.

Keywords: healthcare, ISO/IWA1, nuclear medicine, PDCA, root cause analysis