Specification of Competency Standards
for the Elderly Care Service Industry
Unit of Competency

Functional Area - Gerontechnology

Title	Lead and Execute the Research and Development of Gerontechnology Projects
Code	110891L7
Range	This Unit of Competency is applicable to practitioners who are responsible for coordinating the research and development of gerontechnology projects in the elderly care service industry.The application requires the demonstration of forefront knowledge in the field of professional practice in highly specialized technical, professional or managerial working environments, and its execution requires research, transformational, innovation and leadership skills.Practitioners should be able to lead and execute the research and development of new gerontechnology projects related to the elderly community care and support service industry, develop innovative scientific research projects, and produce original projects to contribute to the industry's research and development in gerontechnology.
Level	7
Credit	3 （For Reference Only）

Competency	Performance Requirements
	1. Relevant knowledge on leading and executing the research and development of gerontechnology projects
	
	• Understand the developmental trend of the research, development and application of gerontechnology
	• Fully understand the needs and development of elderly community care and support services, such as:
	    o Aging population, and the changes in families and the society
	    o Demand elderly care and nursing services
	    o Demand and supply of community care and home care services
	    o Development of public and private healthcare services
	    o Government's policies and resources to promote the research and development of gerontechnology
	• Understand the relationship between the development of gerontechnology and the requirements of elderly community care
	• Sufficient understanding of the relevant knowledge for the research and development of medical equipment and gerontechnology, such as:
	    o Functions and expected product results
	    o Classification methods, and risk categories of the medical equipment
	    o Legal and regulatory requirements related to the operation of the manufacturer
	    o Equipment safety certification, such as: CFDA certifications
	    o The equipment's methods of clinical trial and regulatory requirements
	    o Requirements and procedures for the product's registration, etc.
	• Possess in-depth analytical skills and knowledge on the requirements for the use of quality management systems, such as: ISO 9001 quality management, ISO 13485 medical devices quality management verification, etc.
	• Possess extensive knowledge on risk management, such as:
	    o Information on the product testing and certification center
	    o Relevant liabilities and accident insurances, etc.
	• Fully understand the available resources of the organization and development of scientific research projects, such as:
	    o Innovation and Technology Fund
	    o Innovation and Technology Fund for Better Living
	    o Patient Application Grant, etc.

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- In-depth understanding of the relevant laws and regulations on the protection of intellectual property rights
- Fully understand the skills of writing projects for the research and development of scientific technology

2. Lead and execute the research and development of gerontechnology projects

- Comprehensively analyze the organization's service development strategy and research and development trends for technology, and determine the needs of gerontechnology research and development projects
- Comprehensively consider the industry's background, needs and developmental directions, analyze and explore scientific research projects with developmental potential
- Analyze the organization's operating strategy, scope, needs of service users, and available resources, in order to develop the research and development strategy and sequence of scientific research projects
- Coordinate and execute the latest scientific research projects, and promote cooperation with other organizations, such as:
    - Coordinate the resource allocation according to the needs of the scientific research plan
    - Establish and develop scientific research relationships with academic institutions
    - Develop plans for cooperative scientific research and development projects
    - Communicatee with participating scientific research and academic institutions to coordinate the process and progress of projects
    - Follow-up and control the cooperative scientific research and development projects
- Comprehensively review, assess and analyze the development of the latest scientific research, such as:
    - The progress and benefits of each project, and make amendments accordingly
    - Assessment of innovation ability
    - Analysis of the advantages and disadvantages of comprehensive innovation abilities, etc.
- Facilitate the exchange of knowledge related to the research and development of gerontechnology projects, such as:
    - Strengthen the preparation and execution of an exchange platform for professional knowledge on gerontechnology by exchanges and sharing with relevant colleagues in the industry and scholars/experts on gerontechnology
    - Lead the developmental direction of the research and development on gerontechnology, and aim to make significant contributions to the industry

3. Exhibit professionalism

- Demonstrate originality and leadership in the process of research and development of gerontechnology projects, in order to cope with the new environments, and promote the development of the industry and organization

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<td>Assessment Criteria</td>
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The integrated outcome requirements of this Unit of Competency are:

- Able to lead and execute the development of new scientific research projects in the elderly community care and support services industry; and
- Able to comprehensively review the scientific research and development projects, maintain and transform the results of projects, and make original contributions to the industry on the research and development of gerontechnology.

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