医療機器
クラスⅡ

Ayumo
歩行分析計
Dr Walkie® Plus+

整形外科医が開発した
全ての人のための歩行分析計

整形外科　森口　悠

ayumo Inc.

Company Deck

Creation of a world
where everyone can walk on their own feet

ayumo

Introduction

At ayumo, our vision is to create a world where people struggling with walking can receive timely and appropriate care. We are a health-tech startup developing computer-vision aided diagnostic support and locomotive assessment systems that help clinicians identify underlying causes earlier and more accurately.

To pursue this mission, experts from clinical medicine, business development, research and product engineering, and medical regulatory affairs came together to establish ayumo Inc. in June 2023.

Walking is more than a basic activity—it is a vital indicator of both physical and mental health. Through our work with medical professionals, we have seen many individuals whose gait problems went unnoticed or were identified far too late. More than 200 million people worldwide seek clinical evaluation due to walking difficulties, and this number is expected to continue rising.

By enabling earlier identification of underlying causes and supporting the preservation and improvement of mobility, we aim to contribute to a society where everyone can continue walking on their own feet for as long as possible.

We created this deck to share how we aim to realize this vision, hoping it will resonate with as many people as possible and inspire them to join us in bringing it to life.

Yoshiyuki Kuwada
ayumo Inc. Co-Founder&CEO

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Company Overview

Company Name

ayumo Inc. (Established June 2023)

Location

26F Hankyu Grand Building, 8-47 Kakuda-cho, Kita-ku, Osaka, Japan

Team

Board : 3, Employees and Advisors : 15（as of January 2026）

Business

- Development and sales of medical devices
- Development and sales of wellness services

Certifications

- 2nd class marketing license for medical devices, Manufacturing Registration
- ISO/IEC 27001:2022 Information Security Management Systems

特記事項

Health-tech startup originating from the University of Osaka

Team

Chief Executive Officer

Yoshiyuki Kuwada

After graduation from the Graduate School of Engineering at the University of Osaka, he joined AGC. Afterwards, at several consulting firms, he engaged in supporting the creation of new businesses and industries for government agencies, local governments, and private companies, as well as providing management reform assistance. Subsequently, he co-founded ayumo Inc. and assumed the position of CEO.

Chief Technology Officer

Yu Moriguchi

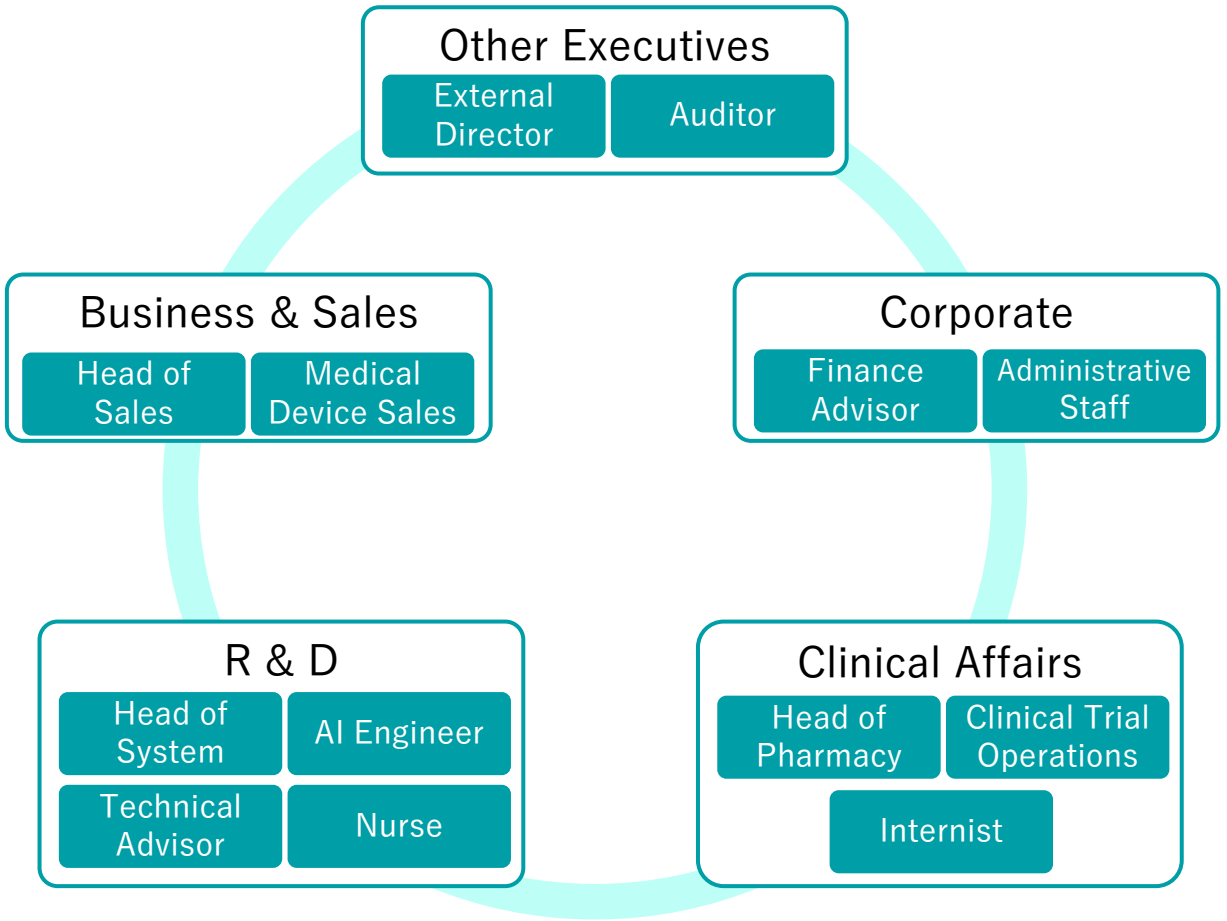
After graduating from the University of Osaka Faculty of Medicine, he worked in orthopedic clinical practice at several institutions. He later served as a Spine Fellow at Weill Cornell Medicine / AO Spine North America in the USA. In 2022, he was appointed Associate Professor at the Center for Global Health, Osaka University Hospital. He is a board-certified orthopedic surgeon and holds a M.D.

Chief Medical Officer

Junichi Kushioka

After graduating from the University of Osaka Faculty of Medicine, he worked in orthopedic clinical practice at several institutions. He conducted research as a Postdoctoral Fellow in the Department of Orthopedic Surgery at Stanford University. He subsequently completed the Stanford Ignite program and the UCLA Biodesign Fellowship. He is served as Chief of the Spine Center at Shonan Fujisawa Tokushukai Hospital. He is a board-certified orthopedic surgeon and holds a M.D.

Organizational Structure



as of January 2026

How We Act

1. Respect one another

Our workplace brings together colleagues from diverse backgrounds. Regardless of career history or age, we foster an environment where everyone can perform at their best by respecting and trusting one another.

2. Focus on how it can be done

We are creating new value that does not yet exist in the world. When faced with challenges, we do not look for reasons why something cannot be done—instead, we focus on how to make it possible and continue to take on new challenges.

3. Always act with honesty and integrity toward everyone

Our products are made possible through the support of many people. We believe it is essential to act with honesty and integrity toward everyone involved—customers, study participants, partner companies, and all who support our work.

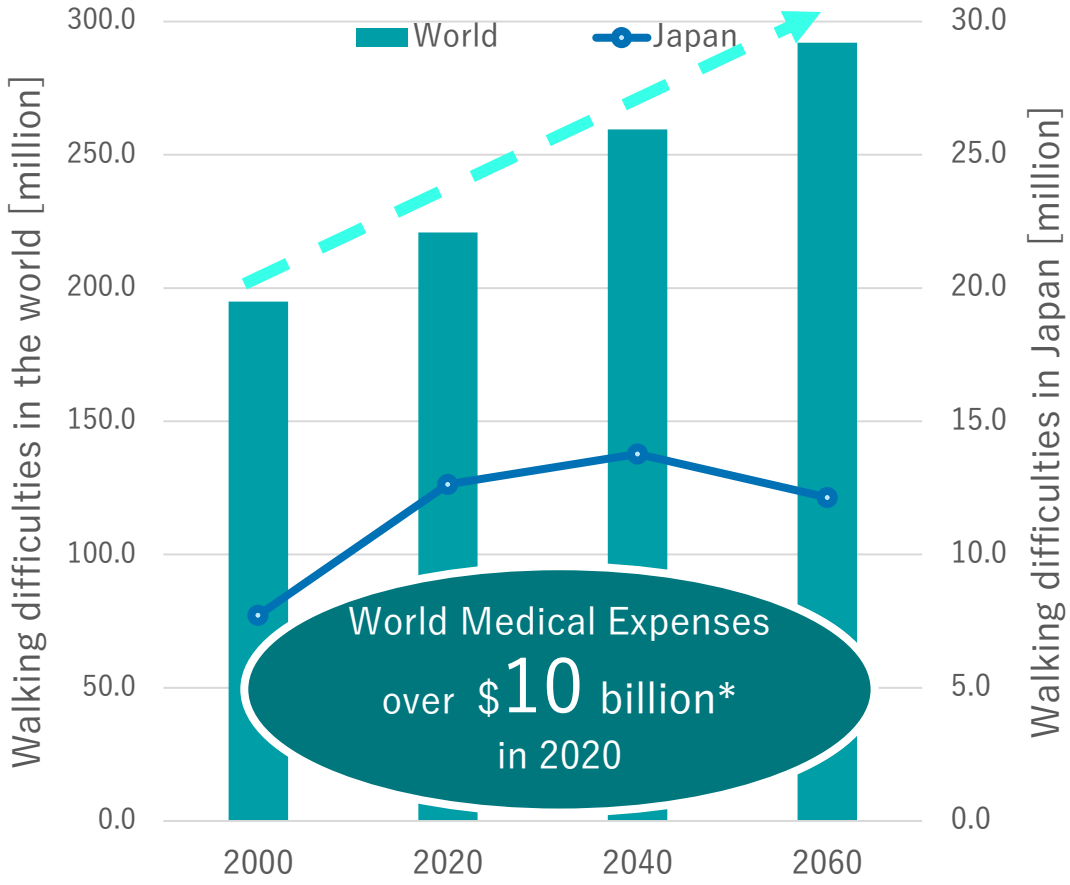
4. Contribute to each person’s growth and well-being

We provide an environment where people can pursue their own growth, regardless of their background or experience. Our goal is to create a workplace where each member can truly feel their personal development and build a sense of fulfillment and happiness together

The Reality of People with Walking Difficulties

As populations age, the number of individuals experiencing walking difficulties continues to rise. A wide range of medical conditions can underlie gait problems, requiring coordinated care across multiple specialties—including orthopedics, neurology, and cardiology.

Estimated Population with Walking Difficulties



*Calculation method: Patient Survey at Medical Institutions through Questionnaire survey, Population estimates and projections by Data Bank

Disease Groups That Cause Walking Difficulties

Site of disease	Specialty	Typical Diseases
Intracerebral nerves	Neurology Neurosurgery	Parkinson's disease, stroke, normal hydrocephalus etc.
Spinal canal nerve	Neurosurgery Orthopedics	Cervical myelopathy, Lumbar spinal canal stenosis etc.
Osteoarticular	Orthopedics	Osteoarthritis of knee, Osteoarthritis of hip, Osteoporosis etc.
Muscle	Neurology Orthopedics Geriatrics Cardiology	Muscular dystrophy, myositis/myopathy, heart failure, sarcopenia/frailty etc.
Peripheral blood vessels	Cardiology	Peripheral Arterial Disease etc.

Challenges in Clinical Practice

Although more patients are seeking medical attention for symptoms such as limb numbness and walking difficulties, musculoskeletal disorders often lack clear biomarkers, making it challenging to identify the underlying cause in some cases.

Feedback from Patients

They visit medical facilities, but identifying the cause takes time, leaving them struggling with prolonged symptoms.

References

2.2 years

Average Time to Reach a Definitive Diagnosis

<Reference> Neurosurg Focus, 2013, 35, 1, 1-6

Feedback from Physicians

The number of patients with walking difficulties is increasing, but because these issues often lie outside our specialty, determining the cause at the first visit is difficult.

89 %

Challenges in Identifying Underlying Diseases in People with Walking Difficulties

<Reference> Insights from Primary Care Physicians Interviewed

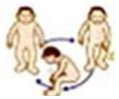
Our Approach

Specialists can often identify the cause of walking difficulties simply by observing gait. We transforms this expert capability into a scalable AI solution that enables non-specialists to make earlier, more accurate assessments. By operationalizing the “specialist’s eye,” we aim to accelerate detection, reduce preventable healthcare burdens, and establish a new standard for early diagnosis in society.

Gait Observation by Specialists

Specialists—such as spine surgeons and spinal disorder experts—can often infer the underlying causes of the walking difficulties at the first visit by visually assessing their gait.

Underlying Causes of Walking Difficulties and Gait Characteristics

Underlying Causes	Gait Characteristics	
Parkinson's disease		Parkinson's gait
Cervical myelopathy		Spastic gait
Lumbar spinal canal stenosis		Intermittent claudication

Our Development Concept

Empowering Non-Specialists with the “Specialist’s Eye” — Toward Early Identification of Walking Difficulties.

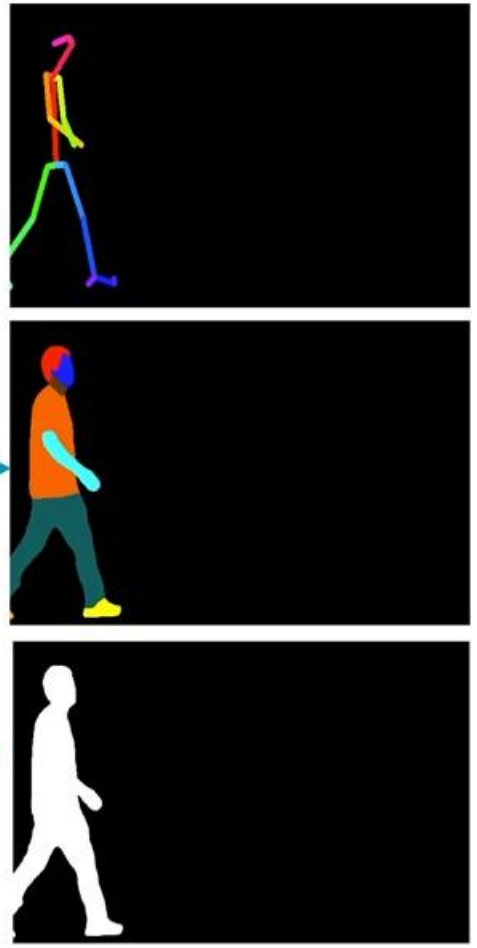
- Reducing Long-Term Complications by Shortening the Time to Diagnosis
- Reducing Healthcare Costs Caused by Missed Diagnoses

Solution Overview

Our technology analyzes gait using a deep learning model from a simple camera recording. It provides an objective, quantitative assessment of locomotive function and indicates potential underlying conditions—without the need for complex examinations.

Gait Video Recording

Feature Extraction



Computation by Deep Learning Models

Computing Disease Possibility from the Extracted Features

- Feature Extraction Model
- Other Information

Scoring disease Possibility and musculoskeletal status through mathematical modeling

Output

- Estimated Severity of Specific disorder
- Estimated Locomotive Syndrome Level
- Gait Parameters (ex. Walking Speed)

Our Strength

We combine gait-recognition technology with high-quality clinical data to develop proprietary deep learning models grounded in medical expertise.

Gait Authentication Technology

Proprietary Algorithm for Extracting Distinctive Gait Features

+

High-Quality Clinical Data

Database Development in Collaboration with Leading Medical Institutions

Partner Institutions & Selected Programs (Partial List)

We actively advance joint research with universities and medical institutions in Japan. In addition, we are selected for various public and private programs. These collaborations and recognitions support our ongoing efforts in research, development, and commercialization.

Universities and Medical Institutions

大阪大学 THE UNIVERSITY OF OSAKA

独立行政法人 国立病院機構 National Hospital Organization

Kyutech Kyushu Institute of Technology

etc.

Selected Programs

Google for Startups

J-StarX

aws startups

MAYO CLINIC PLATFORM_ACCELERATE

AMED

Be a Great Small. 中小機構

GSAP

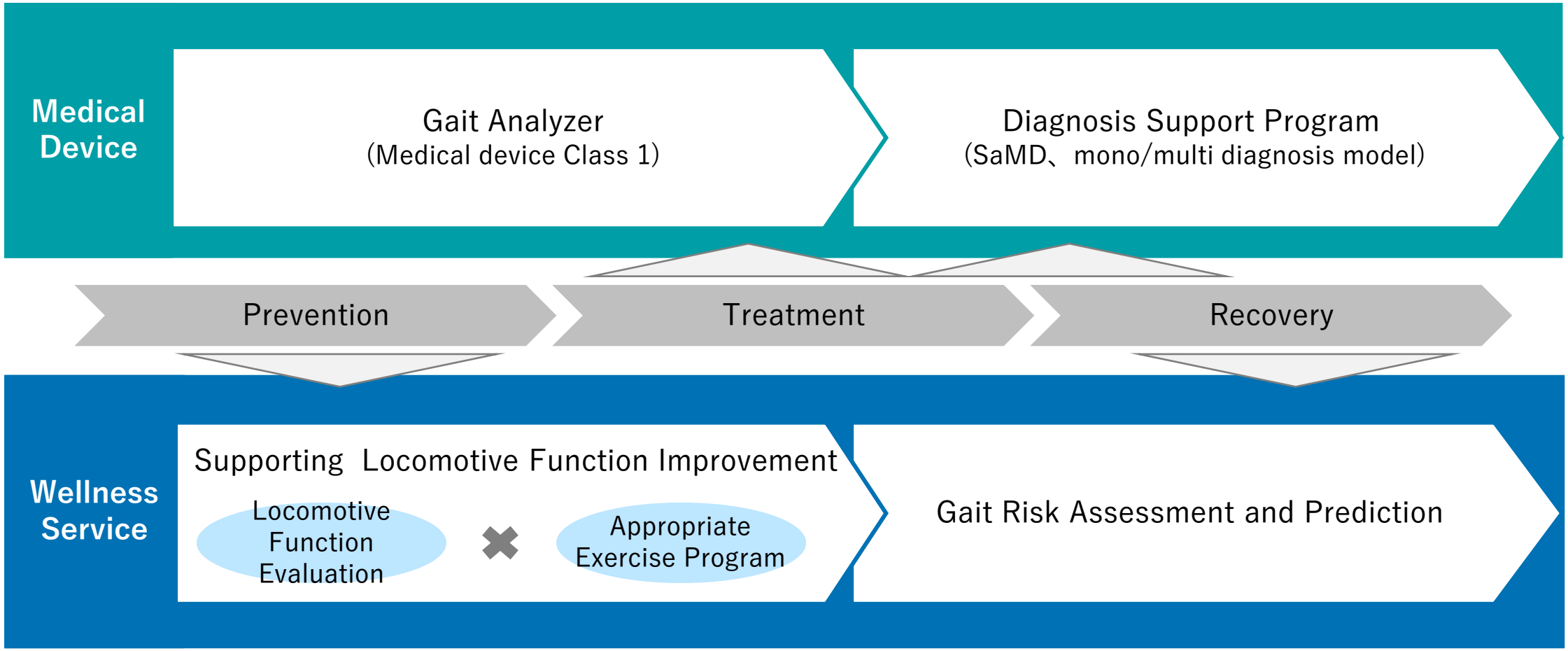
JST

MUIC Kansai

etc.

Business Overview

By leveraging our technology, it becomes possible to assess locomotive function and disease risk with high precision. We deliver new value across the medical and wellness domains, supporting prevention, early detection, treatment, and recovery.



Medical Device

We launched our gait analysis device, Dr Walkie Plus, in April 2025, and it is now in use across medical institutions in Japan. Building on this traction, we are developing a diagnostic SaMD capable of screening spinal disorders such as cervical myelopathy and lumbar spinal stenosis. The platform is designed to extend to neurodegenerative diseases such as Parkinson's disease.

➢ Gait analysis Device Dr Walkie Plus (Class1)

On the Market

Gait Analysis Device

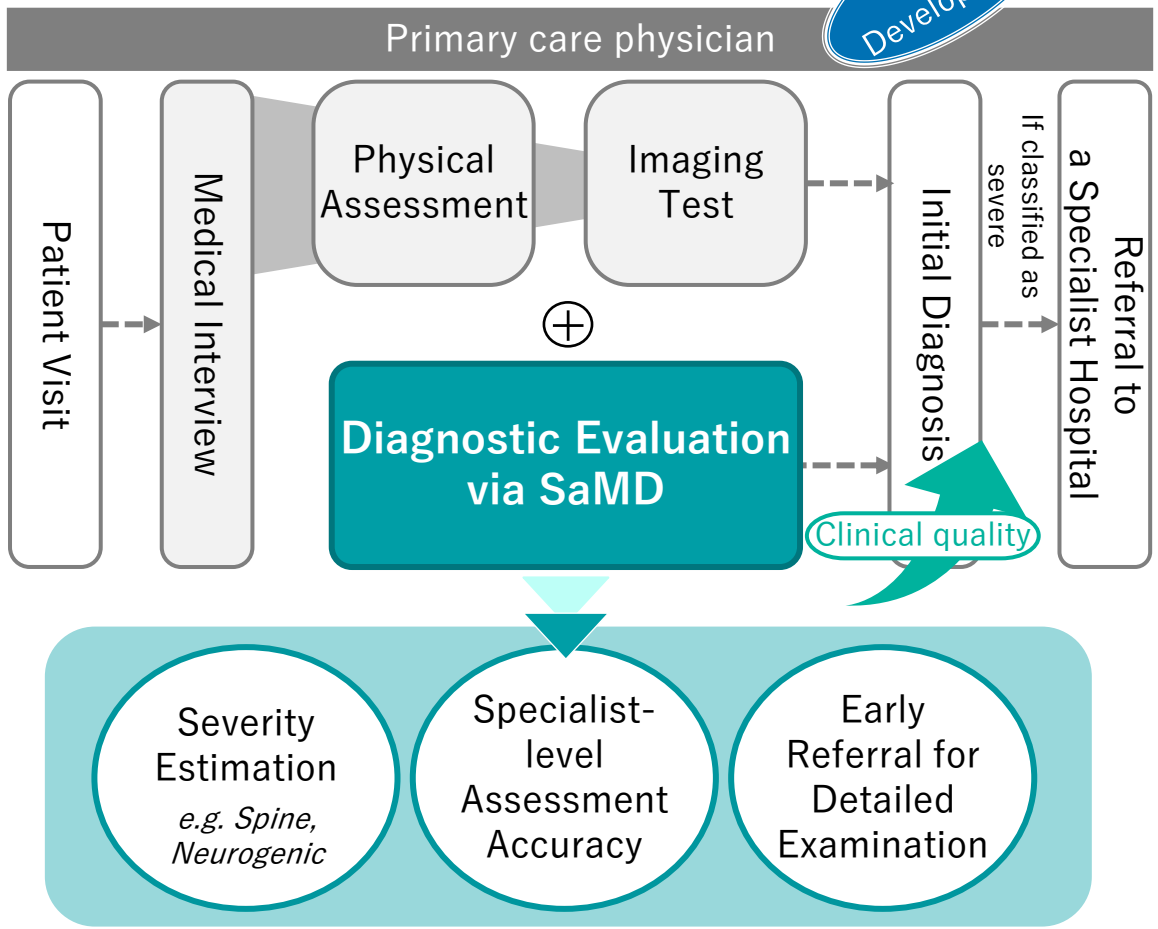
Dr Walkie® Plus+

A Gait Analysis Device for Everyone
Developed by Orthopedic Surgeons

- Contactless measurement of gait condition
- Assessment of similarity to locomotive syndrome
- Pre- and post-rehabilitation physical assessment

➢ Diagnosis Support Program (SaMD)

Under Development



Wellness Service

Maintaining musculoskeletal function is essential to preventing long-term care needs, fractures, work-related injuries, and loss of independence. Our AI-driven locomotive function assessment and medically informed programs enable early risk detection and targeted improvement. This reduces burdens on care facilities, strengthens corporate health management and so on.

AI-Based Locomotive Function Assessment

Medically Guided Exercise Programs

ayumo

	Target Customers	Services and Value Proposition
1	Care Facilities /Nursing Homes	☑ Simple assessment and recording of residents' locomotive function and fall risk ☑ Reducing workload for facility staff (measurement, care-plan documentation, etc.)
2	Corporate Health Insurance Associations	☑ Locomotive function assessment and exercise recommendations for middle-aged and older employees ☑ Reducing risks of workplace injuries, leave of absence, and turnover among employees
3	Corporate Product Development Departments	☑ Improving the efficiency of developing products and services that help maintain and enhance motor function in middle-aged and older adults (e.g., assistive devices, supplements).

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