

PMAC 2026 · PS 2.4

Building Community-based Integrated Care Systems

Through Policy and Technology Innovations in Korea

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 **SNU Health**
Graduate School of Public Health

 **SNU AIHC**
SNU AI Institute Health and Care Center

 **PMAC** | PRINCE MAHIDOL
AWARD CONFERENCE

THE CHALLENGE

The Crisis Demands Action

40% by 2050

Population aged 65+

WORLD'S FASTEST AGING

1M by 2040

Care worker shortage

CRITICAL WORKFORCE GAP

STRATEGIC IMPERATIVE

Data-driven evidence is not optional—it is mandatory for survival.

20.6%

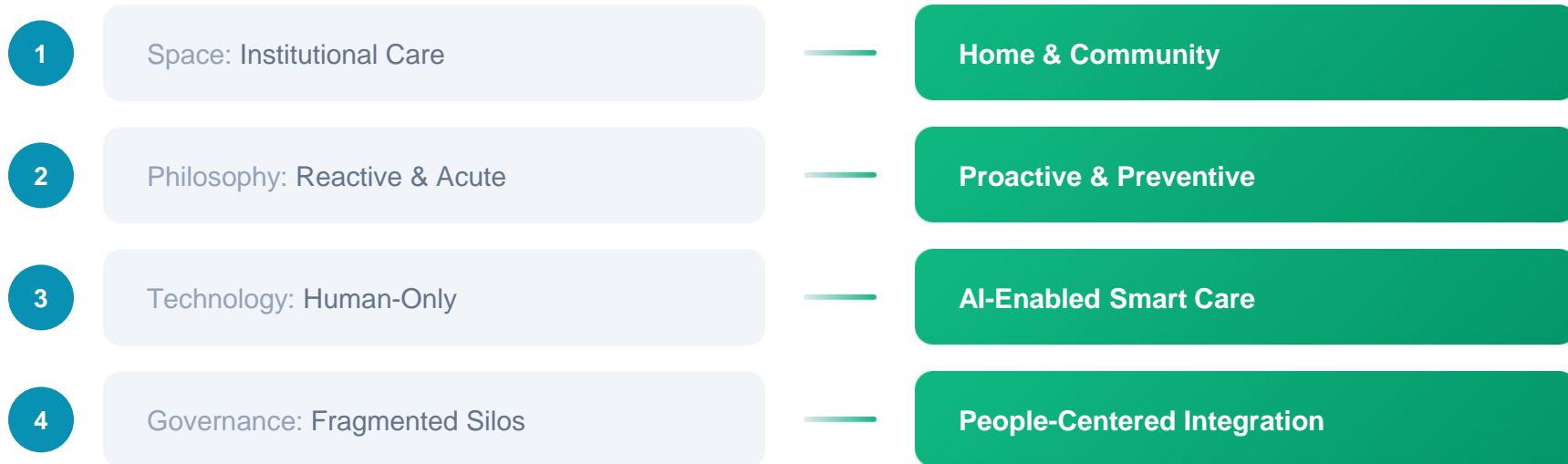
2024



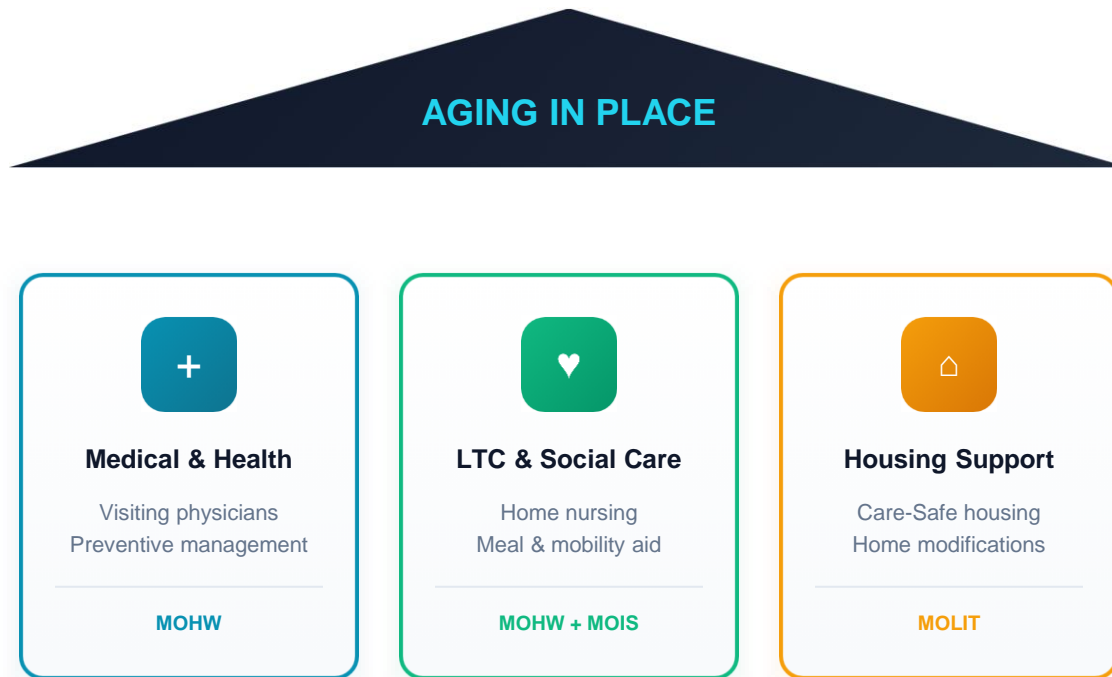
40.1%

2050

A New Paradigm Emerges

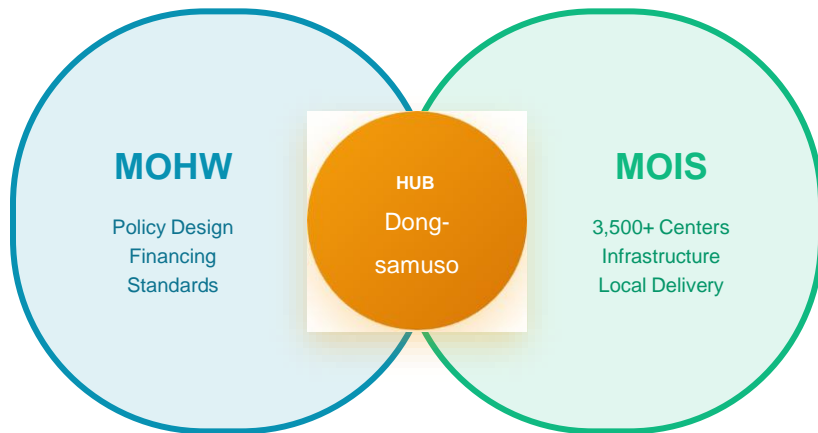


Three Pillars of Aging in Place



Act on Integrated Support for Medical and LTC in the Community - Effective March 27, 2026

Two Ministries, One Mission



Multisectoral governance innovation

Ministry of Health & Welfare

Policy design, financing, and standardized integrated assessment tools

Ministry of Interior & Safety

3,500+ Community Centers as administrative service delivery hubs

National Coordination

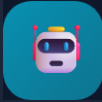
Integrated Care Policy Committee breaks ministerial silos

The Integrated Care Ecosystem



Platform: Unified Case Management via National Social Security Information System

Smart Care: AI as a Safety Net (Representative Models)



Hyodol

AI Social Robot



LLM-powered companion robot with sensors for **24/7 emotional and health monitoring** of elderly living alone.

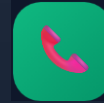
60%+

Local Gov Coverage

12K+

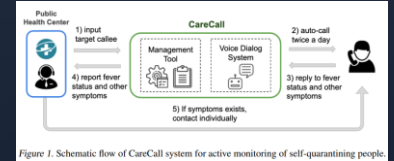
Elderly Users

✓ FDA approved for US market (2025)



Naver Clova

AI CareCall



Hyper-scale LLM conducting automated well-being check-up calls at national scale.

National

Scale Deployment

300M+

Life-Log Data

✓ Integrated AI care platform ecosystem

Not gadgets, but **Smart Safety Nets** — Government-funded scaling of private innovation

Data: Potential Meets Governance



The Potential

AI platforms generate **billions of life-log data points**, enabling:

- Frailty progression patterns
- Functional decline trajectories
- Early intervention opportunities



The Reality

Private Sector

Data silos

Public Sector

Fragmented systems

Korea must conquer

STRATEGIC IMPERATIVE

Data Governance

Framework



Privacy

Protection



Interop

Standards



Evidence

Based Policy

The Value Operating System

FOUNDATION

Human Values

CLINICAL DATA

Traditional

 CGA
Assessment

 EMR
Records

DATA CONVERGENCE HUB

Multi-Source Integration

CGA

EMR

Biomarkers

Life-logs

DIGITAL DATA

New Sources

 Biomarkers
Digital signals

 Life-logs
Daily activities

FULL-LIFECYCLE R&D

Prevention

Care Delivery

End-of-Life

Vision: From "Managing Deficits" → **Optimizing Functional Ability** (WHO)

THE VISION

Healthy Aging as Social Contribution

- Redefine aging: From Burden to **Contribution**
- Empower elders as **active community members**
- **The Social Medal** — sustainable future

"Every citizen contributes to our collective future."