Path C Care System

Short Working Paper (v1)

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Status: Internal working paper (defensive / architectural)

This document intentionally omits interface design, interaction flow, timing, thresholds, and execution mechanics.

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1. Problem Context

Modern home-based care environments face increasing complexity without a corresponding increase in continuity or structural support. Care is frequently delivered by multiple human caregivers across shifts, agencies, and timelines. This fragmentation introduces risk: loss of context, inconsistent execution, duplicated effort, and unclear attribution of responsibility.

At the same time, emerging automation and AI technologies are often framed as solutions through increased autonomy. In care environments, this approach creates ethical, safety, and accountability failures by shifting decision authority away from humans and into opaque systems.

The Path C Care System addresses a narrower but critical problem: **how to preserve human authority and continuity of care while selectively using automation for coordination and execution—without creating autonomous decision-making systems.**

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2. System Purpose

The purpose of the Path C Care System is to stabilize care delivery in complex, long-duration, or multi-caregiver environments by:

- Preserving human decision authority at all times
- Providing continuity of context across caregivers and shifts
- Reducing cognitive and administrative load on human caregivers
- Constraining automated components to clearly defined execution roles

The system is intentionally not designed to optimize care, replace caregivers, or expand autonomy. Its value lies in **constraint, clarity, and continuity**, not intelligence amplification.

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3. Core Actors and Role Separation

The system is composed of three actors operating in a fixed hierarchy:

1. **Human Personal Care Attendant (PCA)**
   The PCA is the sole decision authority. All care intent originates here. Accountability for outcomes remains human-held.

2. **AI Supervisory Layer**
   The AI layer functions as a coordination and memory system. It maintains state, enforces boundaries, mediates commands, and preserves continuity across time. It does not initiate care actions or exercise judgment.

3. **Robotic / Execution Units**
   Execution units perform only explicitly authorized actions. They do not interpret intent, prioritize tasks, or operate independently.

Role separation is treated as a safety feature rather than an efficiency cost. No layer bypasses another, and no layer absorbs responsibilities assigned elsewhere.

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4. Authority and Control Logic

Authority within the Path C Care System is expressed, not transferred.

- All commands originate from a PCA
- The supervisory layer validates commands against system constraints and current context
- Execution occurs only after validation and remains interruptible

Override and interruption mechanisms favor immediacy and clarity. Escalation is treated as an expected outcome under uncertainty, not as a failure condition. At no point does the system resolve ambiguity autonomously.

This control structure is treated as a design invariant across implementations.

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5. Care Tier Framework

Care tiers are used to define **operational boundaries**, not to rank capability or autonomy.

- **Tier 0:** Environmental support and continuity tracking
- **Tier 1:** Assisted physical or logistical tasks under explicit authorization
- **Tier 2:** High-risk assistance under heightened constraint

Tier transitions are driven by caregiver judgment. The system may surface indicators but does not reclassify care level autonomously. Across all tiers, authority and control structure remain unchanged.

6. High-Risk Care Posture

In high-risk scenarios such as dementia, cognitive impairment, or severe mobility limitation, the system adopts its most conservative posture.

Key characteristics include:

- Reduced scope of permissible actions
- Lower escalation thresholds
- Emphasis on monitoring and continuity over execution

The system does not interpret intent, consent, emotional state, or distress. Hardware reliability is expressed through restraint and predictability rather than expanded action.

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7. Explicit Non-Capabilities

The Path C Care System is intentionally not designed to:

- Make care decisions
- Perform clinical or medical functions
- Interpret intent, consent, or emotion
- Initiate physical intervention independently
- Expand scope through autonomous learning or optimization

These exclusions are structural constraints, not temporary limitations. Preserving non-capabilities is considered as critical to system integrity as preserving functional components.

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8. Why the System Matters

The Path C Care System demonstrates that meaningful technological support in care environments does not require autonomy. By treating restraint, role separation, and escalation as core capabilities, the system provides a defensible alternative to autonomy-driven care technology models.

Its contribution is architectural rather than product-specific: a repeatable framework for integrating humans, AI, and automation while preserving accountability, safety, and trust.

End of Working Paper v1