Commentary

Redesign Considerations for a Person-Centered Nursing Home System

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The nursing home sector globally faces significant challenges, including meeting residents' diverse needs, adhering to regulatory demands, and addressing financial imperatives. These competing priorities often lead to fragmented care, preventable hospitalizations, workforce shortages, and systemic inefficiencies. This commentary examines the nursing home system through the lens of systems and complexity science, proposing a redesign framework that emphazises adaptive leadership, outcomes-focused governance, and alignment of organizational purpose, goals, and values. We identify systemic barriers across organizational levels and recommend principles for achieving holistic, person-centered care. Key strategies include fostering stakeholder collaboration, integrating feedback mechanisms, and redefining regulatory priorities to focus on resident well-being. This approach highlights the critical role of adaptive leadership in enabling systems that are flexible, sustainable, and capable of meeting the evolving needs of aging populations.

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Globally, the nursing home sector struggles to meet societal expectations as it is torn between three broad competing agendas: Meeting the needs of residents, fulfilling regulatory demands of regulators, and addressing the financial imperatives of nursing home proprietors (for details see Table 1)[1][2][3][4][5][6][7]. As the demand for residential aged care continues to rise, the sector struggles with limited capacity, leading to mounting pressures on health and social care systems. These pressures manifest in preventable hospitalizations[8][9], workforce shortages[6][10][11][12] and the increasing financial burden on those who rely on care services[13][14][15]. In some systems, such as Australia's, residential aged care

provision is capped, limiting the expansion of nursing home capacity. Consequently, the need for carer support and home care packages is becoming increasingly urgent.

Government/Policy Level	• Lack of funding • Unresponsive regulatory frameworks • Political ideology	Ward Level	• High staff turnover • Insufficient staffing levels • Insufficient staff skills • Insufficient skills mix • High physical workload • High emotional stress levels • Underpaid workplace
Proprietor Level	• Poorly designed/maintained facilities • Running costs • Providing resources/equipment • Resilience of organisation • Meeting frequently changing regulations • Underfunding	Resident Level	• Overall Morbidity • Loss of ADLs • Multiple care needs • Unfamiliar environment • Expectations of care • Resident outcomes/safety • Financial contributions
Facility Level	• High staff turnover • Nursing homes are undesirable work places • Insufficient staff skills • Lack of autonomy • Staff motivation/Staff satisfaction • Lack of equipment • Clinical ability to detect causes of decline • Prevention of adverse events		

Table 1. Systemic issues affecting nursing home care across 5 organisational levels

Given these challenges, it is unsurprising that the system as-a-whole is not functioning in an efficient and seamlessly integrated way[16]. Afterall, systems always produce the outcomes arising from their design. Hence, a system's purpose, even if no longer explicit, can be deduced from observing its dynamics. Purpose provides a system's focus and is its driving force. Looking at the nursing home system's outcomes, the only possible conclusion is that the system is broken and requires redesign[3]

Structurally, every system consists of sub-systems while simultaneously being part of a larger supra-system, leading to a system's functional layering. Dynamically, each functional layer influences and is influenced by the dynamics of all others. A system's highest level provides its overall constraints and thereby aligns every level's work, thereby maintaining the system's stability.

Understanding Nursing Homes as Organisational Systems

In this commentary, we unpick the nature of the nursing home system to demonstrate why redesign is required and the principles that must underpin such change.

Any system that has competing demands is not an integrated system, and thus – sooner or later – doomed to fail[17][18]. The current nursing home system, producing undesirable outcomes, is in need of redesign – a challenging but necessary task.

The core focus of any nursing home systems must be on meeting residents' care needs, whether physical, social, emotional or cognitive (sense-making)[6][19][20]

Redesign Based on Organisational Principles

Redesign requires adherence to organisational design principles[18][21]. A seamlessly integrated organisation will have a clear understanding of its *purpose* (WHY do we exist?), its specific 3-5 *goals* it can focus on at any given time (WHAT exactly do we want to achieve?), and its *core values*, those that do not change in a changing environment. These three understandings give rise to a set of 3-5 '*simple* (or operating) *rules*' that define its operation (HOW do we interact internally and with our external stakeholders?).

Challenges

Organisational redesign requires all stakeholders to change their way of thinking. Firstly, appreciate how the elements of the nursing home system are structurally aligned. Secondly, they need to understand how these elements interact with each other – how do they potentially perpetuate desirable and undesirable behaviours. And thirdly, they must recognise how the needs for structure and interaction vary in different contextual settings.

Organisational change requires leadership that understands the nature of complex adaptive organisations and their role within them[22][23][24]. Paraphrasing Ron Heifetz[25], leaders are not there to solve problems, rather, they are there to facilitate the necessary adaptive work that people in the organisation have to do. Leaders must trust that their staff will develop the best adapted solutions for their particular circumstances.

System regulators are entrusted with ensuring proper governance and accountability[26][27][28][29]. They also have to embrace the complex adaptive behaviour of nursing homes, particularly the need to use different responses to quickly changing care needs[30]. Needs-focused care cannot be delivered in a prescriptive process-focused fashion, it demands the freedom to adopt a variety of responses to achieve the overall purpose and goals of the system. Hence, regulators need to prioritise outcomes-focused governance that assures residents' needs and well-being have been achieved[31][32][33].

A Strategic Approach

A 'systems and complexity thinking' approach[26][34][35][36] is essential to guide a *whole-of-system* redesign (Figure 1). This approach can simultaneously improve care quality and outcomes for residents, strengthen regulation and accountability, and ensures financial viability.

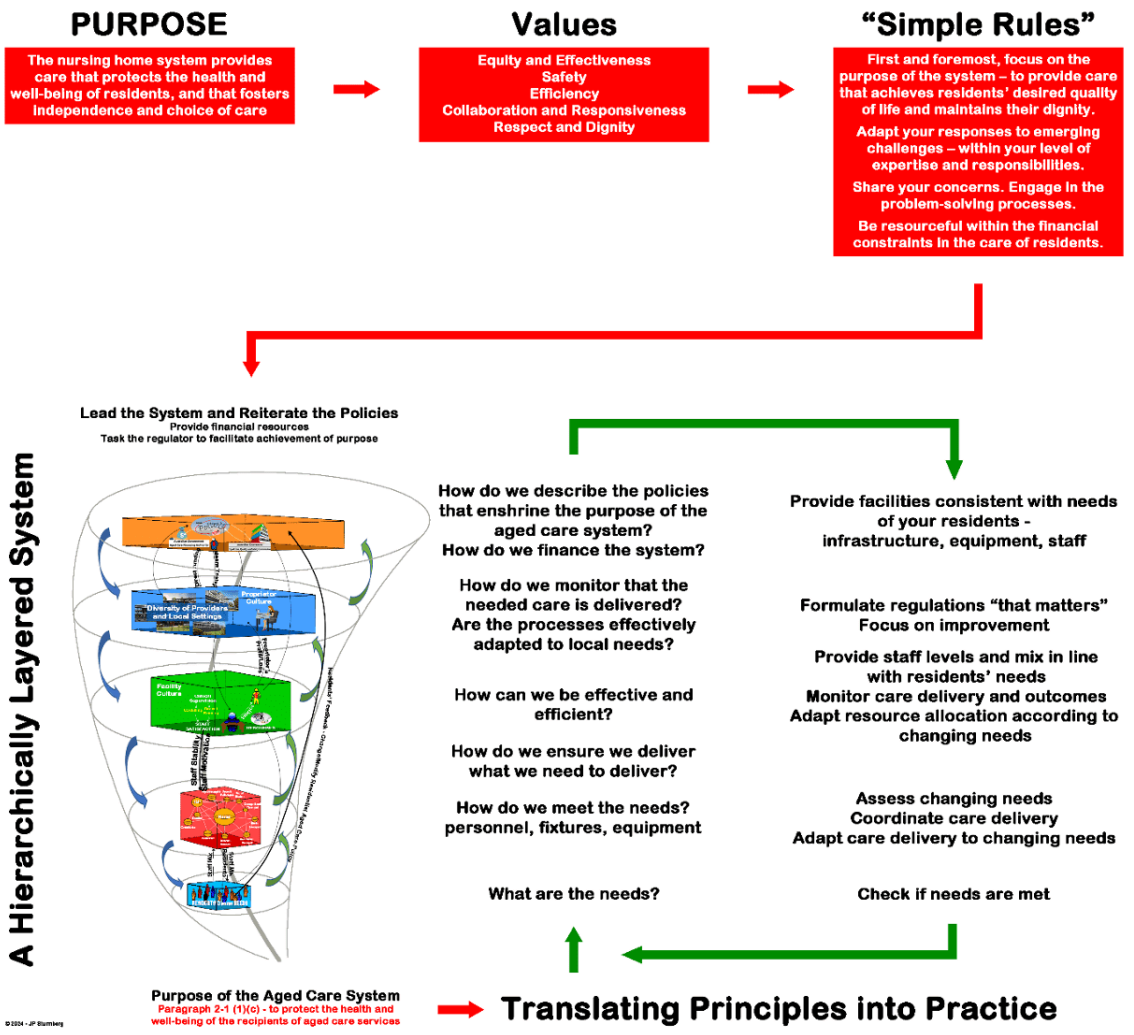

Figure 1. Nursing Home Redesign – Translating Organisational Theory into Adaptive Practice

The Limiting Factor – Adaptive Leadership Skills

Well-functioning, horizontally and vertically integrated organisational systems require adaptive leadership able to maintain everyone's focused on the system's overall purpose[21][37][38] a difficult but necessary task to ensure its long-term stability and adaptability to changing contextual demands[22][24][25][39].

Applying Redesign Principles to Nursing Home Redesign

Nursing home redesign must adhere the three essential systemic redesign principles: First, clearly define the organization's purpose, specific goals, core values, and guiding '*simple*' rules to ensure a seamless

system integration[18][21][34][36] What might that look like in practice?

The purpose definition of the nursing home system should be to 'provide individuals with care that meets their needs (physical, social, emotional and cognitive[6][20][40][41]) while maintaining their dignity[30]. Core values cannot be prescribed, they should naturally emerge from within the system reflecting the collective understandings of stakeholders in their contextual setting. While the '*simple*' or guiding operational rules must align with purpose and core values, they should (generically) embrace notions of: First and foremost, focus on the purpose of the system – to provide care that achieves residents' desired quality of life and maintains their dignity[30]; adapt your behaviours and actions to emerging challenges – within your level of expertise and responsibilities; share your concerns; and engage in the problem-solving processes of your work environment.

Given that organisations are typically functionally layered, their leadership must clearly define and articulate roles and responsibilities, ensuring that all activities at all functional levels focus on realising the organisation's purpose.

And lastly, an effective and efficient nursing home system relies on transparency. It requires leadership that nurtures the free bottom-up feedback, enabling top-down adaptative changes in resource allocation (in particular staffing levels, staff skills, and staff composition[1][6][12][42][43][44][45][46][47][48][49][50]) and policy settings (especially infrastructure requirements[42][51][52] financial arrangements[13][14][15][42][52][53][54][55] and care delivery standards[56]) in response to evolving care delivery needs.

Challenges to systemic redesign include entrenched mindsets and a lack of systems and complexity thinking[35][36][39] Leaders must understand system dynamics, foster a culture of respect and trust, and invest in the system's agents to improve overall function. This involves adapting education curricula, building community linkages, and promoting positive attitudes towards aging.

Conclusions

A 'fit-for-purpose' nursing home system should:

- Define and Align Purpose: Clearly articulate the system's purpose and ensure all components align with it.
- Adopt Holistic Management: Ensure changes in one part benefit the system as-a-whole.
- Implement Effective Governance: Shift from process-focused to outcomes-focused governance.

- Encourage Democratic Engagement: Involve all stakeholders in a participative process to address complex challenges.

By focusing on the system as-a-whole, ensuring clear purpose alignment, and adopting effective governance, it is possible to achieve high-quality, resident-centered care, accountability, and financial viability of the nursing home sector.

Statements and Declarations

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Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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