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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 emphasises 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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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^{[1][2]}. 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)^{[3][4][5]}

The Challenging States of Nursing Home Systems

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 Tab 1)^{[4][6][7][8][9][10][11]}. 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

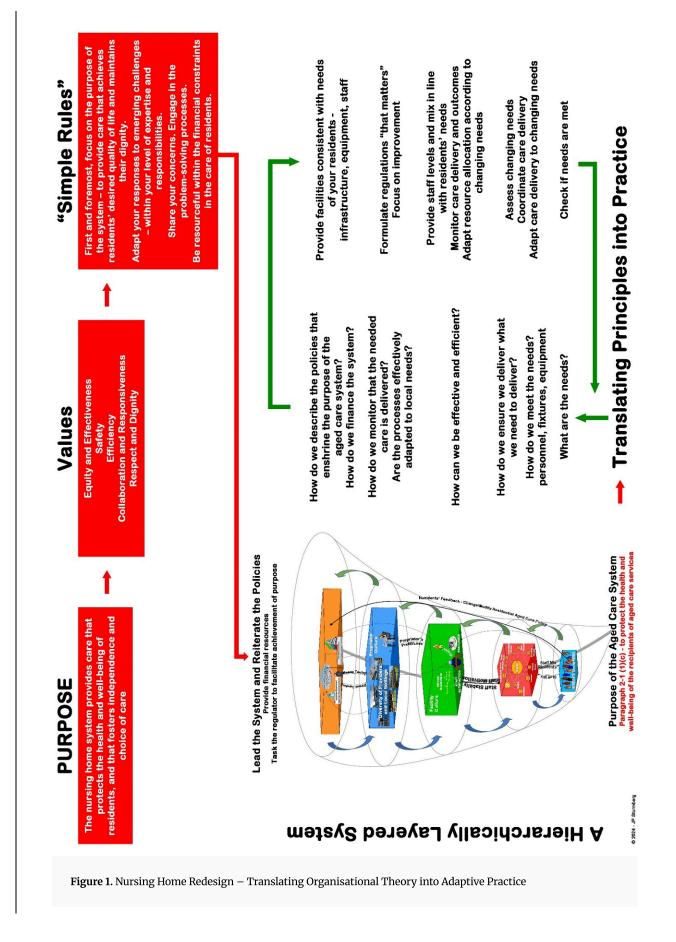
hospitalisations^{[12][13]}, workforce shortages^{[4][14][15]} ^[16], and the increasing financial burden on those who rely on care services^{[17][18][19]}. In some systems, such as Australia's, residential aged (or nursing home) care provision is capped, limiting the expansion of nursing home capacity. Consequently, the need for carer support and home care packages is becoming increasingly urgent.

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

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

A Strategic Approach to Redesigning the System Based on Organisational Principles

A 'systems and complexity thinking' approach^{[20][21][22]} ^[23] is essential to guide a *whole-of-system* redesign that is responsive to local circumstances (Fig 1). This approach can simultaneously improve care quality and outcomes for residents, strengthen regulation and accountability, and ensures financial viability.



Redesign requires adherence to organisational design principles^{[2][24]} 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?)^[25]

Applying Redesign Principles to Nursing Home Redesign

System redesign requires first and foremost committed leadership that engages all stakeholders in the design process. In the context of the nursing home system, 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^{[2][20][22][24][25]} 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^[4] [5][26][27]) while maintaining their dignity^[28] 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^[28] 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^{[4][6][16][29][30][31][32][33][34][35][36][37]}) and policy settings (especially infrastructure requirements^{[29][38][39]} financial arrangements^{[17][18]} $\frac{[19][29][39][40][41][42]}{19}$ and care delivery standards^[43]) in response to evolving care delivery needs.

Challenges

Challenges to systemic redesign include entrenched mindsets and a lack of systems and complexity thinking^{[21][22][44]}. Well-functioning, horizontally and vertically integrated organisational systems require adaptive leadership able to maintain everyone's focus on the system's overall purpose^{[24][45][46][47][48][49]} a difficult but necessary task to ensure its long-term stability and adaptability to changing contextual demands^{[44][47][49][50]}. Paraphrasing Ron Heifetz^[50], 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.

Systemic leaders not only see the 'insight' of their organisation, but also those external domains that impact its seamless function, and engage with issues like adapting education curricula, building community linkages, and promoting positive attitudes towards aging.

System regulators are entrusted with ensuring proper governance and accountability^{[23][51][52][53]}. They also have to embrace the complex adaptive behaviour of nursing homes, particularly the need to use different responses to quickly changing care needs^[28]. Needsfocused 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^[54] [55][56]. Box 1 illustrates the 'systemic ripples' of a prescriptive approach to managing a challenging problem that demands adaptive responsiveness which must be distinguished from unwarranted ones. As Russ Ackoff said: "Getting rid of what you don't want doesn't mean you get what you want".

The Problem: A male/female resident with marked dementia wonders the dark corridor of his/her nursing home wing in the early hours of the morning. He/she intends to go back to bed but enters another resident's room, despite each resident's door having personalised signage. This female/male resident is not affected by cognitive loss. The intruding resident lifts the sheets off the bed to go back to bed. While doing so he/she touches the female/male resident's thigh which wakes her/him up in a fright. She/he gets out of bed and calls for help. The attending nurse redirects the intruding resident back to his/her room at the other side of the corridor, and he/she goes back to bed. Beside of the immediate scare, the female/male resident do not regard this incident as a sexual assault.

The Rule: Any form of touching any resident – by staff or fellow residents – is inappropriately defined by the regulator as sexual assault requiring immediate mandatory reporting, including notification of the police.

The Question: Is the definition of sexual assault applicable to this situation? The police concluded that this doesn't meet the thresholds of sexual assault.

The Systemic Consequences:

- No injuries or harm has occurred to the female/male resident besides of the immediate scare.
- •

- She/he did not perceive the incident to be a sexual assault. There were no provoking factors triggering the behaviour.
- The event caused probably unnecessary embarrassment, upset, and worries for each resident's next of kin.
- The incident having been precautionarily escalated by management to a sexual assault has personal consequences to care staff, as well as consequences for all other residents under their care. Staffs' time principally the nurse's time is taken up with more paperwork, phone calls, and meetings with management.
- Given the limited time nurses have to provide care, any time taken up by noncaring issues reduces the time available for care, which in turn increases the risk of adverse events for all other residents.

Systemic Effects: Rigid approaches create an environment of uncertainty and distrust, resulting in a climate of fear that inhibits what the Aged Care Act demands – diverse, flexible, and adaptive responsiveness of service delivery that meets the needs of individuals.

Box 1. Systemic Implications of a Rigid Policy

There are Guiding Principles, but No Blueprints, for System Design

Successful organisational redesign requires all stakeholders to adopt a systems and complexity thinking approach.

- Firstly, appreciate how the elements of the nursing home system are structurally aligned.
- Secondly, understand how these elements interact with each other how do they potentially perpetuate desirable and undesirable behaviours.
- And thirdly, recognise how the needs for structure and interaction vary in different contextual settings.

It is important to accept that systems always produce the outcomes inherent in their design, which are defined by its purpose. The overarching system design will always require adaptation at the local level to deliver on the system's purpose, thus will have multiple, mutually agreeable configurations and interactions. Equally important is the appreciation that 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.

Conclusions

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

- Define and Align Purpose: Involve all stakeholders in a participative process to address complex challenge of clearly articulating the system's purpose and ensuring all its components align with it.
- Create the Necessary System Culture: Collectively define the system's values and 'simple' (or operating) rules.

• Adopt to emerging challenges: Only implement changes to one part if that change benefits the system as-a-whole. Ensure appropriate staffing levels, and provide the equipment required to care, rehabilitate and cure. Design governance approaches that focus on and improve person-centered outcomes.

By focusing on the system as-a-whole, ensuring clear purpose alignment, and adopting effective governance, it is possible to achieve high-quality, person-centered care, accountability, and financial viability of the nursing home sector. Such a systemic approach is 'emergent' and will result in different but mutually agreeable designs best adapted to local circumstances overcoming the limitations of "one-size fits all" solutions.

Further Reading

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Statements and Declarations

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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