RESEARCH ARTICLE

Towards sustainable development: Assessing social sustainability of Australian aged care system

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Abstract

The importance of social sustainability, one of the three pillars of sustainable development, is increasingly recognised. Its implementation in the aged care system enhances stakeholders' quality of life and supports sustainable societal development. However, there is limited global research on social sustainability in aged care. This study aims to assess the overall social sustainability of the Australian aged care system and propose measures for its improvement. A conceptual framework was developed and applied to analyse the Final Report: Care, Dignity and Respect by the Australian Royal Commission into Aged Care Quality and Safety. The findings reveal that Australia's aged care system demonstrates significant deficiencies in social sustainability, with unequal access to care, services and facilities, and inadequate health and comfort for the elderly and their families. Employees contend with issues of unfair employment, insufficient compensation, unhealthy work environments, and inadequate education and training. Several measures are proposed to enhance social sustainability. This study provides a comprehensive analysis of social sustainability in the aged care system within a Western context. It enhances our understanding of the components of social sustainability in aged care, assesses its current status, identifies existing challenges, and provides possible directions for improvement. The insights from Australia's experience and potential solutions could inspire other countries to recognise the importance of social sustainability and reform their aged care systems towards sustainable development.

KEYWORDS

aged care, Australia, case study, quality of life, social sustainability, stakeholder engagement

1 | INTRODUCTION

Australia's aged care system has been on a decade-long reform pathway, with social sustainability as one of the goals pursued by the reform. This journey stemmed from a review by the Productivity Commission into the system, which noted that it required a 'fundamental reform' to address its challenges, including limited services and consumer choice, variable care quality, and other issues. In addition, the Commission emphasised that the system needed to be socially sustainable and deliver care through a sustainable workforce (Productivity Commission, 2011). The release of the Oakden Report in 2017 further drew the Australian government's attention to the quality of aged care (Groves et al., 2017). A Royal Commission into Aged Care Quality and Safety was subsequently established to investigate the quality and safety of care provided. The results of the investigation were not satisfactory. The Commission then envisaged a new

system to ensure the elderly receive high-quality care and support. High-quality care prioritises the elderly, provides services to the elderly safely and in a timely manner by caring and compassionate people, and delivers a high quality of life (Royal Commission into Aged Care Quality and Safety, 2021). This is consistent with the aim of the aged care system described in the *Report on Government Services* issued by the Productivity Commission, namely, to promote the well-being of the elderly (Productivity Commission, 2021).

A high quality of life and wellbeing implies the realisation of social sustainability (Rogers et al., 2012). An aged care system is considered socially sustainable when it effectively meets diverse social needs and enhances the quality of life of the elderly, their relatives, and the employees involved in providing aged care and support. This includes ensuring equal access to aged care services, health and comfort for the elderly and their relatives, accessibility of residential aged care facilities, and fostering a work environment that promotes equity, fairness, and safety for employees, alongside providing relevant policies, procedures, education, and training. The social needs of the employees cannot be ignored, as a workforce with a high quality of life is conducive to fulfilling the social needs of the elderly and their relatives (Lee & Severt, 2018).

It has been 3 years since the Royal Commission into Aged Care Quality and Safety submitted its final report in 2021 to reform the aged care system. Subsequent reviews and reports indicate that the system still has many problems. For example, certain special groups do not have the same access to quality services as the broader community (Woods et al., 2022). The health and comfort of the elderly are of great concern. According to the Australian Institute of Health and Welfare (2023c) survey, more than 32% of older people in residential aged care experienced a fall in the fourth quarter of 2023, and more than 17% were physically restrained. The building of relationships between the elderly and the community is still neglected. Moreover, staff turnover is high, which negatively impacts the continuity of care (Woods et al., 2022). Several reasons can account for these problems. For example, the reforms fail to adequately recognise the importance of relationships and capacity building for the wellbeing of older people (Woods et al., 2023). Low wages, poor training outcomes, and negative public perceptions of the sector discourage many people from becoming aged care employees. While wages for direct care employees, such as registered nurses, have increased, low pay continues for those responsible for cleaning, catering, administration, care management and maintenance (Sutton et al., 2023).

Ensuring the quality of life in the aged care system requires a focus on social sustainability. The consequences of an unsustainable system are severe. It is detrimental to older Australians and their relatives and could further discourage potential employees from entering the system. Hence, the aged care system should prioritise social sustainability. However, there is a lack of research in this area, and the status of social sustainability appears to be inadequate. To the best of the authors' knowledge, only two studies have comprehensively analysed the social sustainability of China's aged care systems as a whole.

These studies encompassed various social needs of the elderly and their relatives, employees, and the broader local community and society, concluding that improvements are necessary in China (Wang et al., 2023a, 2023b). In contrast, other studies have targeted specific aspects of the quality of life within aged care systems globally. They agree that older people and employees do not have a high quality of life (Blanco-Donoso et al., 2021; Kadri et al., 2018; Martín et al., 2021; Monro et al., 2023). These focused studies contribute to our understanding of social sustainability in aged care because striving for a high quality of life aligns with the principles of social sustainability practice (Weingaertner & Moberg, 2014). In general, existing research is fragmented and there is a lack of comprehensive understanding of the overall social sustainability of Australia's aged care system.

Therefore, the objectives of this study are to assess the overall social sustainability of the Australian aged care system and propose measures for its promotion. Based on the objectives, two research questions (RQs) are formulated:

> **RQ1.** What is the current status of social sustainability in Australia's aged care system?

> **RQ2.** How can the social sustainability of Australia's aged care system be improved?

This study addresses a significant gap in the existing aged care literature, which has largely overlooked social sustainability. Few studies have analysed the social sustainability of aged care systems as a whole, and they were conducted in China. Given that different political, institutional, and cultural contexts influence human social needs, research in a Western context is essential. This paper establishes a conceptual framework for assessing the social sustainability of the Australian aged care system. Content analysis is then used to analyse the '*Final Report: Care, Dignity and Respect*', released by the Australian Royal Commission into Aged Care Quality and Safety in 2021, based on the conceptual framework. This methodological approach enables the thorough addressing of the research questions and the achievement of the study's objectives. The findings enhance our understanding of the components of social sustainability in the aged care system, its current status, existing problems, and potential avenues for improvement. It contributes to UN Sustainable Development Goal 3 (Good Health and Wellbeing), Goal 8 (Decent Work and Economic Growth), and Goal 10 (Reduced Inequalities). In addition, the findings contribute to practice. An extensive literature review indicated that both the elderly and employees within aged care systems worldwide face significant challenges in maintaining a high quality of life, leading to unsustainable practices. Fortunately, the Australian government has recognised these issues and is actively pursuing reforms. This paper outlines Australia's proactive experiences and potential solutions, which may inspire other nations to prioritise social sustainability and consider similar reforms in their aged care systems to promote sustainable development.

2 | LITERATURE REVIEW

2.1 | Australia's aged care system

Australia's aged care system provides subsidised care and support for older people. It is a large and complex system consisting of a series of programs and policies. The system has different aged care modes. In addition to receiving care from family or friends, the elderly can also choose to receive Commonwealth Home Support Programme (CHSP) or Home Care Packages (HCP) at home, or residential care in a residential setting. The CHSP provides entry-level services to ensure older people remain healthy, independent, and safe at home and in the community. The services include allied health and therapy services; domestic assistance; goods, equipment, and assistive technology; home maintenance; home modifications; meals and other food services; nursing; personal care; social support; specialised support services; transport; centre-based respite, flexible respite and cottage respite (Australian Department of Health and Aged Care, 2023b). HCP is a more structured, more comprehensive package of home-based support. It provides four levels of support, from basic care to high care. Residential care provides support and accommodation for elderly people who can no longer live independently and need ongoing assistance with day-to-day tasks. The level of care provided is higher than that provided at home. As of 30 June 2023, the most used was CHSP (over 816,000 people), followed by HCP (over 258,000 people) and residential care (more than 250,000 people) (Australian Department of Health and Aged Care, 2023a). Many elderly people in Australia tend to receive services at home. Aged care is also one of Australia's largest service industries. According to the *2020 Aged Care Workforce Census Report*, more than 430,000 people worked in Australia's aged care system (Australian Department of Health, 2021).

These services were provided by more than 3100 aged care providers, including not-for-profit (religious, charitable, and community), government, or private organisations (Australian Institute of Health and Welfare, 2023b). *The Aged Care Act* and the *Aged Care Quality and Safety Commission Act 2018* are the major legislation for aged care in Australia. According to the regulations, approved aged care providers must adhere to the *Aged Care Quality Standards*, which involve consumer dignity and choice, ongoing assessment and planning with consumers, personal care and clinical care, services and supports for daily living, service environment, feedback and complaints, human resources, and organisational governance (Office of Parliamentary Counsel, 2019).

2.2 | Social sustainability and its assessment

Social sustainability generally refers to the realisation of human well-being, which is influenced by various contextual factors (Rogers et al., 2012). These factors encompass political, institutional and cultural backgrounds, as well as the circumstances of individuals and communities (Deneulin & McGregor, 2010). Vallance et al. (2011) divided social sustainability into three categories: development

sustainability, bridge sustainability, and maintenance sustainability. Eizenberg and Jabareen (2017) identified four components of social sustainability: equity, safety, eco-promotion, and urban forms. It is worth noting that social sustainability has also been defined within various industries and fields, including supply chains, the built environment, agriculture, and resource exploitation, among others.

In line with the definition of social sustainability, scholars measured and assessed social sustainability across various industries, contexts, or perspectives. For example, the social sustainability assessment of infrastructure, housing and renewal projects (Dalirazar & Sabzi, 2022; Debrunner et al., 2022; Hendiani & Bagherpour, 2019), and the assessment of agriculture (Ait Sidhoum, 2018; Schaafsma et al., 2023). Other scholars have measured the social sustainability of built environments at different scales, such as cities (Parjanen et al., 2019) and communities (Winston, 2022; Yang et al., 2023). The social sustainability of supply chains has also received attention (Badri Ahmadi et al., 2017; Popovic et al., 2018). Through iterative analysis of research findings, it has been observed that while the specific presentation of indicators and frameworks may differ, the identification and establishment of these measures primarily fall into two classification schemes: stakeholder-based classification and social impact-based classification. The first classification scheme identifies stakeholders first, and then identifies the social impacts of products and services on them (Hendiani & Bagherpour, 2019; Kumar & Anbanandam, 2019; Sierra et al., 2016, 2018). The second classification scheme identifies the social impacts of products and services first, and subsequently establishes relevant indicators and frameworks (Ballet et al., 2020; Cooper et al., 2018; Karji et al., 2019; Popovic et al., 2018).

2.3 | Social sustainability in aged care

An extensive literature review found a scarcity of studies focusing on social sustainability in aged care as a whole. Wang et al. (2023a) established a social sustainability indicator framework for Chinese aged care projects, identifying three stakeholders, 10 social impacts, and 21 indicators. The study revealed that significant improvements are needed to realise most indicators. Furthermore, Wang et al. (2023b) conducted a multiple case study, identifying 42 first-level critical practices and establishing a consolidated realisation path to achieve social sustainability of aged care Public-Private Partnership projects in China. Other studies have examined the sustainability of retirement villages (i.e., a type of real estate rather than government-funded aged care) in Australia, pointing out the importance of social sustainability (Hu et al., 2017; Xia et al., 2015, 2021).

Other studies have explored certain specific aspects of the quality of life for the elderly and staff in Australia's aged care system. These are partial and non-holistic explorations of social sustainability. For example, studies of Aboriginal and Torres Strait Islander peoples living in rural and remote areas pointed to the inaccessibility of home care services (Thomas et al., 2023). While Australia has gradually adapted to COVID-19, older people remain a vulnerable population with high

mortality rates (Inacio et al., 2023). They are controlled and managed, with autonomy and participation impaired (Petriwskyj et al., 2018) and spiritual needs unsatisfied (Sivertsen et al., 2019). As pointed out by Monro et al. (2023), although reforms are being implemented in Australia's aged care system, the care model is not focused on the overall wellbeing of the elderly. Meanwhile, employees face multiple dilemmas, such as poor professional image, low pay, high pressure, and overwork (Coppin & Fisher, 2020; Farr-Wharton et al., 2021; Miller et al., 2020; Oakman et al., 2022). Studies of Australia have reached the same conclusion as those of other countries, that is, the elderly and employees have a low quality of life (Blanco-Donoso et al., 2021; European Centre for Social Welfare Policy and Research, 2010; Shahar et al., 2019).

2.4 | Gap in knowledge and the conceptual framework

The literature review found that social sustainability is a complex concept, which is highly context dependent. Its definition and assessment vary by research subject, industry, or background (Missimer & Mesquita, 2022). It is better to consider stakeholders and corresponding social impacts simultaneously when establishing the indicator framework of social sustainability. Except for the research of Wang

et al. (2023a, 2023b), holistic social sustainability research in the aged care sector is scarce.

This study developed a conceptual framework, illustrated in Table 1, to analyse the social sustainability of the aged care system in Australia. This framework adapts the indicator framework by Wang et al. (2023a), originally tailored for the Chinese context. We omitted the third stakeholder group—local community and society—from Wang et al. (2023a) framework, as it was not addressed in the *Final Report*. The remaining two stakeholder groups were retained. Additionally, the indicator descriptions were revised. While Wang et al. (2023a) focused on the goals/objectives of socially sustainable aged care projects, this study assesses the current status of social sustainability. Hence, our indicators are presented in a neutral manner rather than an idealised one. For example, 'equal access to aged care' in Wang et al. (2023a) was modified to 'access to aged care'. The term 'equal' was removed because it is unclear whether the elderly in Australia's aged care system have equal or unequal access. Moreover, the Australian context was taken into account when conducting the analysis. For example, language barriers encountered by indigenous or non-English speakers were considered when analysing access to aged care. This challenge did not present in the study of Wang et al. (2023a), which was conducted in a Chinese scenario where inequity is predominantly due to the unique Hukou system.

3 | RESEARCH METHODOLOGY

3.1 | The choice of Australia's aged care system

Australia's aged care system was chosen as the focus of this study for two primary reasons: (a) Australia's aged care system represents a 'critical case' in the context of this research. A critical case is strategically important for the issue under analysis and can significantly enhance the generalisability of a case study (Flyvbjerg, 2006). In 2023, 16.7% of the Australian population is aged 65 years and over, well above the world average of 10%. Nearly 1.5 million people receive aged care (Australian Institute of Health and Welfare, 2023a). Being one of the first countries to enter aged society, Australia's aged care system has undergone long-term development. It has been continuously reformed under the initiative of the Productivity Commission in 2011 and the Royal Commission into Aged Care Quality and Safety in 2021. The aim is to ensure the elderly receive high quality care and support and deliver a high quality of life. Therefore, the Australian case could thoroughly demonstrate social sustainability issues in the aged care system; and (b) publicly available data on Australia's aged care system are comprehensive and in-depth. The Royal Commission into Aged Care Quality and Safety was established on 8 October 2018 to investigate the quality and safety of care provided in residential aged care facilities and community and flexible aged care settings. Given the complexity of the task, the Committee adopted eight key methods for the inquiry: public submissions; public hearings; documents, information or statements in writing; community forums; targeted consultations; visits to service providers; research conducted by

TABLE 1 A conceptual framework for the social sustainability of Australia's aged care system.

Stakeholders	Social needs	Indicators
1. Elderly and their relatives	1.1 Equity	1.1.1 Access to aged care
		1.1.2 Access to services and facilities
	1.2 Health and comfort	1.2.1 Satisfaction of basic needs
		1.2.2 Satisfaction of physical comfort
		1.2.3 Satisfaction of psychological comfort
	1.3 Accessibility	1.3.1 Accessibility of residential aged care
		1.3.2 Accessibility of facilities
		1.3.3 Accessibility of the elderly
2. Employees	2.1 Equity and fairness	2.1.1 Employment opportunity
		2.1.2 Employment contract and compensation
	2.2 Health and safety	2.2.1 Workplace
		2.2.2 Policies and procedures
	2.3 Education and training	2.3.1 Professional skills
		2.3.2 Sustainability awareness

Note: Adapted from Wang et al. (2023a).

TABLE 2 The contents of the final report.

Volumes	Contents
Volume 1 Summary and recommendations	A summary of the final report, approach to the inquiry, and recommendations.
Volume 2 The current system	The current system, problems of access, the nature and extent of substandard care, and systemic problems in the aged care system.
Volume 3 The new system	Vision for the future of aged care in Australia.
Volume 4 Hearing overviews and case studies	Transcripts of public hearings, case studies.
Volume 5 Appendices	Witnesses, roundtable discussions, service provider visits, community forums, and so forth.

the Office of the Royal Commission; and research commissioned from external providers. Ultimately, the Commission received 10,574 public submissions, held 26 public hearings and workshops, conducted 19 case studies, 12 community forums, 13 roundtable discussions, and 34 service visits. The *Final Report: Care, Dignity and Respect*, released in February 2021 and spanning five volumes, highlighted the current system's issues, made recommendations, and outlined future prospects. Table 2 provides a summary of the final report. All data are publicly available on the website of the Royal Commission into Aged Care Quality and Safety (https://agedcare.royalcommission.gov.au/publications).

3.2 | The application of content analysis

Content analysis was adopted to analyse the data. According to Riffe et al. (2019), content analysis could produce useful generalisations with minimal information loss, such as describing research focus, theme, and trend (Downe-Wamboldt, 1992). The final report, public submissions, hearing transcriptions, and other documents obtained by the Commission during the inquiry provided the opinions of stakeholder groups on the aged care system, including the elderly, service providers, employees, researchers, and so forth. Therefore, it is very suitable for conducting content analysis to understand the status of social sustainability.

3.2.1 | Sample selection

The final report was selected as the sample. As stated in Section 3.1, the report was released after an extensive more than 2 years investigation by the Royal Commission into Aged Care Quality and Safety. To ensure the collection of adequate and reliable data, the Committee adopted eight key methods for the inquiry, received more than 10,000 public submissions, and conducted 26 public hearings. Given these rigorous methodologies, the report is considered robust enough to serve as the basis for scientific research. Furthermore, all raw data, such as public submissions and transcripts of community forums, were used to support and validate the coding results.

3.2.2 | Coding and grouping

In content analysis, researchers use specific frameworks to analyse data (Downe-Wamboldt, 1992). The conceptual framework in Table 1 serves this purpose. It provides a catalogue to analyse the data in the final report and ensure that the findings are derived from a structured thematic review, provide a comprehensive overview and capture all critical elements. All indicators are treated as codes to code the final report. Specifically, Volume 2 of the final report, titled 'The Current System', was carefully reviewed to identify systemic issues related to various indicators. Further, if a problem is extensively discussed in Volume 2 (defined as having at least one paragraph devoted to problem analysis) and confirmed in Volume 4 or 5, it is then classified as an unmet social need and coded into the corresponding indicator. Problems that do not meet this criterion are excluded. In addition, Volumes 4 and 5 were thoroughly examined to identify social needs not highlighted in Volume 2 but addressed in the empirical investigation.

3.2.3 | Reliability assessment

A pilot test was conducted to test the conceptual framework after its initial establishment. Thirty public submissions were randomly selected and coded. During the coding process, problems identified in the aged care system could be consistently and unambiguously attributed to specific indicators without overlap. This smooth categorisation process supports the assertion that the indicators have clear meanings and are mutually exclusive, effectively covering all aspects relevant to social sustainability. Thus, the conceptual framework remains unchanged. Coding for the final report was done independently by two co-authors. In addition to self-validation, this study also compared the independent coding results. Inconsistencies in the results were discussed by all the authors and a consensus was reached.

4 | RESULTS

The conceptual framework in Table 1 was used to understand the satisfaction of the social needs of the elderly and their relatives, as well as employees in the Australian aged care system. This section presents the coding results of the content analysis.

4.1 | Satisfaction of the elderly and their relatives' social needs

4.1.1 | Equity

1. Access to aged care

This indicator examines whether older people have equal access to aged care, regardless of their health status, location, or identity. My Aged Care is the single-entry point for government-funded aged care in Australia. It is a website with no face-to-face assistance. This leaves

older people with different backgrounds and diverse life experiences facing inequity when accessing and navigating the aged care system. They suffer from language and literacy barriers, and older people in regional, rural, and remote areas may not have ready access to technology and the Internet (Transcript, Melbourne Hearing 2, Janette McGuire).

2. Access to services and facilities

This indicator examines whether older persons have access to services and facilities without discrimination. The results indicate that certain groups of elderly people face inequity in their access to aged care services and facilities. For example, older people in regional, rural, and remote areas receive fewer services than those in big cities (Older Persons Advocacy Network, Public submission, AWF.670.00035.0002 at 0019). The elderly with disability in the aged care system are sometimes denied access to health services, such as mental health services or specialist palliative care services (Exhibit 17-6, Melbourne Hearing 4, Statement of Sunil Bhar). Older people living in residential aged care have less access to specialist health care than those in the community (Australian Institute of Health and Welfare, Interfaces between the aged care and health systems in Australia—first results, 2019, P6). In addition, older people cannot access additional services such as rehabilitation and physiotherapy because they cannot afford to pay (Transcript, Merle Mitchell, Sydney Hearing).

4.1.2 | Health and comfort

1. Satisfaction of basic needs

This indicator examines whether the elderly residents have adequate and appropriate accommodation, food, clean water and sanitation, and whether their personal and property safety is guaranteed. The result is that their basic needs are not being met. First, the level of malnutrition among older Australians is unacceptable. It was estimated that 8% of older people living in the community and 22%–50% of older people living in residential aged care are malnourished (Exhibit 6-48, Darwin and Cairns Hearing, Statement of Robert Hunt and Sharon Lawrence on behalf of the Dieticians Association of Australia). Both the quantity and quality of food are inadequate. Second, the accommodation environment for the elderly is not friendly. For example, the lack of a proper temperature control system results in an environment that is too cold or too hot. Third, the personal safety of the elderly is not guaranteed. Several cases of abuse were reported by both elderly living in residential aged care and those receiving care service at home (Name withheld, public submission, AWF.001.00172.01 at 0002; Name withheld, public submission, AWF.001.01744 at 0001). Pressure sores and falls are more common than abuse.

2. Satisfaction of physical comfort

This indicator examines whether older residents have adequate physical care, and whether they could get timely and appropriate treatment when sick. It is obvious that the physical comfort needs, especially health needs of the elderly are not being met. The widespread use of chemical restraints in residential aged care has resulted in residents not receiving the care they need. Residents do not have timely access to general practitioners (Transcript, Canberra Hearing, Rhonda Payget). They have limited access to specialist health practitioners too, such as geriatricians, psychiatrists, cardiologists and specialist palliative care practitioners (Australian Institute of Health and Welfare, Interfaces between the aged care and health systems in Australia—first results, 2019, p. 6). The provision of allied health care is also inadequate (Transcript, Melbourne Hearing 4, Esther May). Only a very small proportion of older people are reviewed by pharmacists for medication administration (Pharmaceutical Society of Australia, Medicine Safety: Aged Care, 2020, pp. 6–15, https://www.psa. org.au/wp-content/uploads/2020/02/Medicine-Safety-Aged-Care-WEB-RES1.pdf). Further, the inquiry found that there is inadequate staffing, especially nurses, in both home and residential aged care. This limits the availability of services. The staffing mix does not match the needs of the elderly (Exhibit 1-60, Adelaide Hearing 1, Statement of Gerard Hayes).

3. Satisfaction of psychological comfort

This indicator examines whether residents build social networks and sense of community with the help of service providers to stay away from negative emotions such as loneliness and helplessness. The psychological confusion in the final report mainly concerns the elderly in residential aged care. There was plenty of evidence at the hearing that older people face significant mental health risks when transitioning to residential aged care. In institutional setting, older people often lack freedom of movement, which can hinder their ability to build relationships (Exhibit 19-8, Sydney Hearing 3, Statement of Stephen Cornelissen). Services focus on acute, severe or complex mental health problems at the expense of prevention, early intervention or treatment of milder forms of mental illnesses (Transcript, Melbourne Hearing 4, Alison Argo). About half of those living in residential aged care have been diagnosed with depression (Australian Institute of Health and Welfare, People's care needs in permanent residential aged care: Factsheet 2018–19, 2020, p. 1).

4.1.3 | Accessibility

1. Accessibility of residential aged care

Accessibility of residential aged care concerns whether a residential aged care has good accessibility to public transport and parking lots and is convenient for family members to visit. The final report contains no such information.

2. Accessibility of facilities

Accessibility of facilities concerns whether a residential aged care is equipped with physical environment, entertainment, rehabilitation facilities for elderly residents, or if it has payment systems,

information platforms and other technical components to provide convenience for family members. Many speakers at the community forum expressed their concerns about facilities, including the lack of activities and the lack of choice for residents. 'We don't do much except watch TV all day' (Volume 5, Rockhampton community forum).

3. Accessibility of the elderly

This indicator examines whether the elderly are easily approached by family members for emotional communication. The COVID-19 pandemic has led to their inaccessibility. The Commission received 4691 complaints between January and 30 June 2020. One of the most common issues raised was visitation (Exhibit 18-21, Sydney Hearing 2, Statement of Janet Anderson). The restrictions on visitation 'have had both a positive and negative impact on the quality and safety of care for residents' and caused distress to families. The lack of communication and support from the residential aged care has amplified the distress and trauma suffered by the residents and their families and friends (Submissions of Anglican Community Services, Sydney Hearing 2).

4.2 | Satisfaction of the employees' social needs

4.2.1 | Equity and fairness

1. Employment opportunity

Employment opportunity concerns whether the employees are treated equally without discrimination (for example age, gender, and ethnicity) when seeking jobs. The final report contains no such information.

2. Employment contract and compensation

This indicator examines whether the terms of the contract are fair. The results show that the aged care system is failing to offer competitive pay and employment conditions. Aged care is widely regarded as a low-status job with low pay (Aged Care Workforce Strategy Taskforce, A Matter of Care: Australia's Aged Care Workforce Strategy, 2018, pp. 92–93). Many employees feel they are being exploited (Exhibit 11-1, Melbourne Hearing 3, general tender bundle). Irregular and split shift patterns, insufficient and variable working hours, and casual employment contracts also lead to job dissatisfaction and stress.

4.2.2 | Health and safety

1. Workplace

Aged care providers should offer a healthy and safe workplace to the employees. The final report provides little information on this.

Employees indicated that their workplaces are not equipped with suitable equipment to protect their backs from injuries (Transcript, Melbourne Hearing 3, Lavina Laboya).

2. Policies and procedures

This indicator focuses on whether the aged care providers provide soft infrastructure for employees to ensure their health and safety. According to the final report, there is a lack of proper policies and procedures, especially during the COVID-19 pandemic. Employees must serve residents who are, or may be positive for COVID-19, putting them at risk of catching the virus. Union surveys revealed that personal protective equipment was not in sufficient supply for employees and that they were not trained to use it (Exhibit 18-1, Sydney Hearing 2, general tender bundle). This resulted in employees' understanding of infection prevention and control principles being 'varied' and in many cases 'too little' (Transcript, Sydney Hearing 2, Annie Butler). Even before the pandemic, employees' health and safety needs are often overlooked. For example, many aged care providers control their labour costs by adopting policies that reduce their nurse staffing. This has forced personal care workers to undertake clinical care tasks that would otherwise be performed by nurses (Transcript, Adelaide Hearing 1, Deborah Parker). Moreover, the high level of administrative paperwork also increased pressure on employees.

4.2.3 | Education and training

1. Professional skills

This indicator examines whether aged care providers have educated and trained employees to improve their professional skills. The results are not promising. Without minimum mandatory qualifications, some personal care workers do not even have formal training. There is little effective training in dementia care, palliative care, nutrition, oral health, medication and falls management (Transcript, Adelaide Hearing 1, John McCallum). The quality of vocational education and training programmes that are available is low (Exhibit 11-59, Melbourne Hearing 3, Statement of Sandra Hills). Apart from a lack of training, there is no clear career path in the aged care sector (Exhibit 11-59, Melbourne Hearing 3, Statement of Sandra Hills).

2. Sustainability awareness

This indicator examines whether aged care providers have educated and trained their employees to be sustainability-conscious, that is, to acknowledge, respect and value the diverse needs of the elderly. The results found that there is ageism and invasion of the privacy of the elderly. Carers' stereotypes of older people lead to assumptions about older people's cognitive capability and further exclude older people from conversations (Exhibit 17-4, Melbourne Hearing 4, Statement of Diane Corser). 'For many staff, it just seems like a job without responsibility or care'.

5 | DISCUSSION

The previous section analysed the problems encountered by the elderly and their relatives, and the employees, as reflected in the final report, using the conceptual framework in Table 1. Based on that, we discuss the two RQs raised in the Introduction, that is, what the current state of social sustainability is in Australia's aged care system, and how the social sustainability of Australia's aged care system can be improved.

5.1 | The current status of social sustainability in Australia's aged care system

Overall, the social sustainability of Australia's aged care system is currently unsatisfactory.

First, the social needs of the elderly and their relatives are not being fully satisfied, which is evident in three main aspects.

- Inequitable access to aged care, services, and facilities. The content analysis reveals that older individuals encounter disparities in accessing My Aged Care, the single-entry point for government-funded Aged Care in Australia, and in obtaining further services and facilities post-initial access. This has been corroborated by prior research. A study by Yu and Byles (2020) on residential aged care in Australia indicated that factors like education level and geographical isolation contribute to unequal access. Similarly, a case study by Wang et al. (2022) on hospital PPP projects in Australia identified patient access inequities. This issue is prevalent globally, with variations in the root causes of such inequities due to differing social, cultural, and institutional contexts (Wang, 2023).
- Unsatisfied health and comfort. The analysis shows that the basic, physical, and psychological needs require further attention and fulfilment. Research in Australia has found that residential aged care is often perceived as a place of loss and suffering (Miller et al., 2020). Care plans frequently fail to adequately address the individual needs and preferences of the elderly (Hamiduzzaman et al., 2020), and mental health problems are widespread (Aged & Community Services Australia, 2015; Grenade & Boldy, 2008). Globally, aged care systems struggle to overcome this issue. There is a notable deficiency in diverse, skilled, and well-resourced healthcare teams (Koopmans et al., 2018), and the integration of health and care services presents significant challenges (Wang et al., 2021).
- Limited accessibility. The content emphasises the challenges in accessing aged care facilities and the resulting isolation of elderly residents, exacerbated by the COVID-19 pandemic. A study of retirement villages in Australia found that enhanced accessibility of villages promotes visits and communication among family members and friends of the elderly (Xia et al., 2021), while easy access to village amenities supports the personal and social activities of elderly residents, thereby improving their health (Nathan et al., 2013). Similarly, the ease of access to residential aged care positively affects the mobility, interaction, and food intake of the elderly (Hamiduzzaman et al., 2020). Unfortunately, current research confirms the ongoing challenges in the accessibility (Cai et al., 2017; Cheng et al., 2022).

Second, the social needs of the employees are not adequately addressed, manifesting in three key areas.

- Inequitable employment and compensation. Employees often face unfair treatment in terms of employment and compensation. Ensuring fairness is crucial, as it provides reasonable income, fundamental to enhancing their quality of life (United Nations Environment Programme & Society of Environmental Toxicology and Chemistry, 2013). Furthermore, fairness can reduce employee turnover, promote a stronger, higher-quality workforce, and improve service quality (Allan & Vadean, 2021; Costello et al., 2020). This is vital for improving the elderly's quality of life. Regrettably, issues of unfair employment and irrational compensation are widespread globally (Devi et al., 2021; Shi et al., 2020).
- Hazardous work conditions. It is found that the health and safety of employees in Australia's aged care system are often compromised. Prioritising employee health and safety is known to boost job satisfaction and decrease turnover rates. Neglecting these aspects not only leads to workplace accidents (Reyes et al., 2014), but also diminishes the quality of care (Jeon et al., 2019; Plaku-Alakbarova et al., 2018). Unfortunately, the study of Oakman et al. (2022) in Australia pointed out that residential aged care often neglects employee safety. Studies in other countries have reached similar conclusions. Employees face a high incidence of occupational injuries and diseases (McCaughey et al., 2015) and significant psychological stress (Blanco-Donoso et al., 2021; British Geriatrics Society, 2021; Martín et al., 2021; Shahar et al., 2019), leaving their health and safety unprotected (Guerra Santin et al., 2021; Martín et al., 2021).
- Inadequate education and training. There is a notable lack of sufficient education and training for employees, both in professional skills and sustainability awareness. According to the Institute for Sustainable Infrastructure (2015), education and training improve the skills, knowledge and capability of employees and promote their growth and development. The absence of adequate education and training leads to unmet care needs of the residents (European Centre for Social Welfare Policy and Research, 2010) and increased pressure on the employees (Costello et al., 2020). Studies in Australia and other countries have highlighted widespread deficiencies in education and training within the aged care sector (Hamiduzzaman et al., 2020; Han et al., 2020; Meyer et al., 2018).

5.2 | The improvement of social sustainability in Australia's aged care system

The analysis of the current status of social sustainability in Australia's aged care system demonstrates that social needs of the two major
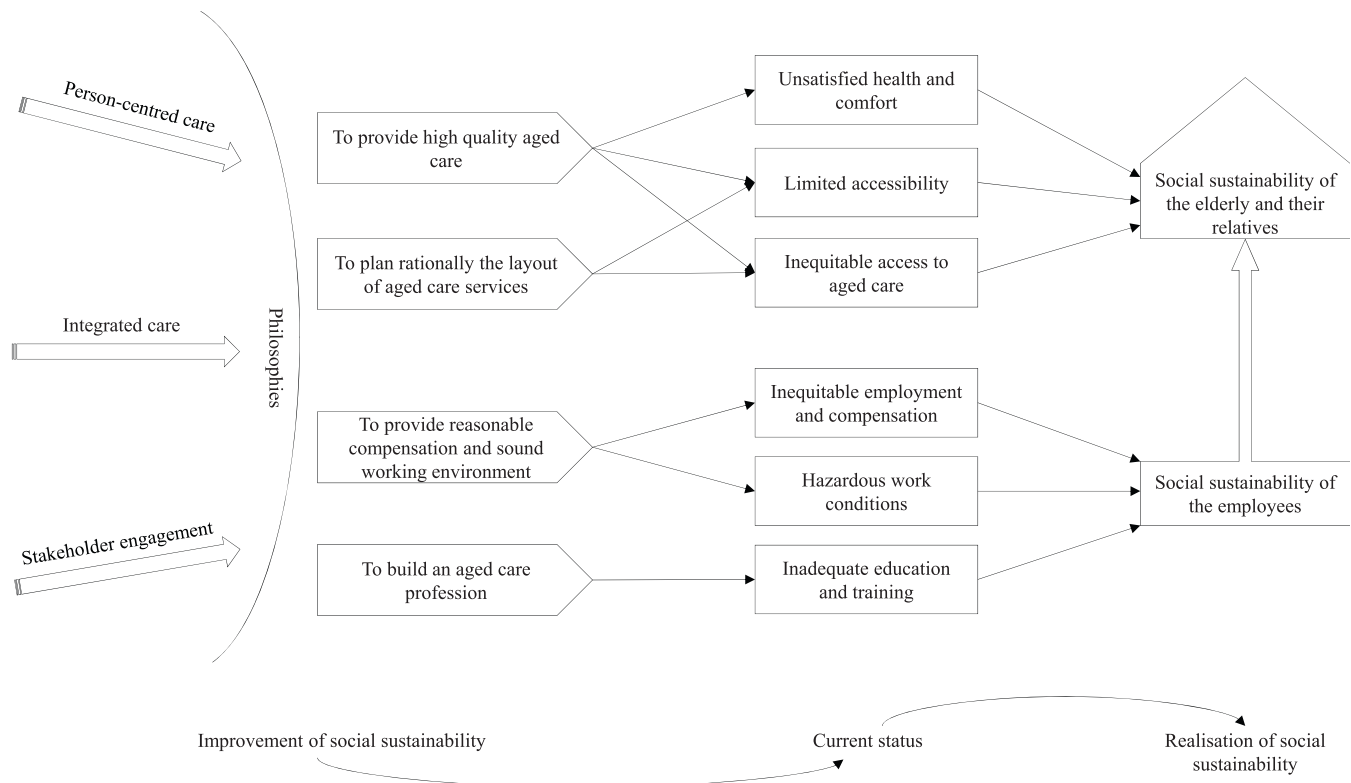
FIGURE 1 The improvement of social sustainability in Australia's aged care system.

stakeholder groups, namely, the elderly and their relatives and employees, have not been fully satisfied. It is assumed that the Australian government and aged care providers may adjust their philosophies and take measures to meet relevant social needs, and ultimately realise social sustainability. Figure 1 displays the logical relationship between the measures and the goals, as explained below.

5.2.1 | To highlight the philosophies in aged care

According to Dyer et al. (2019), innovative aged care approaches are supported by various philosophies, for example, human rights and reablement. To achieve social sustainability in the aged care system, three philosophies in particular warrant emphasis.

- Person-Centred Care. Aged care should move towards person-centred care (Sjögren et al., 2015), which provides care by establishing relationships between care providers, the elderly, and the important people in their lives (McCormack et al., 2016). It emphasises the personal value of the elderly and focuses on their needs and preferences. Person-centred care improves the elderly's quality of life (Chenoweth et al., 2014). Meanwhile, it treats employees in a dignified manner (Kadri et al., 2018). Further, perceptions should be shifted—quality care does not depend solely on selfless dedication, but also requires employees to have professional skills (Palmer & Eveline, 2012).
- Integrated Care. Integrated care aims to solve the problems of care continuity, efficiency and service effectiveness (Douglas

et al., 2017). It has been defined as a network of multiple professionals and organisations across the health and social care system to provide consumers with accessible and comprehensive services (Valentijn et al., 2015). It can reduce the hospitalisation demand, drug use and mortality of the elderly and improve their quality of life (Douglas et al., 2017; Su & Wang, 2019).
- Stakeholder Engagement. Stakeholder engagement is pivotal for knowledge sharing, fostering a more equitable and sustainable social development (Infrastructure and Projects Authority, 2020), and enhancing the benefits and value of projects (Keeys & Huemann, 2017). Effective engagement entails: (a) strengthening information disclosure. For example, My Aged Care should provide more comprehensive and practical information; (b) enhancing communication. Interactions among the providers, the employees, and the elderly and their relatives should be bidirectional (Omori et al., 2019; Reid & Chappell, 2017; Wang et al., 2021); and (c) empowering stakeholders. The providers should seek opportunities for negotiation and joint decision-making in all aspects of daily life with the elderly and employees (Age Cymru, 2011; Guerra Santin et al., 2021; Xia et al., 2015).

5.2.2 | To provide high quality aged care

High quality aged care helps older people live self-determined and meaningful lives through specialised clinical and personal care services

and other support provided in a safe and caring environment. Specifically, aged care providers need to:

- Meet the basic needs of the elderly: (a) to provide an appropriate living environment for the elderly, which includes clean rooms and drinking water, sanitation, and necessary living facilities; and (b) to provide the elderly with a nutritious balanced diet. This is essential for preventing malnutrition (Age Cymru, 2011; Welsh Government's Department of Health and Social Services, 2019). Moreover, the dining experience is central to the socialisation of older residents (Yee-Melichar et al., 2014).
- Meet the care and health needs of the elderly. The providers should ensure multidisciplinary support for the elderly, including care staff, doctors, nurses, pharmacists, rehabilitation therapists, social workers, and so forth (Age Cymru, 2011; Koopmans et al., 2018; National Institute for Health and Care Excellence, 2015). A prospective comprehensive Geriatric Assessment is also important (British Geriatrics Society, 2021).
- Meet the psychological needs of the elderly. The providers should organise various social activities, which will promote the sense of belonging and importance of the elderly (European Centre for Social Welfare Policy and Research, 2010). Family visits should be encouraged in residential aged care (Parkinson et al., 2019).
- Introduce smart care. Smart care can use scientific and technological means to improve the services provided to the elderly and improve their quality of life (British Geriatrics Society, 2021; Douglas et al., 2017). For example, adopting equipment that can monitor and control the status of the elderly, provide mechanical support for mobility and physical tasks, and provide alerts (Huang et al., 2015; Matsui et al., 2013; Poncela et al., 2019; World Health Organization, 2019; Zhao et al., 2021). In addition, smart care products can also be used to improve the accessibility of facilities. For example, providing clear and accurate guidance for check-in, visitors, and consultants through intelligent guidance; providing information about the elderly to their relatives through apps; establishing video interactive systems, and so forth.

5.2.3 | To plan rationally the layout of aged care services

Spatial optimisation enables the elderly to have equal access to aged care services and facilities to the maximum extent (Dadashpoor et al., 2016; Tao et al., 2014; Wang & Tang, 2013). Locating near places where older people live or where public transport is convenient can increase the proportion of elderly people receiving aged care services (Cai et al., 2017). For Australia, the government should ensure adequate coverage of services to meet the needs of people in rural, regional, and remote areas. It is important to note that planning can only be achieved if the government is able to determine the costs of providing services in different geographical areas in Australia and ensure the service providers are remunerated appropriately.

5.2.4 | To provide reasonable compensation and sound working environment

Aged care providers need to make efforts in the following two aspects:

- To provide reasonable compensation for the employees. According to person-centred care philosophy, a salary distribution mechanism based on position importance, capability and performance of the employees should be established.
- To provide a sound working environment for the employees, which includes (a) a good physical environment. Indoor and outdoor environment design and facilities need to be considered. For example, dedicated and comfortable staff spaces, homelike environments, safe and open outdoor spaces, and so forth (Naccarella et al., 2018); and (b) a good social environment. A supportive organisation/leadership and a positive psychosocial environment are seen as components of a good social environment (McCormack & McCance, 2006; Miller et al., 2020). The providers should create a safe, everydayness and community atmosphere (Sjögren et al., 2015), which will provide psychosocial support for the employees, increasing their competence, effectiveness and sense of belonging (Jacobi, 1991).

5.2.5 | To build an aged care profession

The building of an aged care profession needs the joint efforts of government departments and aged care providers.

- Government departments should pay attention to aged care degree education and develop vocational education and training. For example, the undergraduate curricula for health professionals should be adapted to enable the health professionals to meet the care needs of older people; training packages should be developed to ensure that industry skill requirements are reflected in the national training system; and nationally recognised short courses may be established.
- Aged care providers should provide adequate training to employees, which includes (a) to provide skill and idea training. Skills are multifaceted (British Geriatrics Society, 2021). Person-centred ideas and service attitudes training will improve employees' responsiveness to the needs of the elderly and improve service quality and organisational efficiency (Lee & Severt, 2018); and (b) to enhance the effectiveness of training. The success of training is inseparable from the effective and supportive leadership (Kuske et al., 2009). Customised modes, mentoring and support programs could be considered (Coppin & Fisher, 2020; Karantzas et al., 2012; Surr et al., 2019).

6 | CONCLUSIONS AND LIMITATIONS

The concept of social sustainability in aged care systems is predicated on meeting the social needs of the elderly and their relatives, as well

as employees, thereby ensuring a high quality of life. This is essential for the sustainable development of an aged society. A conceptual framework was established and used to conduct a content analysis of the *Final Report: Care, Dignity and Respect* released by the Australian Royal Commission into Aged Care Quality and Safety, addressing the two research questions.

First, Australia's aged care system exhibits poor social sustainability. The three primary social needs of the elderly and their relatives, that is, equity, health and comfort, and accessibility, are not satisfactorily met. Similarly, the three social needs of the employees, that is, equity and fairness, health and safety, and education and training, are not adequately addressed, resulting in a diminished quality of life for both groups.

Second, Australian government departments and aged care providers should consider implementing measures to enhance the social sustainability of aged care system. Crucially, this involves emphasising the philosophies of aged care, including person-centred care, integrated care, and stakeholder engagement. These philosophies are fundamental to achieving social sustainability. Additionally, providing high-quality aged care, rational planning of service layouts, offering reasonable compensation and a sound working environment, and fostering a professional workforce can help meet stakeholders' social needs and improve their quality of life.

In conclusion, this case study offers a comprehensive overview of the social sustainability of Australia's aged care system and proposes potential measures for its improvement. The analysis and conclusions provide insights into the composition, status, challenges, and solutions regarding social sustainability in aged care. The Productivity Commission stated as early as 2011 that the aged care system needed to be socially sustainable and deliver services by a sustainable workforce (Productivity Commission, 2011). However, the understanding of social sustainability at that time was not comprehensive and focused mainly on social cohesion. Although the reforms after 2021 have promoted the wellbeing of the elderly to some extent, there are still many problems in the whole system. Therefore, the Australian government may consider setting social sustainability as the goal of the system, seeking to work with aged care providers to comprehensively satisfy the social needs of the stakeholders and improve their quality of life.

There are two main limitations to this study. First, the stakeholder groups were broadly categorised: (a) the elderly and their relatives, and employees, were treated as distinct groups without further segmentation. However, these are not homogeneous groups. For instance, the social needs of older people living at home differ from those in residential settings. To streamline the conceptual framework, this distinction was overlooked; and (b) the needs of the local community and society were not considered. According to Wang et al. (2023a), these are important stakeholder groups, but they were not included in the Final Report, hence their perspectives are absent from this study. Second, the findings are based on a content analysis of the Final Report, a qualitative study of secondary data. Although the Report syntheses views from multiple stakeholders, there may still be bias in the conclusions. Future research could segment stakeholder groups, for example, to study the social needs of the elderly

receiving home care and those receiving residential care respectively and explore ways to satisfy their needs. Quantitative analysis using the latest primary data is also expected.

CONFLICT OF INTEREST STATEMENT

The authors declare that they have no conflicts of interest.

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