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Culture Change in Long-Term Care-Post COVID-19: Adapting to a New Reality Using Established Ideas and Systems

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Résumé

La réponse à la pandémie de COVID-19 dans le secteur des soins de longue durée (SLD) a fortement ébranlé les efforts de transformation de la culture des soins qui visaient à opérer une transition de modèles institutionnalisés à des modèles désinstitutionnalisés, dont l'approche est centrée sur la personne et la relation. En raison de la persistance de la pandémie, la viabilité des efforts de changement de culture a été remise en question. En nous appuyant sur sept modèles de changement de culture mis en œuvre au Canada, nous identifions les prérequis organisationnels, les mécanismes de facilitation et les changements en première ligne pertinents au changement de culture qui peuvent renforcer la réponse à la pandémie de COVID-19 dans les centres de SLD. Nous soutenons qu'un retour aux modèles de soins institutionnalisés, dans le but d'atteindre les objectifs de santé publique visant à limiter les épidémies de COVID-19 et d'autres maladies infectieuses, est défavorable aux résidents en SLD, à leurs familles et au personnel. Le changement de culture et la lutte contre les infections ne sont pas forcément incompatibles. Les deux stratégies ont des visées et des approches communes qui peuvent être intégrées lorsque les praticiens des SLD envisagent des interventions continues pour améliorer la qualité de vie des résidents, tout en veillant au bien-être du personnel et des familles des résidents.

Abstract

The response to the COVID-19 pandemic in long-term care (LTC) has threatened to undo efforts to transform the culture of care from institutionalized to de-institutionalized models characterized by an orientation towards person- and relationship-centred care. Given the pandemic's persistence, the sustainability of culture-change efforts has come under scrutiny. Drawing on seven culture-change models implemented in Canada, we identify organizational prerequisites, facilitatory mechanisms, and frontline changes relevant to culture change that can strengthen the COVID-19 pandemic response in LTC homes. We contend that a reversal to institutionalized care models to achieve public health goals of limiting COVID-19 and other infectious disease outbreaks is detrimental to LTC residents, their families, and staff. Culture change and infection control need not be antithetical. Both strategies share common goals and approaches that can be integrated as LTC practitioners consider ongoing interventions to improve residents' quality of life, while ensuring the well-being of staff and residents' families.

Background

Long-term care (LTC) homes have disproportionately borne the brunt of the coronavirus disease (COVID-19) pandemic (Liu et al., 2020). In Canada, more than 69 per cent of COVID-19 deaths have occurred in LTC homes (Canadian Institute for Health Information, 2021). Plausible explanations for the disproportionate impact of COVID-19 in LTC include congregate settings, residents' age and frailty, and higher rates of pre-existing co-morbidities, which are known risk factors associated with COVID-19 morbidity and mortality (Holroyd-Leduc & Laupacis, 2020; Stall, Jones, Brown, Rochon, & Costa, 2020). Further, LTC workers' employment in multiple high-risk sites, low staff–resident ratios, and for-profit statuses of LTC homes have increased the risk of COVID-19 outbreaks (Estabrooks et al., 2020; Stall, Jones, et al., 2020).

The World Health Organization (WHO), and national and regional public health agencies published infection prevention and control (IPC) guidelines to limit COVID-19 spread in LTC (World Health Organization, 2020). In Canada and other countries, guidelines early in the

pandemic (April 2020) mandated physical distancing; restricted visitation only for essential personal, medical, or compassionate reasons; prospective COVID-19 symptoms surveillance; early isolation and notification of suspected cases; proper use of personal protective equipment (PPE); and continuous environmental cleaning and disinfection (British Columbia Ministry of Health, 2020; British Geriatrics Society, 2020; Public Health Agency of Canada, 2020; World Health Organization, 2020). They also recommended staff IPC training.

Adherence to these IPC measures may have played a crucial role in limiting the spread of COVID-19 and protecting the health and safety of LTC residents and staff (Rios et al., 2020). Nevertheless, the mandated and standardized implementation of some of these measures has threatened to undo or slow down the progress made in improving residents' quality of life through the culture-change movement. This movement represents a fundamental shift in the vision for LTC that underpins many models of care (Koren, 2010). Although various culture-change models focus on different aspects of care, they express a shared value of person-centredness and relationship-centred care that emphasize residents as active participants in care, and espouse holistic consideration of residents' needs and perspectives, relationship building, and de-institutionalization of care (Koren, 2010).

Balancing person-centred and relationship-centred care in culture change with COVID-19 IPC measures has been challenging. Culture-change proponents have called for careful balance between goals to maintain residents' overall social participation, mental health, and quality of life (Dichter, Sander, Seismann-Petersen, & Köpke, 2020; Inzitari et al., 2020). Indeed, there have been tensions from the outset between person-centred and relationship-centred care models and institutional (traditional) care models that focus on standardizing quality of care (Öhlén et al., 2017). However, culture-change experts conclude that quality of life and quality of care are inseparable and must be considered in tandem (Armstrong et al., 2019).

In this policy note, we draw on our understanding of culture-change models, identifying key strategies that can potentially improve current pandemic management practices and policies in the LTC sector. We posit that person-centred and relationship-centred care in LTC culture-change is not antithetical to public health goals of infection control. We identify shared methods and goals, and contend that both must be integrated to improve LTC residents' quality of life. Considering the continuing threat of COVID-19 and other infectious disease outbreaks, ongoing culture-change initiatives may integrate a focus on the physical health and safety of residents, family, and staff, while maintaining the relationships relevant to residents' well-being. This article offers important considerations given the needed redesign of the LTC sector that has been laid bare by the COVID-19 pandemic (McGilton et al., 2020).

The Culture-Change Movement in LTC

De-institutionalizing LTC

The culture-change movement gained popularity as an aspirational paradigm of care, beginning in the mid-1980s. It has inspired multiple culture-change models (Armstrong et al., 2019) which have been developed and deployed in various LTC settings, including in Canada. The models have sought to fundamentally alter values, norms, administrative and organizational structures, and physical attributes of LTC homes, as well as policies and practices to

holistically meet the increasingly complex needs of residents. Changes espoused by these models are important for people with dementia who constitute the majority of LTC residents (Liu et al., 2020).

Many culture-change models share common values, goals, and approaches (Koren, 2010). They emphasize person-centred design and delivery of health services, relationship-building among residents, families and care providers, flexible staff work cultures, shared decision making, and home-like physical environments (Armstrong et al., 2019). These approaches are underpinned by theories of personhood, relationality, community, and purposeful living among LTC residents (Armstrong et al., 2019; Brownie, 2011). Culture-change advocates recommend fundamental changes in staffing and administration (e.g., staffing policies empowering staff involved in care delivery), capacity building, partnerships with stakeholders, critical dialogue, and leadership (Armstrong et al., 2019; Boscart et al., 2019; Dupuis, McAiney, Fortune, Ploeg, & de Witt, 2016).

Patient-Centred, Person-Centred, Relationship-Centred, and People-Centred Care

At its core, the culture-change movement promotes personcentred and relationship-centred care (Dupuis et al., 2016; Koren, 2010). These care paradigms prioritize residents' needs and perspectives. However, other health care models have also prioritized health care users to varying degrees. For example, patient-centred care has been on the health care agenda for decades (Håkansson Eklund et al., 2019). Although person- and patient-centred care share a common focus on prioritizing health care users, these terms are not synonymous. Patient-centred care describes care that accounts for, and is respectful of, patients' known needs and values (Lines, Lepore, & Wiener, 2015) during diagnoses and treatment with the goal of achieving a functional life (Håkansson Eklund et al., 2019). It represents the earliest evolution from the more paternalistic medical approach. In contrast, person-centred care recognizes that individuals who are living with illnesses or impairments are not than just "patients", but humans, who are capable of making decisions and actively participating in their care to achieve their goals for a meaningful life (Håkansson Eklund et al., 2019). Person-centred care is often integrated in a life-course approach where a person's history and experiences are deeply considered, and interdisciplinary services are organized around the person's needs (Håkansson Eklund et al., 2019). Metrics for success in person-centred models align with these same values, ensuring that the voices of health care users are central. Therefore, personreported outcome measures (PROMs) and person-reported experience measures (PREMs) have become prominent (Benson, 2020; Öhlén et al., 2017).

Moreover, we view person-centred models as being inclusive of relationship-centred approaches to care (Wyer, Alves Silva, Post, & Quinlan, 2014). Relationship-centred care recognizes the role of the quality of relationships in the delivery and outcomes of health services. Therefore, culture-change models have prioritized the development and maintenance of the triad of relationships among LTC residents, residents' families and frequent visitors, and the staff (Dupuis et al., 2016; Ryan, Nolan, Reid, & Enderby, 2008). Relationship-centred care models also emphasize the role of relationships among health providers in care coordination around residents' needs, extending beyond the health facilities into the communities (Nundy & Oswald, 2014).

The WHO adopted similar values at a population-level by recommending integrated people-centred health services (World Health Assembly, 2016). This approach acknowledges individuals, care providers, families, and communities as participants and intended beneficiaries of trusted health systems organized around their needs and social preferences, rather than around individual diseases (World Health Assembly, 2016). Strategies for *person*-centred care and integrated *people*-centred care are similar, and comprise empowering and engaging people and communities, strengthening governance and accountability, coordinating care across specialties, and creating an enabling environment (Dupuis et al., 2016; World Health Assembly, 2016).

People-centred care in LTC requires orienting health systems and services around the needs of residents, their families, and staff (Goodwin, 2014), breaking down the acute/long-term care and community/hospital dichotomies that characterize Canada's elders' care systems (Holroyd-Leduc & Laupacis, 2020), and strengthening the quality of care (including infection prevention) across the care spectrum from community to acute and LTC settings (Stein, Goodwin, & Miller, 2020).

COVID-19 and Culture Change in LTC

COVID-19 has exacerbated systemic problems in LTC, especially in Canada. Chronic underfunding has resulted in failing infrastructure, crowded physical spaces, inadequate staffing levels and inappropriate staffing mix, heavy workloads, and high staff turnover (Estabrooks et al., 2020). This has limited the capacity of LTC homes to respond adequately to the threat of COVID-19 (Estabrooks et al., 2020). Poorly coordinated LTC health systems, initial shortcomings in pandemic preparedness in LTC, and suboptimal understanding of the systems implications of pandemic response policies also left homes underequipped to protect residents and staff during outbreaks (Holroyd-Leduc & Laupacis, 2020; Stall, Jones, et al., 2020). For example, many Canadian provincial medical health officers issued "single site orders" which restricted health care aids to working at only one work site during the pandemic. Prior to these orders, it was common for health care aids to work between sites, particularly as casual workers filling in shift vacancies caused by absenses. These single site orders often did not have contingency measures to address resulting staff shortages, which further strained the health workforce and increased absenteeism in an apparent vicious cycle (Duan et al., 2020).

Moreover, COVID-19 IPC response measures adversely affected culture-change practices in LTC homes. Besides visitation restrictions, many LTC homes cancelled communal social activities, like communal dining, increasing the risk of medical complications like malnutrition, dehydration, and pressure ulcers (Dichter et al., 2020; Edelman et al., 2020). Social isolation among residents caused by these measures also affected their mental health and quality of life (Dichter et al., 2020). Direct-care providers reverted from a progressively person- and relationship-centred model to an institutionalized model of care as a way to manage COVID-19 risk. This institutionalized care utilizes bureaucratic and standardized approaches that have not necessarily considered residents' values and needs. Focus has shifted from quality of life, social connectedness, and engagement to measures mainly fixated on preventing transmission and reducing mortality rates.

IPC measures have further isolated older adults who already suffer high levels of loneliness (van Dyck, Wilkins, Ouellet, Ouellet, & Conroy, 2020). Research pre-dating COVID-19 estimated that the prevalence of loneliness among adults 65 years of age and older ranged between 33 and 72 per cent, with a majority of these

individuals residing in LTC homes (van Dyck et al., 2020). This social isolation and loneliness has been linked with increased morbidity and mortality (van Dyck et al., 2020). Socially isolated residents experience higher rates of cardiovascular diseases and mental health consequences such as depression, anxiety, and cognitive decline (Dichter et al., 2020; van Dyck et al., 2020).

The mental health impacts of these restrictive IPC measures have been especially pronounced among LTC residents living with dementia. This population has faced challenges understanding why measures have been instituted, complying with them, and adapting familiar routines to the measures (Edelman et al., 2020; Wang et al., 2020). Health providers managing dual concerns about risk of COVID-19 infections and residents' pre-existing health conditions have experienced increased anxiety, exhaustion, and burnout (Wang et al., 2020). Residents' families have also experienced anxiety and poor quality of life outcomes (Tupper, Ward, & Permar, 2020).

The rollout of COVID-19 vaccines gives cause to be cautiously optimistic about the potential end of the pandemic. However, because of the evolution of the COVID-19 pandemic, the emergence of new COVID-19 strains of concern, and the risk of other infectious disease outbreaks in the future (Jamison et al., 2017), approaches that balance LTC residents' quality of life with preventing widespread infectious disease outbreaks need to be identified and implemented.

The Role of Culture Change in Adapting LTC Homes to the Threat of COVID-19

Drawing on insights from seven culture-change models (Table 1), we identified common strategies and approaches across the models that can potentially limit the spread of infectious disease, including COVID-19, in LTC while maintaining the social and relational aspects of care. Without conducting a systematic environmental scan, we selected models that were well known to our stakeholders and that historically influenced their culture-change work in British Columbia, Canada. Table 2 summarizes themes identified from the models in a multi-level framework that includes the organizational level (including organizational prerequisites and facilitatory mechanisms), and frontline changes at the provider and resident level. Because unidimensional approaches adopting single interventions have been shown to hinder sustainable outcomes in LTC (Chaudhury, Hung, Rust, & Wu, 2017), we adopted this multi-level framework to present the core features of a successful culture change. We drew inspiration from other multi-level frameworks for understanding and predicting outcomes of evidence-based health innovations (Chaudoir, Dugan, & Barr, 2013). We identified opportunities for integration of COVID-19 response and culture change at each level of the multi-level framework.

Organizational Prerequisites

Intersections exist between organizational attributes necessary for both proactive IPC measures (including responses to COVID-19) and for culture change in LTC. Dynamic and committed leadership is a central factor in realizing culture change in LTC (Armstrong et al., 2019; Dupuis et al., 2016) and responding to COVID-19. Reports from LTC homes and health authorities that have managed significant COVID-19 outbreaks highlight leadership as a crucial prerequisite in mounting coordinated, cohesive responses (Havaei, MacPhee, Keselman, & Staempfli, 2021; Stall, Farquharson, et al.,

Table 1. Selected culture-change models

Model	Year	Description
Eden Alternative	1991	Based on the 10 Eden alternative principles, it promotes human growth in LTC, and empowers older adults to fulfil their right to construct and pursue meaningful lives.
Senses Framework	2006	Prioritizes relationship-centred care, focusing on relationships among residents, staff, and family carers, promoting a sense of security, continuity, belonging, purpose, achievement, and significance.
Partnerships in Dementia Care (PIDC) Alliance	2016	Focuses on enhancing dementia care to better reflect a relationship-centred, partnership-based approach to care.
Dementia Care Matters 6 C's model	2009	Promotes the Butterfly Care Home approach to culture change. Based on Kitwood's model, it focuses on organizational change, to provide services that promote and value emotions at work.
Pioneers in Culture-Change and Person-Directed Care	1997	Aims to create resident-directed communities where residents maintain control and choice over their lives – "A Continuum of Community."
Kitwood's Personhood	1993	A theoretical model providing a basis for person-centred care for people with dementia. Personhood is not lost, it may be maintained through relationships with others.
Neighborhood Team Development ^a	2018	A multi-component intervention aiming to modify the physical environment, organize service delivery, and align staff to promote interdisciplinary collaboration and person-centredness.

Note. ^aThe neighborhood team development culture change intervention draws from the Schlegel Villages' guidebook developed by the Research Institute for Aging, Ontario. The neighborhood team development extends the individual neighborhood guides and integrates them within a large organizational change process.

2020) that break implicit and explicit barriers to meet residents' and staff needs (Laxton, Nace, & Nazir, 2020).

Culture change's focus on building trusting relationships and effective partnerships with a wide range of stakeholders, including residents and families, care communities, and allied health partners (Dupuis et al., 2016) can be beneficial to the COVID-19 response (Laxton et al., 2020). These relationships are crucial in managing and leading a crisis response in which stakeholders must quickly work together to find practical solutions (Laxton et al., 2020). Ongoing processes of culture change are an advantage, as LTC leaders note that these relationships are difficult to develop spontaneously or while in a crisis (Laxton et al., 2020).

Further, culture-change proponents have long decried steady declines in staffing levels over the last two decades, which have led to low staff-to-resident ratios, heavy workloads, job dissatisfaction, staff turnover, increasing reliance on casual workers, and fewer opportunities for spontaneous, one-on-one interactions between residents and staff (Duan et al., 2020). The COVID-19 pandemic has drawn attention to the untenable workloads of direct-care staff, which limited capacity to effectively implement IPC and outbreak management plans (Estabrooks et al., 2020). Culture-change proponents have advocated for increased funding and staffing levels as a crucial pillar of culture change (Armstrong et al., 2019), emphasizing the need for research to establish optimal staffing levels and staff mix in LTC. Indeed, the culture-change movement is partly a response to suboptimal work conditions, as one of the aims of culture-change initiatives is to increase job satisfaction. Improving staffing levels to improve residents' and staff well-being is an investment that can assuage dual concerns over quality of life and residents' safety.

Facilitatory Mechanisms

Frontline culture-change activities are facilitated by organizational policies, and structural and administrative changes in LTC including reorganizing service delivery (Boscart et al., 2019) and the workforce, and empowering frontline staff to advocate on residents' behalf. The process of culture change has been considered to be ongoing quality improvement (Armstrong et al., 2019), a journey rather than a destination (White-Chu, Graves, Godfrey,

Bonner, & Sloane, 2009). Comprehensive and verifiable metrics are needed to inform this process (Armstrong et al., 2019; Koren, 2010; White-Chu et al., 2009). Various feedback-gathering techniques have been used including learning circles; resident councils; and staff, resident, and family feedback. However, arguments have been made for rigorous evaluation of culture-change initiatives to examine clinical outcomes, quality of care, resident quality of life, quality of work life, and resident and family satisfaction (Armstrong et al., 2019; Boscart et al., 2019; White-Chu et al., 2009). Such data-driven measures for person- and relationshipcentred data collection could also be beneficial to IPC practitioners to evaluate the effect of their COVID-19 responses on outcomes for residents, family, and staff (Estabrooks et al., 2020).

Culture-change models seek to flatten health workforce hierarchies, and encourage collaborative decision making and interdisciplinary coherence among teams (Boscart et al., 2019; Sheard, 2014) to ensure responsiveness to residents', family, and staff needs. Direct-care staff work consistently with a small group of residents to foster viable relationships (Koren, 2010). This consistent staff-residents assignment aligns with COVID-19 infection control recommendations (British Geriatrics Society, 2020) and may help curtail disease spread. The workforce reorganization involves action to empower LTC staff, including training for unregulated direct-care providers, who account for up to 90 per cent of direct care in LTC homes (Estabrooks et al., 2020). Formalizing and standardizing these positions, with appropriate pay and benefits including paid sick leave, can improve care practices and reduce COVID-19 infection (Estabrooks et al., 2020). Finally, creating a supportive environment for staff can improve their ability to advocate for residents to inform care practices that are more holistic even during COVID-19 (Ryan et al., 2008).

Frontline Care Changes

Frontline changes that prioritize person- and relationship-centred care, social connections, and creating a home-like environment have been undermined by the COVID-19 response (van Dyck et al., 2020). Reinstating these changes could benefit residents. Up to 31 per cent of older adults infected with COVID-19 suffer "soft signs" such as loss of appetite, reduced oral intake, new onset/

Table 2. Common themes in culture-change models

Theme	Summary		
Organizational Prerequisites			
Dynamic and committed leadership	Required to translate philosophies of culture change into tangible practices, and to direct and sustain change. Leadership initiates change processes, engages direct care staff through stressful change processes, eliminates administrative barriers to innovation, and builds partnerships with stakeholders. Leaders play a role in creating environments of honesty, openness, teamwork, and responsiveness.		
Human resource capacity	Human resource challenges pose barriers to culture change in LTC. Minimum staffing levels (higher than current levels) are required. Preferable staff-to-resident ratios in a social model of care are unclear, but adaptations to each LTC home's context is recommended. Job description changes that enhance staff flexibility and training to support integrated holistic care are advocated. Shifts from statutory competency alone to values-based care promoting person-centredness are encouraged.		
Informed communities and partnerships	Culture change requires stakeholder engagement and buy in. Implementation and sustainment of culture change require meaningful participation of health workers, policy makers, residents, and families in collaborative decision making. Early stakeholder engagement is crucial for integrating relevant ideas and feedback into the culture-change process to foster ownership.		
Facilitatory Mechanisms			
Workforce reorganization	Workforce redesign is needed to flatten hierarchies in LTC. Teamwork, coherence, communication, and familial work culture are priorities that allow flexibility in meeting residents' needs. Interdisciplinary collaboration ensures that services are responsive to residents' needs. Self-directed teams should be prioritized, with managers and supervisors acting as team facilitators. Consistent staff-resident assignments based on shared interests and personalities can foster relationship building.		
Staff empowerment	Self-directed teams must be backed by organizational policies and practices. This reinforces the social model of care and creates supportive environments that allow staff's continued autonomy and creativity. Opportunities should be provide for staff to express concerns or suggest improvements. Such empowered contexts may allow direct-care staff who work closely with residents to advocate for their needs.		
Quality improvement processes	Culture change can be considered as continuous quality improvement with specific measurable outcomes. Mechanisms for continuous feedback, including collaborative learning circles, resident councils, and family forums, allow for regular evaluation and improvement. Direct-care staff may serve as formal or informal leaders in the quality improvement process.		
Frontline care changes			
Resident directedness	Staff develop individualized care plans that recognize residents' personal history, experiences, and personality. To reinforce residents' self-determination, dignity, and respect, residents (as much as is possible) make decisions about routine activities such as bedtimes, eating schedules, and participation in meaningful activities. Where possible, residents participate in routine chores such as meal preparation, cleaning, and activity planning. Residents' participation in providing care to themselves and one another can reduce feelings of helplessness.		
Homelike environments	A decentralized model of 10–15 residents per household is suggested, to improve relationships among residents. Resident may be grouped by personality, personal history. and/or cognitive ability. Dementia villages consisting of small household in-household meal preparation and dining, and safe outdoor access are gaining popularity. Personalizing physical space involves filling the environment with "stuff of life": common items otherwise found residents' homes that may be linked to residents' life stories. These changes require significant upgrades to aging facilities.		
Social connections	Interdependent and enduring relationships among residents, families, and staff are emphasized, contributing to a sense of belonging within the LTC community. Consistent staff assignments, respectful language, and positive person-work (a range of well-being-enhancing interactions by health workers including recognizing residents, validating their experiences, and celebrating their successes) can foster these relationships.		

 $\textit{Note}. \ \text{Themes emergent from analyses of selected culture-change models with adaptations from Armstrong et al.}, 2019$

worsening confusion, and diarrhea (British Geriatrics Society, 2020). Strong relationships among care providers, family, and residents can facilitate early identification of these subtle symptoms and ensure swift response. Close relationships can also reduce isolation and loneliness among residents' and LTC care providers.

Culture-change models encourage connections among residents, families, and community; for example, the use of telehealth services to virtually connect loved ones with residents (Hado, Feinberg, Friss Feinberg, & Feinberg, 2020; van Dyck et al., 2020) provides vital emotional support (Hado et al., 2020). In keeping with person- and relationship-centred goals of culture change, additional opportunities must be considered to engage residents, families, and communities within a sensible IPC framework (British Columbia Ministry of Health, 2020).

Balancing "home-like" physical spaces with IPC is perhaps one of the most contentious and challenging issues in LTC (Clifton et al., 2018). Some culture-change models encourage adding "stuff of life" items within the physical space to create a home-like environment (Clifton et al., 2018). These items may be perceived to complicate routine disinfection practices. Yet, studies have shown no clear evidence linking them with increased infection rates (Mondelli, Colaneri, Seminari, Baldanti, & Bruno, 2020). The contribution of fomites to infections in real-world health care settings where routine cleaning practices are implemented is quite limited (Clifton et al., 2018; Mondelli et al., 2020).

Culture change's goals of enabling more privacy and creating more private spaces for LTC residents can further limit the potential for widespread infections in LTC, especially with decentralized care settings in small, self-sufficient households (Koren, 2010; Sheard, 2014). With decentralization, residents live in smaller households of 10–15 residents selected based on shared history and interests. Decentralization during COVID-19 can allow more

efficient isolation measures that are less burdensome to residents and families. Perhaps, households with an infected resident may be isolated from the larger group without the need for whole facility lockdowns (Yen, Schwartz, & King, 2020).

In LTC homes that have been converted from buildings previously used as hospitals, schools, or other institutional facilities, shared rooms are common (Liu et al., 2020). Culture-change models however advocate for private resident rooms and newer facilities. Preliminary reports have linked the size, age of building facilities, and proportion of residents in shared rooms with the severity of COVID-19 outbreaks in LTC (Estabrooks et al., 2020; Liu et al., 2020). Fewer shared rooms could decrease disease spread and improve the effectiveness of isolation measures (Estabrooks et al., 2020). Culture-change models also promote residents' access to outdoor spaces without the risk of wandering (Estabrooks et al., 2020; Harris, Topfer, & Ford, 2019). Such settings allow families, friends, and community members to interact with residents in a manner consistent with physical distancing measures while supporting residents' well-being during the pandemic (Estabrooks et al., 2020).

Thinking Ahead: Linking Culture Change with IPC and Pandemic Response

Initial responses to the COVID-19 pandemic focused on preventing infections among residents and care providers. In many cases, these responses resulted in restrictive measures not aligned with person- and relationship-centred care as advocated in culture change. Evidence suggests that reversion to institutionalized care in attempts to achieve public health goals of reducing infections fails to meet residents' physical, mental, emotional, and spiritual needs. It also fails to meet families' expectations of care and threatens staff mental health and well-being. Given the continued risk of COVID-19 and other infectious diseases, LTC leaders must consider measures to achieve IPC goals while sustaining a focus on person- and relationship-centred care. Pandemic response measures should not solely focus on IPC, but on integrated measures to fully support residents' quality of life, as well as staff and family well-being (Stein et al., 2020).

Evidence demonstrates that culture change and IPC share common, mutually reinforcing goals. Central to successful integration of culture change and IPC is the need for data and surveillance programs in LTC. These programs can leverage existing quality improvement structures of culture change along with public health measures, such as access to COVID-19 testing, PPE, optimal staffing levels, and staff support to effectively respond to disease outbreaks (Estabrooks et al., 2020). However, established measures must also focus on person- and relationship-centred measures that assess what matters to LTC residents and their families (Benson, 2020). Such measures can address the limited and often equivocal evidence about the impact of culture-change models on resident, staff, and family outcomes (Petriwskyj, Parker, Brown Wilson, & Gibson, 2016). Coordination with acute care systems should also be prioritized, with investments to further integrate LTC into the broader health system, ensuring that residents have access to appropriate acute care when needed (Holroyd-Leduc & Laupacis, 2020).

Restrictive ICP measures may be reasonable as a short-term solution, but with the COVID-19 pandemic's persistence, more integrated approaches will likely result in less adverse outcomes (Stein et al., 2020). Where possible, health authorities must actively

engage the LTC community in crafting IPC measures (World Health Organization, 2020). Care must be taken to balance prevailing risks with benefits, using available data. Technology can also be leveraged to bridge gaps when risk from physical visits outweigh benefits (Edelman et al., 2020).

Finally, evidence is scarce on the specific contributions of culture change to COVID-19 infection rates in LTC settings. We must begin to collect data on each aspect of culture change and how they contribute to risk of infection, along with necessary alterations needed to meet residents' complex needs while protecting their health

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