7 *Does a strong long-term care system benefit the health system (and vice-versa)?*

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7.1 Introduction

This chapter investigates the intricate relationship between the long-term care and health sectors. Historically perceived as separate entities, there is a growing recognition of their interdependence, especially when evaluating the health outcomes and health care utilisation of older people. The global ageing population presents a unique challenge to the health sector. As the number of older people rises, so does the demand for both health care and long-term care. In this context, the significance of a well-developed long-term care system becomes evident. Such a system not only enhances the quality of life for older people but also acts as a crucial buffer, reducing the pressure on traditional health care settings that are not designed for and are ill-suited to providing long-term care. By ensuring older people receive consistent and high-quality care outside hospitals and clinics, the likelihood of health crises that necessitate emergency medical attention diminishes.

A core argument presented is the potential benefits of integrating both types of care. The Covid-19 pandemic further underscored the vulnerabilities within both sectors, emphasising the urgency of achieving greater coordination. Through exploring various integration methods, from system level (macro integration) to service-level (meso integration) and clinical processes (micro integration), this chapter sheds light on the complexities of such integration. The evidence is inconclusive at times, and the myriad ways care can be integrated adds to the complexity. However, given the problems that a lack of coordination causes, the question is less of whether integration works, but rather how to ensure that it does. This demands that integration is approached with a comprehensive understanding of its inherent challenges and complexities, and an appreciation that the benefits may take time to be fully realised.

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This chapter considers the extent to which current evidence supports the argument that well-developed systems of long-term care may benefit the health sector, by improving people's health and wellbeing and ultimately reducing pressure on health care providers. The first section explores the theoretical foundations of the relationship between the two sectors, including the mechanisms through which access to long-term care may influence health care utilisation. Implicit in this discussion is that the two sectors are distinct entities. In practice, long-term care and health sectors are often integrated to some degree, even when they are funded and organised separately. This is explored in the second section of this chapter, where the relationship between long-term care and health care is examined through the lens of integration. Here, the impact of coordination between sectors on older people's health outcomes and the health sector are considered, drawing upon current evidence and case examples. In the third section of this chapter, links to the experience of Covid-19 are highlighted, and the implications for understanding the interface and divide between long-term care and health sectors discussed. Finally, acknowledging empirical challenges, the chapter concludes by presenting key areas where further evidence is needed to strengthen our understanding of the relationship between long-term care and health care.

Given the focus of this chapter – the relationship between health care and long-term care – the ensuing discussion draws upon evidence from high-income countries where *both* types of care exist in some form or other. This typically reflects the location of published evidence. However, many of the issues raised in this chapter are relevant to LMICs, where demand for long-term care will inevitable rise as populations age.

7.2 Can (and does) access to long-term care reduce older people's use of health care?

In most high-income countries, long-term care systems are organised and funded separately to health sectors. Yet both sectors are capable of exerting some degree of influence over the other. This interface between the two can be understood through the lens of older people's access to long-term care and health services. This section explores the ways in which access to long-term care is capable of reducing older people's use of health care, and if current evidence confirms these arguments.

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Access: First, what is meant by *access* to long-term care? Access is a term often used within policy, yet its definition is complex. As mentioned in chapter 2 of this volume, one of the most widely accepted and evidence-supported theoretical frameworks of access to care is Andersen's model (Andersen, 1995). In this framework, access is an iterative process through which care outcomes are shaped by environmental, population and behavioural factors, as well as care processes and quality. In a more recent development, Gulliford and colleagues (2003) take a slightly different approach to operationalising access. In their framework, access to care is defined as: the availability and supply of care; the utilisation of care; the equity of care; and the quality and effectiveness of care. More recent, and more patient-centric perspectives, include that proposed by Levesque et al. (2013), which includes five dimensions of accessibility of services: 1) approachability; 2) acceptability; 3) availability and accommodation; 4) affordability; and 5) appropriateness. Five corresponding abilities of persons interact with the dimensions of accessibility to generate access, including: 1) ability to perceive; 2) ability to seek; 3) ability to reach; 4) ability to pay; and 5) ability to engage with care. However, most studies typically operationalise access as the *availability and supply* of care, and the *utilisation* of care. This is also the approach adopted within this chapter.

Now that access is defined, let's consider how access to long-term care could influence older people's use of health care. Two mechanisms may underpin this relationship: prevention and substitution.

Prevention: Care that supports and maximises independence with day-to-day activities can prevent deteriorations in older people's health. The evidence for this argument is convincing. Home care programmes postpone the loss of functional independence (Stuck et al., 2002). Unmet support needs for ADLs predict higher rates of hospital admissions and mortality (DePalma et al., 2013; Hass et al., 2017; He et al., 2015; Lo et al., 2015; Pudaric et al., 2003; Xu et al., 2012; Gaugler et al., 2005; Sands et al., 2006). Good health is enjoyed by those who live with greater day-to-day independence (Gama et al., 2000), and chapter 3 of this volume sets out the evidence that being covered by the public long-term care system leads to higher psychological wellbeing. Underpinning this premise is the basic notion that health and long-term care needs are not divisible, but interdependent. Such interdependency extends to the health and long-term care services

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that are designed to address these needs. There is therefore a clear mechanism through which long-term care can prevent the use of health services because support to stay independent has benefits for older people's health. By the same logic, a well-resourced long-term care system should also lower health care demand for unpaid carers. Those who provide such unpaid care are typically at greater risk of poorer health. A long-term care system that supports, or largely reduces the need for, unpaid carers, may likely support better health outcomes for this population. Evidence of reduced unplanned health care use among those using long-term care (and their carers) would support this argument.

The causality potentially runs both ways: more investment in prevention of morbidity earlier in the life course may delay functional decline and care needs later.

Substitution: A package of home support or residency in a care home may substitute for unnecessary stays in hospital. In this scenario, an older person may be well enough to be discharged from hospital, but the stay is prolonged because a long-term care arrangement is unavailable (Gaughan et al., 2015; Forder, 2009). Evidence of shorter lengths of hospital stay for populations within areas with greater long-term care supply would provide support for this argument.

Both the prevention and substitution arguments suggest that access to good quality long-term care can benefit the health sector. Each of these scenarios is possible. Yet a key consideration is the context in which these mechanisms occur. Here, context refers to the conditions of access imposed on sectors by policy. Eligibility criteria, universalism and means testing are important conditions of access (see chapter 3 in this book). The extent to which access to each of long-term care and health care is hindered or enabled by these conditions will also shape the relationship between the two. For example, restrictive or inconsistently applied long-term care eligibility criteria may hinder access to supportive care, resulting in unmet need. As evidence shows, unmet long-term care needs will then increase demand on health sectors (e.g., see DePalma et al., 2013; Hass et al., 2017; Sands et al., 2006), particularly those that are universal and free at the point of use. Similarly, payment barriers to long-term care are likely to shift the resulting unmet need onto health sectors. The degree of successful integration between both sectors is also a critical contextual factor for these mechanisms, which is explored in more detail later in this chapter. Figure 7.1 summarises these arguments.

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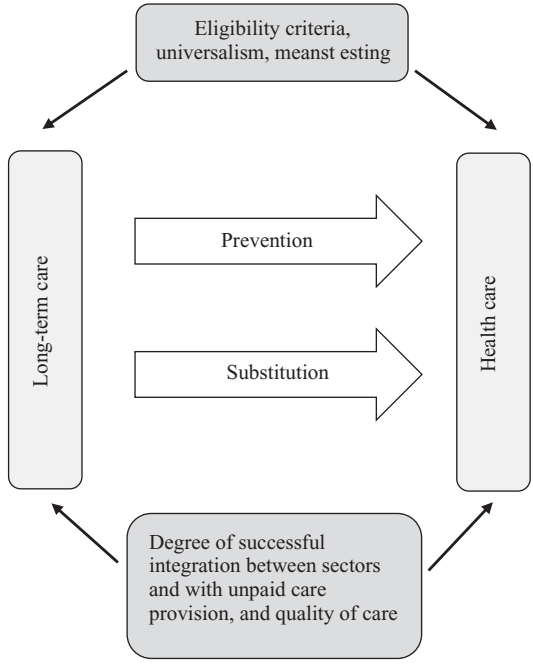

Figure 7.1. The ways in which long-term care can influence health care utilisation

Now that the ways in which long-term care can reduce older people's use of health care are set out, let's look at whether evidence confirms this. Three recently published systematic reviews offer a good starting point.

The first is a Cochrane review of ten studies that compared outcomes between older populations using home care or residential care long-term care (Young et al., 2017). This review did not focus exclusively on health service utilisation outcomes, but evidence on the outcome of hospital admission was reported in three of the ten studies. Evidence about the impact of home care compared to institutional long-term care on hospital admissions was uncertain. Two studies favoured institutional long-term care for a greater reduction in hospital admissions, while one study favoured home care. All three studies were subject to methodological biases and the findings should be treated with caution.

Similar conclusions were derived from another systematic review (Spiers et al., 2019a). Drawing upon thirteen studies, this review

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reported evidence about the relationship between older people's use of long-term care and their use of health care. Evidence in this review was complex: health care use outcomes were diverse, and compared in different ways. A small amount of evidence suggested that residing in a care home with nursing was associated with fewer hospital admissions or a reduced risk of hospital admission. This pattern was observed when hospital admissions were compared between care homes and usual care, and when compared according to the length of care home stay. In contrast, there was no strong evidence of an association between the use of long-term care and other health care utilisation outcomes, such as length of hospital stay, delayed discharges and use of emergency health services.

The third systematic review examined the relationship between long-term care supply and health care use by older populations (Spiers et al., 2019b). Across twelve studies, evidence was weighted towards an inverse relationship. That is, greater long-term care supply was associated with fewer hospital readmissions and delayed discharges, and reduced length of hospital stay and health care expenditure. The direction of this evidence was not consistent, with some exceptions. However, overall this review suggested that care homes in particular may have a beneficial impact on the health sector. This review also found evidence about the relationship between home care supply and secondary health care utilisation. However, this evidence was smaller in quantity and did not offer a clear view about the benefits of this type of long-term care for the health sector.

In summary, these reviews suggest that a greater supply of care homes is likely to benefit the health sector, and in particular, secondary health care services. In contrast, there is a less consistent message when studies examine the utilisation of long-term care, rather than its supply.

Since the publication of these reviews, more evidence has become available, which adds to this already complex picture. A study by Walsh and colleagues (2020) examined home care supply in Ireland. Their findings support the argument that long-term care benefits the health sector: a 10 per cent increase in formal home care provision corresponded to a reduction of between 0.45 and 1.2 days in hospital. Furthermore, this association was stronger for females than males, but similar effects were found between married and unmarried populations. The impact of home care supply on length of hospital stay was strongest for inpatients who were likely to be those experiencing delayed discharges.

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Analyses of English data were published in three studies between 2018 and 2021. One study indicates there is no evidence to link long-term care supply with emergency admissions related to falls or neck of femur fractures, or length of hospital stay (Liu et al., 2021). Another found no evidence that reductions in government long-term care spending was linked to an increase in emergency hospital admissions (Seamer et al., 2019). A third study demonstrated a weak substitution effect between community care contacts and hospital costs (Lau et al., 2021). However, community care contacts in this study were not specific to long-term care and also included community health services.

For convenience, the studies and reviews described thus far are summarised in Table 7.1. From this table we can appreciate the diversity of the evidence: the different types of long-term care, the different ways that access to care is conceptualised, and the range of health care use outcomes scrutinised.

So, how do we make sense of this complicated picture? A balanced interpretation should acknowledge that there is a fairly consistent trend of evidence that care homes have the potential to reduce secondary health care use. The beneficial impact of home care on secondary health care use is less certain, reflecting the heterogeneity of the evidence base.

In terms of the mechanisms outlined earlier, to what extent does this evidence support the arguments? Certainly, the link between care homes and secondary health care use – particularly delayed discharges and length of stay – supports the substitution argument. That is, long-term care can potentially substitute unnecessary hospital care. Although we can be reasonably confident about this relationship, there is far less certainty about the size of the impact of long-term care. The review of long-term care supply, for example, was unable to quantify the size of the impact in terms of potential absolute cost savings and saved hospital bed days (Spiers et al., 2019b). The preventive role of long-term care is also partly supported by evidence of fewer hospital admissions in one review. However, when considering the more recent studies, evidence about hospital and emergency admissions was inconsistent.

Overall, there is some evidence to show that long-term care can benefit health sectors. Yet a fair assessment of this evidence would also acknowledge the heterogeneity within these findings. What may account for this heterogeneity? Four factors are critical in this discussion.

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Table 7.1. *Summary of evidence about access to long-term care and health care utilisation*

Study	How is access operationalised?	Type of long-term care	Health care use outcomes	Evidence that long-term care benefits health sectors?
Young 2017	Utilisation	Care homes Home care[a]	Hospital admissions	Yes, for care homes
Seamer 2018	Availability and supply	Public expenditure	Emergency admissions	No
Spiers 2018	Availability and supply	Care homes Home care	Hospital readmissions, delayed discharges, length of hospital stay, health care expenditure	Yes, for care homes Less consistent for home care
Spiers 2019	Utilisation	Care homes Home care[b]	Hospital admissions, length of hospital stay, delayed discharges, emergency health services	Yes, for hospital admissions No for other outcomes
Walsh 2020	Availability and supply	Home care	Length of hospital stay	Yes
Pace 2020	Availability and supply	Public expenditure	Emergency admissions, length of hospital stay	No
Lau 2021	Utilisation	Community care contacts[c]	Hospital costs	Yes, but a weak effect

Notes: [a] Compared home care with care home residency; [b] Comparisons included with usual care, between types of care, and according to the amount of care; [c] Includes community health services

1. The impact of formal long-term care use on health care use depends on the operationalisation of access to care

The way that access to care is operationalised is important. When studies examine the availability and supply of long-term care, the evidence about the impact on hospital use tends to be more consistent. The overall trend of findings would suggest that greater supply of long-term care is linked to reduced use of secondary health care. By contrast, evidence that considers the utilisation of long-term care – and how this relates to older people's health care utilisation – is less consistent. One reason for this is that the *utilisation* of care is more vulnerable to a range of confounding influences than the *supply* of care (Andersen, 1995; Gulliford et al., 2002). Expectations of and attitudes to care, for example, may determine whether available care is used (Sarkisian et al., 2002). Unpaid care often supplements or replaces paid long-term care services (Davey & Patsios, 1999; Tennstedt et al., 1993). Such use of unpaid care may then moderate the extent to which use of paid long-term care influences health care use.

Inevitably, the measurement of long-term care utilisation is complicated – certainly more complicated than the measurement of whether care is available. It is not unreasonable, therefore, to expect that evidence about the benefits of long-term care for the health sector may lack consistency when studies consider the utilisation rather than the supply of care. Even so, any observed impact of long-term care supply assumes that at some point care has been utilised.

2. The impact of formal long-term care use on health care use depends on the type of long-term care considered: home-based vs institutional care

The studies described above examined two types of long-term care: care homes and home care. These are two very different forms of care, serving populations with different needs. Older people residing in care homes have a greater level of dependency than those still able to manage in community settings (Jagger et al., 2011). Care home residents are therefore more likely to need health care.

Similarly, care homes are designed for people with greater levels of dependency and greater complexity in needs. If a resident's health deteriorates, care homes should in theory be equipped to manage this when it first occurs. For example, care homes should have access to specialist health staff and primary care. Such features would enable

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care staff to manage their residents' health and prevent transfers to hospital where appropriate. In contrast, home care is often delivered by individual or small groups of care staff who work without these links to specialist health expertise. In the context of care delivered at home, a care recipient will more likely be directed to hospital in the event of an acute deterioration in health.

These important differences might explain why a stronger trend of evidence is observed for the impact of care homes on secondary health care, compared to the impact of home care. Even so, this hypothesis assumes such integrated arrangements between care homes and health staff are successful. In practice, such arrangements are rarely formalised (Gage et al., 2012; Iliffe et al., 2016).

3. The impact of formal long-term care use on health care use depends on the regularity of care provision

Care homes may demonstrate a greater impact on the health sector than home care because of the regularity of the care delivered. Long-term care delivered in home settings is episodic. In contrast, populations living in care homes should have access to staffing for assistance throughout the day. A continuous presence of staff should equate to more opportunities for assistance when needed. This, in turn, could prevent deteriorations in health and thus the need for health care. The continuous presence of staff in care homes may also foster responsive relationships between care staff and residents. Such responsive relationships are a key component of high-quality care (Anderson et al., 2016; Wilson et al., 2009), and may enable more efficient management of residents' health. This uninterrupted form of long-term care in care homes may be a critical factor for moderating residents' health care use. Admittedly, this is a rather optimistic hypothesis. The reality is that workforce pressures persist in long-term care, with retention of care staff an ongoing challenge. Thus, while continuity of staffing in care homes may be critical for preventing deteriorations in health (and thus avoiding health care use), the extent to which such continuity is realised in practice can be questioned.

4. The impact of formal long-term care use on health care use depends on care processes and quality of care

Finally, substantial variations in the processes of care and care quality may account for the heterogeneity in findings. These variations can arise from a multitude of factors, including regional differences,

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individual practitioner approaches and the unique needs of each patient. Even with standardised care protocols, packages of care will differ from person to person. This is because every individual has unique health needs, personal preferences and circumstances that can influence the type and extent of care they receive. Quality of care is deeply subjective and shaped by expectations, which differ across populations. For instance, cultural norms, personal experiences and societal values can all play a role in shaping one's perception of what constitutes high-quality care. This means that the long-term care being measured is not homogenous. It is a complex tapestry of services, interventions and interactions that can vary widely even within the same health care system. These are the sort of confounding influences that are challenging to correct in any analysis of the relationship between access to long-term care and health care use. Such complexities underscore the need for nuanced and comprehensive evaluations when studying the impact of long-term care on health outcomes.

Summary

The question set out at the start of this section was whether access to long-term care can reduce older people's use of health care. The encouraging answer is: yes, and there is a sensible and intuitive logic to how a high-quality long-term care system can benefit health sectors. However, the effect differs for different types of long-term care and depending on which health care outcomes are considered. Answers to this question should therefore stress the importance of adopting realistic expectations about what this sort of evidence can reveal. The diversity and quality of long-term care, as well as the methodological challenges of isolating this relationship from a vast array of confounding influences, render a clear and consistent trend of evidence unlikely. A degree of pragmatism is called for, and a reflective approach to its interpretation. The shortcomings of the evidence base call for much more significant investment and improved access to various types of data to adequately investigate these issues and provide more precise and reliable answers. As pointed out, this is a highly complex web of interactions and effects that cannot be appropriately disentangled without more powerful studies.

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7.3 Improving coordination and integration between long-term care and health sectors: does it make a difference to older people's health and health care utilisation?

So far, this chapter has considered evidence about the relationship between long-term care and health sectors. An assumption underpinning much of this discussion is that the two sectors are distinct entities. While health care and long-term care are often delineated as distinct sectors in discussions and policy frameworks, a closer examination reveals significant overlap and interdependence. Long-term care includes medical as well as personal and social support. Aspects of medical care that fall under the umbrella of long-term care include skilled nursing care, rehabilitation services, medication management, chronic disease management, respiratory care, nutritional support, behavioural health management and palliative care. The implication of this is that the long-term care and health sectors are not truly distinct, even when they are funded and organised separately. The confluence of needs, especially among older populations, often requires services from both domains simultaneously. However, when health care and long-term care operate in separate silos, care recipients can face challenges in accessing comprehensive services, navigating between systems and experiencing seamless continuity of care. Such operational fragmentation can lead to gaps and potential redundancies in care and increased costs, adversely impacting the overall quality of life for the individuals in question.

The question then arises: can a more integrated approach between these sectors lead to enhanced health outcomes and efficiencies? The integration of both types of care offers another lens through which to examine the relationship between long-term care and health care. This section considers evidence about the extent to which greater integration and coordination of care between both sectors improves health outcomes for older people and benefits health sectors. The question of how integration of services both within the long-term care sector itself, and between long-term care and other services, can enhance access and efficiency is also discussed in chapter 4 of this volume.

First, what is meant by integrated care? Although this term is used frequently in care policy and practice, the ways in which care can be integrated are highly variable. Broadly speaking, care can be integrated at the system level (macro integration), the service-level (meso integration),

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and at the level of clinical and care processes (micro integration) (Briggs et al., 2018; Valentijn et al., 2012). In the following sections, examples of and evidence for each approach are described. Table 7.2 summarises these case examples for reference.

Table 7.2. *Case examples of integration between long-term care and health care*

Type of integration	Case examples
Macro integration	**Northern Ireland** Approach • Care commissioned and delivered through single trusts with shared budgets • Health care remained universal while means testing and payment barriers remained for some types of long-term care Experience • Resistance to shifting resources away from acute care, even with combined budgets • Integration has not enhanced or protected role of long-term care
	Republic of Korea Approach • Introduction of single-payer public long-term care insurance • Long-term care insurance ring-fenced from health insurance Experience • Insurance viewed favourably among public • Separate funding streams have hindered coordination of care in practice
Meso integration	**Canada** Approach • Program of Research to Integrate Services for the Maintenance of Autonomy (PRISMA)

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Table 7.2. (*cont.*)

Type of integration	Case examples
	• Integrated health and long-term care service to promote functional independence
	Experience
	• Lower rates of functional decline, unmet need, emergency department visits and hospital admissions in areas adopting the programme
Micro integration	**England**
	Approach
	• National Health Service Vanguard programme • Enhanced joint working across long-term care, primary and secondary health care settings and disciplines
	Experience
	• Stabilised emergency admissions for care home residents, but no difference in hospital bed days • Joint working across health and long-term care is impeded by professional boundaries, separate governance arrangements and different cultures of working between health and long-term care

Macro integration, in the context of blending long-term care and health care, can encompass a variety of meanings, ranging from the consolidation of funding mechanisms, to integrated decision-making processes, potential co-location of services, and unified governance, or a combination of these. There may be an argument that integrating long-term care and health care in this way erases, or at least diminishes, funding boundaries between sectors. The absence of these sort of boundaries could in turn facilitate timelier discharge from hospital into care homes or community packages of support. But is there evidence to support this? Can this type of integration improve outcomes for older people?

A good example of this type of integration is the health and care system in Northern Ireland: both types of care are commissioned and

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delivered through single trusts with shared budgets (Donnelly & O'Neill, 2018). Despite this structural integration, conditions of access to each type of care remain distinct. That is, health care is universal while means testing and payment barriers remain for some types of long-term care for older people.

Reflecting on the Northern Ireland experience, Gray and Birrell (2016) conclude that combining budgets and commissioning brought challenges that were not outweighed by benefits. The potential of shared budgets to create seamless moves between acute health care and long-term care did not materialise. Instead, they describe a resistance to shifting resources away from acute care, with concerns raised about the impact on hospital provision. These sorts of barriers are not new. Evaluations of other policy agendas that advocate for greater care delivered in community settings have reported similar opposition from acute providers (Spiers et al., 2016). Furthermore, Gray and Birrell (2016) note that these integration arrangements have done little to protect long-term care spending.

Long-term care funding in the Republic of Korea offers an interesting contrast to this example. As part of the inception of a new long-term care system in 2008, the country opted for single-payer public long-term care insurance that was separate from the country's national health insurance system (Yoon, 2021). This separation of funding mechanisms was intentional: a ring-fenced long-term care insurance was thought to be more attractive to the public, with less risk of placing financial burdens on health insurance. Indeed, the new insurance was viewed favourably among the public (Choi, 2015). However, while this separation has the benefit of de-medicalised long-term care, separate funding mechanisms have challenged coordination between sectors in practice (Choi, 2015; Kim & Kwon, 2021). Thus, experience from two different macro-approaches to integration in the Republic of Korea and Northern Ireland suggests that neither have created a situation in which coordination between sectors has improved.

Others are sceptical about the value and effectiveness of structural integration. Glasby (2017), for example, notes that while structural mergers look good publicly, they offer little success. Indeed, a review of integrated financing and care found no evidence that such approaches reduced secondary care use in the longer term (Mason et al., 2015). A further consideration is that while health care in universal systems is typically funded through a single source (e.g., the taxpayer), long-term

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care often receives funding through multiple sources, including both national and regional governments (OECD, 2011). These multiple sources add even greater complexity to integrated funding arrangements.

While macro integration endeavours to bridge the gap between health care and long-term care, the interplay of power relations, resources and operational intricacies cannot be understated. Both the Northern Ireland and the Republic of Korea examples serve as reminders that mere structural adjustments, devoid of deeper systemic recalibrations, might not suffice. These examples also demonstrate the diversity of arrangements that can fall under this umbrella, but do not preclude the possibility of successful approaches to integration. The challenge lies in discerning how best to navigate these complexities for the betterment of care outcomes.

Meso integration does not require combined budgets, organisations and commissioning, but combines services and inputs from different sectors, organisations and disciplines. A multidisciplinary team comprising health and long-term care professionals is a useful example of this type of integration. Given the diversity of what this could look like in practice, it is not surprising that evidence about the benefits is inconclusive. In a recent systematic review, integrated health and long-term care interventions for older people improved wellbeing and satisfaction, but demonstrated an inconsistent impact on outcomes such as ADLs, IADLs, perceived health, physical functioning and quality of life (Looman et al., 2019). Despite this, there are examples that support arguments for the effectiveness of integrating health and long-term care services.

One such example is the Program of Research to Integrate Services for the Maintenance of Autonomy (PRISMA) in Canada (Hébert et al., 2010). The service is designed for frail older people at risk of functional decline and comprises six core elements: coordination between managers locally and regionally; a single point of entry; a single assessment instrument; case management; individualised care plans; and a computerised clinical chart. Quasi-experimental evaluations of this programme have produced promising findings. Lower rates of functional decline, unmet need, emergency department visits and hospital admissions were observed in regions participating in the programme compared to non-participating regions (Hébert et al., 2010).

Given the mixed evidence reported elsewhere, why has this approach in Canada produced more uniform benefits across health and health utilisation outcomes? A number of explanations are possible.

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First, the remit of this integrated service is one that would benefit equally from input from both long-term care and health professionals. Promoting functional independence would be challenging without the involvement of long-term care experts, such as occupational therapists. There is therefore a rational pathway to impact, between the integration of health and long-term care professionals, and improved outcomes for older people. Second, in the evaluation by Hébert and colleagues, outcomes were clearly aligned to the service objectives. This is important to ensure that evaluations capture impact where it is most likely to occur. Finally, new service models take time to embed within systems of care. Short evaluation periods risk underestimating impact because new services have not yet had the chance to bed in (Kumpunen et al., 2019). Hébert and colleagues (2010) collected data over four years: this seems a reasonable period in which to expect to see change in older people's health and care as a result of the programme.

Micro integration reflects an adaptation of care processes that facilitates joint working protocols and information sharing in a way to support holistic care. One hypothesis is that this sort of integration could maximise the role of long-term care in preventing deteriorations in health. De Carvalho and colleagues (2017) argue that this type of integration is critical, as this is where clinical care processes can be tailored to promote older people's independence and wellbeing. Even so, evidence that these sorts of outcomes improve as a result of such integrated processes is inconsistent (Looman et al., 2019; Eklund & Wilhelmson, 2009). Furthermore, some have noted that these sort of joint working arrangements risk the medicalisation of long-term care (Carey, 2018).

Micro-level integration sometimes goes hand in hand with meso-level integration, when services are formally combined. A good example of this type of meso- and micro-level integration is England's National Health Service Vanguard programme (NHS England, 2016). With an investment of around £389 million across fifty localities in England, this large-scale programme aimed to lessen dependency on hospital care by shifting care into community and care home settings. Five different models were piloted between 2015 and 2018, in which services were reconfigured to offer greater integration of care and achieve the programme's aims. A key element of these pilot models was to enhance joint working across settings and disciplines.

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The Vanguard programme represented a significant investment in care, but did it work? An evaluation published in 2020 indicated that Vanguards were successful in stabilising emergency admissions for care home residents, but made no difference to total hospital bed days (Morciano et al., 2020). Key learning from this ambitious programme highlighted the same sorts of challenges noted elsewhere in the integrated care literature: primarily, that joint working across health and long-term care is often impeded by professional boundaries, separate governance arrangements and different cultures of working between health and long-term care, as well as acute and community care (Maniatopoulos et al., 2020; NHS Providers, 2021; Stocker et al., 2018). These are the key lessons for policy moving forward with agendas to promote greater integration of care.

Summary

Let's revisit the question posed at the start of this section. Does integrating long-term care and health care offer benefits for the health sector and older people's health outcomes? A confident answer to this question is challenged by the diverse ways in which integration is operationalised, delivered and evaluated. Evidence from Canada demonstrates the value of integrated health and long-term care for older people, with a model of care that has a focused remit with tangible objectives. Similarly, the Vanguard programme in England offers some support for greater integrated working with care homes. Yet despite repeated calls for greater coordination of health and long-term care by patient populations, evidencing the benefits of integration is challenging. Furthermore, it is important to question the idea that integration of care produces a linear preventive impact on health and health care use. For example, Mason and colleagues (2015) argue that closer working between health and long-term care can identify unmet need. In turn, this may increase overall care costs in the short term, with reductions more likely observed over the longer term.

Perhaps the most important consideration for this question is not whether care integration works, but what happens if long-term care remains disjointed from health care. As Glasby (2017) points out, even if integrated care fails on certain metrics, the consequences for patients and their wellbeing are much worse when health and long-term care remain fragmented and poorly coordinated. When health and long-

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term care operate in silos, patients often find themselves navigating a maze of services, leading to potential gaps in care and diminished overall wellbeing. In such fragmented systems, there is a risk of vital information being lost, of treatments being delayed, and of a lack of continuity in care. These challenges not only strain the health care infrastructure but also place undue stress on patients and their families. Thus, even if integrated care has its challenges, it is crucial to recognise that the repercussions of fragmentary health and long-term care systems can be far more severe for both patients and the broader health care ecosystem. The following section discusses how this was laid bare by the experience of Covid-19 in the United Kingdom.

7.4 Understanding the interface and divide between long-term care and health care: the experience of Covid-19 in UK

Following the Covid-19 pandemic, the lessons learned and the implications for policy are slowly emerging in the health and care literature. This section offers some early reflections on these experiences of Covid-19. Such reflections are in no way conclusive; at the time of writing, the pandemic was ongoing, and drawing firm inferences at this stage remains premature. Rather, this section aims to briefly summarise some of the key implications of the Covid-19 experience for understanding the relationship between long-term care and health care sectors, drawing on the example of the United Kingdom.

As many have noted, the Covid-19 pandemic highlighted the deeply divided and fragmented nature of the health and long-term care systems within the United Kingdom. High rates of infections and mortality in care home settings led to questions about the factors that account for this, and why care homes were particularly vulnerable to transmission. Daly's (2020) analysis of England's experience highlights the critical differences between health and long-term care in terms of their resourcing, infrastructure and cultural and political capital. Centrally funded and organised, with regulatory bodies, the NHS in the England was inevitably better prepared to respond to a pandemic than a long-term care sector that has been left underresourced. Multiple providers and comparatively poorer arrangements for regulatory oversight within long-term care added further challenges to the sector's ability to respond to Covid-19 (Daly, 2020). Daly's point about political value is also critical. Long-term care within England has often taken a back

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seat to health care politically speaking; this became even more apparent during the pandemic. For example, personal protective equipment (PPE) was prioritised in health care settings while care homes received around only 10 per cent of what was needed across the sector (BBC, 2021).

More recent evidence further illuminates how a poorly resourced long-term care sector was hit hard by the pandemic. For example, higher rates of infections were recorded in care homes with more bank agency staff, higher occupancy rates and lower staffing ratios (Tinsley, 2020; Dutey-Magni et al., 2021). Poor workforce conditions likely contributed to the spread of Covid-19: low wages and inadequate sick pay meant that self-isolation came at a cost for care workers (Shembavnekar et al., 2021). The financial loss may have forced some care staff to remain working while infected or showing symptoms (McAnea, 2021). This is supported by some evidence that lower levels of infection were observed among care homes where staff received sick pay (Tinsley, 2020), although other workforce conditions will have also shaped this outcome.

Ultimately, it is clear that in the United Kingdom at least, Covid-19 exposed the fragility of the long-term care system. So what does this mean for understanding the relationship between long-term care and health care? To answer this, it is important to revisit an argument made earlier in this chapter. Health and long-term care needs are interdependent, and long-term care plays a key role in supporting older people's health. Yet to do so – not just adequately, but optimally – long-term care must be properly resourced. If anything, the Covid-19 experience demonstrated what happens when long-term care sectors are not adequately resourced. Perhaps most of all, the Covid-19 experience shows that the chronic political and financial neglect of long-term care is no longer a viable option.

7.5 Implications

The relationship between long-term care and health care can best be characterised by an interdependency that reflects the close link between independence and good health. The evidence explored in this chapter, while at times complex and heterogeneous, provides some support for the argument that, in addition to being a critical resource for older populations, long-term care can benefit health and health sectors. So what are the implications of this? Building on the arguments and evidence discussed, this section considers three questions:

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1. What are the risks to health sectors of not developing long-term care for older populations?
2. What further evidence is needed to understand the relationship between access to long-term care and older people's health care utilisation?
3. What are the key empirical challenges and how can these be addressed?

1. *What are the risks to health sectors of not developing long-term care for older populations?*

Based on what has been discussed in this chapter, what would happen if governments chose not to develop long-term care sectors? The answer is simple. Evidence clearly shows a link between maintaining functional independence and good health (see, for example, the analysis of mental health outcomes presented in chapter 3). Inevitably, without long-term care to support older people's functional independence and wellbeing, the detrimental impact on health would be absorbed – successfully or otherwise – by already overstretched health sectors. Consequently, health care costs would rise, obliterating policy efforts to contain demand and expenditure.

Yet the focus should not solely – or even primarily – be on the cost implications of poorly developed, underresourced long-term care. A failure to develop and invest in long-term care will inevitably undermine efforts to support people to age with dignity and have a good quality of life. Hospitals are not designed for long-term care; nor are long hospital stays conducive to overall health and wellbeing. An absence of long-term care in community settings will also have broader societal consequences. Unpaid care often absorbs the unmet need resulting from insufficient coverage of paid services, with adverse financial, social and health impacts for those faced with increased care responsibilities.

2. *What further evidence is needed to understand the relationship between access to long-term care and older people's health care utilisation?*

To date, research about the relationship between access to long-term care and health care utilisation suffers from two key limitations. First,

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evidence typically focuses on care home settings and secondary (hospital) care. Comparatively less research has explored the impact of long-term care delivered in home and community settings. Going forward, a greater focus on the role and impact of home care is important. This would not only address an evidence gap, but also ensure investment in long-term care is targeted appropriately.

The immediate challenge to this is that community support, particularly home care packages, are highly personalised and thus heterogeneous. Indeed, measuring the receipt of home and community care alone may be futile. Perhaps more worthwhile is a focus on the quantity, frequency, focus and quality of care delivered in home and community settings. These are important dimensions of care that could be critical for moderating health care use, and future work could explore these further. Such work could be supplemented by qualitative investigations to unpack the consequences for health care use, including comparisons between those who do and do not receive the community long-term care they need.

Second, research to date has focused on the implications for secondary health care, with a particular dominance observed for hospital admissions and bed days. These outcomes make sense, because this is where most of the impact might be expected. Primary and community health care is overlooked in the current evidence. Yet this is a key part of the health sector that could be optimised to support and integrate with long-term care – particularly in terms of preventive approaches and models. Future research could explore the relationship between long-term care and primary and community health care. This might include consideration of the impact on service utilisation and the ways in which care across these settings could be integrated to optimise support.

It is also worth noting that current approaches have yet to fully exploit comparative case study methods at country level to explore the relationship between long-term care and health care utilisation for older populations. Few long-term care sectors are developed and implemented with a clear before and after baseline, while diverse contexts (health sectors, socioeconomic and political) render robust comparisons challenging. Even so, where a full, wide-scale reform of long-term care is implemented, this offers a valuable opportunity to track health sector outcomes over time from the baseline, and where possible, to compare outcomes across similar contexts. Doing so would help to

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elucidate evidence about the nature of the relationship between both sectors, and the mechanisms (prevention and substitution) underpinning this. A wave of reforms to long-term care has been instituted in Europe and elsewhere in the wake of the Covid-19 pandemic. This is a unique opportunity for policy makers at national and regional level to ensure that reform efforts are paired with evaluation and detailed research into the outcomes and impact of new models of care.

3. *What are the key empirical challenges and how can these be addressed?*

As noted earlier in this chapter, providing clear evidence about the relationship between access to long-term care and health care utilisation is challenging. Heterogeneous forms of long-term care and confounding influences are two of the key obstacles highlighted. Greater detail about the type, volume and frequency of care received within data may help to unpick some of this diversity in care. Similarly, collection of data on a range of important confounders such as expectations of care, unpaid care and financial resources would enable researchers to adjust for these within their analyses. These issues link to a wider obstacle: that there are limited data available from which to explore this topic. Administrative data and cohort studies form the two common data sources, but such data are not designed or optimised for exploring the relationship between access to long-term care and health care. Going forward, research on this topic would benefit greatly from more comprehensive data about the use of long-term care, including how usage changes over time. Finally, as indicated earlier, evaluations must accommodate the time it takes for new policies to bed in, and for initial investments to pay off. This is an important message for politicians, who may seek quick wins on shorter time scales to demonstrate value to the public. Tracking outcomes over longer periods will likely offer a more fruitful approach to evaluating and demonstrating the impact of long-term care on health and health sectors.

7.6 Conclusions

The health and long-term care needs of older people are symbiotic: when independence is maximised, good health follows. The relationship between long-term care and health care reflects this interdependency,

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and underlines why strong long-term care sectors can potentially benefit health sectors. A further argument identifies long-term care settings as a substitute for health care, with the potential to lessen demand on hospital services.

While there are reasoned arguments as to why long-term care can benefit health outcomes and health sectors, evidencing this relationship is challenging. The heterogeneity of long-term care, data availability and a range of confounding influences are important methodological limitations to understanding this relationship. As such, our expectations of this evidence should be pragmatic. Certainly, some types of long-term care are linked with reduced secondary health care utilisation. Inconsistencies observed in other sections of this literature are not that surprising given the limitations discussed, but they underline the importance of concerted investment in robust evaluations to generate evidence from which more confident conclusions can be drawn.

Yet the risks of not investing adequately in long-term care are starkly evident. Without a strong long-term care system, working in close concert with health care services, the burden on health care services increases, and the quality of life for older people diminishes. The societal implications, from over-reliance on unpaid care to increased health care costs, further emphasise the urgency of the situation. Hospitals, while essential, are not equipped to provide the specialised care that many older people require. Furthermore, the reliance on unpaid care, often shouldered by family members, can have significant social, financial and health implications.

Critically, simply doing nothing with long-term care is far too risky. Investment in this sector is critical to maximising the enormous potential of long-term care for improving people's health and for upholding the efficiency of health sectors in the longer run.

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