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## Interdependencies in Social Prescribing at the Health-Social Care Nexus

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**Abstract**

Purpose:
Holistic and person-centred care models such as social prescribing are gaining traction as transformative paradigms that address contextual determinants of health. Unlike rule-based coordination, social prescribing functions through relational interdependence, requiring dynamic collaboration and shared goals across fragmented service ecosystems. This study investigates how relational, institutional and infrastructural interdependencies shape organisational frontline capacity to deliver social prescribing in community settings.

Methodology:
Adopting a sequential explanatory mixed-methods design, participatory photovoice integrated with in-depth interviews and focus group discussions were conducted with well-being co-ordinators embedded in Singapore's public healthcare system. These well-being co-ordinators are organizational frontlines – defined as the points of interaction, interface, and time where institutions engage patients through social prescribing in co-creating care.

Findings:
Our findings identify how different types of interdependence influence anticipatory and adaptive capacities across relational, institutional, and infrastructural domains. We propose a practical analytical matrix that maps organizational frontline configuration (interaction, interface, time) to capacity domains (adaptive and anticipatory) and types of interdependencies (relational, institutional, infrastructural). This framework illustrates the operational implications for care continuity and system responsiveness.

Research limitations/implications:
The findings are based on a national and cultural context and may not generalize across systems. Future research could apply the framework in comparative or longitudinal studies. Irrespective, social prescribing programmes must invest in building relational infrastructure and institutional alignment at the organisational frontline. Performance measures should be tailored to accommodate non-linear, person-centred outcomes that emerge through adaptive and anticipatory coordination.

Originality/Value:
This paper contributes to service ecosystem theory and public management by conceptualising the organisational frontline as a dynamic site of interdependence

management. It offers a novel framework to guide practice and policy in embedding social prescribing into complex community ecosystems.

Keywords:
Social prescribing, organizational frontline, adaptive capacity, anticipatory capacity, public healthcare, community-based care, service ecosystem

Paper type:
Empirical research paper

## 1. Introduction:

Public health and social challenges are growing increasingly complex due to fast-ageing populations, the rise of chronic illnesses, and persistent socioeconomic inequalities. These pressures are driving a shift toward more holistic, person-centred models of care (Borgermans et al., 2017). One such model is social prescribing, a transformative paradigm that addresses the social determinants of health by linking individuals to non-medical, community-based supports (Anderson et al., 2018; Marmot, 2006; Nau et al., 2019; Ostrom et al., 2021; World Health Organization, 2022). Social prescribing has gained significant policy traction worldwide. For example, England's National Health Service now employs over 3,500 "link workers" to bridge primary care with community services, with more than 2.5 million people referred to such programs as of 2023 (National Academy for Social Prescribing, 2023).

In Singapore, social prescribing is incorporated into the national 'Healthier SG' strategy to promote preventive, community-based care (Ministry of Health Singapore, 2022; Singh, 2023; World Health Organization, 2024). Unlike traditional structured care pathways, social prescribing operates through a relational logic rather than rigid protocols, aligning shared goals among diverse actors and tailoring support to individual contexts across fragmented service ecosystems.

Social prescribing differs markedly from rule-bound institutional care. It unfolds in dynamic community environments where frontline healthcare and social care practitioners must continually adapt interventions to each patient's motivations, capabilities, and evolving life contexts. In these settings, service outcomes are shaped by multiple overlapping interdependencies – task, relational, outcome, and knowledge interdependencies, which are rarely visible in standardized performance metrics or linear coordination protocols (Lamothe & Dufour, 2007; Teo et al., 2025; Turner & Baker, 2019). The challenge for organizations is to develop anticipatory and adaptive capacity on the frontline, enabling practitioners to respond to emergent client needs and interdependencies in real time. This requires flexibility and discretion akin to that of "street-level bureaucrats" (Lipsky, 2010), as frontline workers negotiate complex needs that cannot be addressed by one-size-fits-all solutions.

Against this backdrop, our study focuses on the organisational frontline of social prescribing, where institutional systems at the nexus of health and social care engage with citizens to co-create value. We adopt Singh et al.'s concept of the organisational frontline as the interactional, temporal, and interface-based points of contact between institutions and citizens (Singh et al., 2017; Singh & Bridge, 2023). Within this frontline, we examine the role of Well-Being Coordinators (WBCs) in Singapore's public healthcare system – dedicated staff embedded in hospitals who connect discharged patients with community resources, mediating between individual needs and institutional capabilities to sustain continuity of care (World Health Organization, 2024). WBCs serve as boundary-spanning link workers situated at the intersection of healthcare and social support, operating within hospital-to-community transition programs pioneered in Singapore since 2019 (Teo et al., 2025).

Our objective in this paper is to elucidate how the organisational frontline of social prescribing collaborates with recently discharged patients to co-create value in the community setting. In particular, we investigate how WBCs function and intervene to transform care outcomes for patients after hospital discharge. By analysing WBCs' practices on the frontline, we shed light on how such roles facilitate integrated, person-centred care beyond hospital walls. The findings advance theoretical understanding of frontline co-production in public services and offer practical insights for policy and management. In an era of fast ageing societies and health system reforms, this study demonstrates how empowering frontline actors in social prescribing can help bridge healthcare and social services, align with national health policies (e.g. preventive care

under Healthier SG), and ultimately improve continuity of care for vulnerable populations.

Collectively, these insights underscore the policy relevance of investing in relational, community-oriented approaches and guide public managers in implementing and scaling social prescribing for greater public value.

## 2. Literature Review:

### 2.1 Service Ecosystems and Interdependence

Service ecosystems theory conceptualises public service delivery as an emergent outcome of resource integration, actor coordination, and institutional alignment across multiple levels (Aal et al., 2016; Akaka & Vargo, 2015; Lusch et al., 2016; Strokosch & Roy, 2024). Instead of viewing value as something delivered unilaterally by institutions, it is co-created through iterative interaction and mutual adjustment between service users, providers, and supporting organisations (Mccoll-Kennedy et al., 2012; Payne et al., 2008; Vargo et al., 2023).

This framing is relevant for social prescribing, which relies on connecting individuals to non-medical, community-based services to address social determinants of health (Beirão et al., 2017; Sandhu et al., 2022). In such distributed and decentralised systems, coordination is achieved through relational, institutional, and infrastructural interdependencies that cross organisational boundaries, rather than through hierarchical command and control (Chen et al., 2021; Sweeney et al., 2015). These interdependencies are often asymmetrical, non-linear, and context-dependent, placing a premium on frontline actors' discretionary capacity to adapt care pathways in real time (Chandler et al., 2019).

We build on this literature by distinguishing three types of interdependence: relational, institutional, and infrastructural. Each form of interdependence constrains or enables frontline responsiveness in different ways. These forms of interdependence are particularly consequential in fragmented care systems, where coordination cannot be taken for granted and must instead be constructed and maintained at the frontline (Raveendran et al., 2020; Tham et al., 2018). We conceptualise knowledge and information flows as an integral part of infrastructural interdependence.

### 2.2 Organisational Frontlines as Sites to Manage Interdependence

Organisational frontlines are increasingly recognised as the interface where macro-level policy ambitions are translated into micro-level practice (Singh et al., 2017). Rather than acting as passive conduits for top-down directives, frontline actors actively interpret, modify, and sometimes resist institutional logics in order to align with the lived realities of service users (Singh & Bridge, 2023). Singh and Bridge (2023) further conceptualise frontlines as epistemic sites, where the discretionary labour of professionals mediates between abstract institutional goals and the situated complexity of client needs.

This framing is particularly pertinent for analysing WBCs in the care service ecosystem. These WBCs perform extensive sensemaking, emotional labour, and coordination across organisational silos. In their capacity as social prescribing practitioners, their responsibilities extend beyond merely facilitating patient referrals to services. As our findings will show, WBCs function as relational knowledge agents: they bridge epistemic gaps between patients and institutions, realign care goals in light of evolving contexts, and manage interdependencies across domains. Their work underscores the importance of understanding the frontline as a strategic site of interdependence management, instead of a locus of service delivery.

### 2.3 Anticipatory and Adaptive Capacities in Complex Service Ecosystems

Extant governance scholarship has drawn attention to the need for anticipatory and adaptive capacities in addressing uncertainty and complexity in public service systems (Bovaird, 2008; Duit & Galaz, 2008; Eshuis & Gerrits, 2021; Guston, 2014). Anticipatory governance refers to the institutional capacity for foresight, proactive intervention, and risk mitigation before problems escalate. Adaptive governance, by contrast, involves the ability to respond flexibly and iteratively to emerging conditions through learning, feedback loops, and distributed decision-making (Teisman & Klijn, 2008)

These capacities are applicable in the context of social prescribing, where care delivery unfolds in community settings characterised by fragmented authority, incomplete information, and fluctuating patient needs. In such environments, predefined protocols and linear performance metrics often prove inadequate. Instead, service ecosystems must support frontline actors to exercising discretionary judgement, respond to relational signals, and recalibrate interventions in real time.

We contribute to this literature by showing how anticipatory and adaptive capacities manifest differently across relational, institutional, and infrastructural domains, and how each is enabled or constrained by the interdependencies managed at the organisational frontline. Our findings highlight the need for both top-down structures (e.g., risk escalation protocols, cross-boundary governance mechanisms) and bottom-up discretion (e.g., relational trust-building, context-sensitive timing) to support continuity and transformation in care delivery.

## 3. Methodology:

### 3.1 Research Design

This study employed a sequential explanatory mixed-methods design. In the first phase, a survey questionnaire is administered to participants. This was followed by qualitative data collection in the second phase, using participatory photovoice and in-depth interviews. The final phase comprised a series of three focus group discussions. This multi-phase approach allowed us to capture of participants lived experiences, field insights, and relational dynamics in a comprehensive manner.

### 3.2 Data Collection

Twenty-eight participants were recruited from three institutions within the largest regional public healthcare system in Singapore, using purposive sampling. All participants are well-being coordinators involved in social prescribing. Photovoice was used to elicit visual narratives of frontline interaction, allowing participants to document and reflect on critical moments and environments in their work (Harley, 2012; Holtby et al., 2015; Lune & Berg, 2017; Wang & Redwood-Jones, 2001; Wilson et al., 2007).

### 3.3 Analysis

All qualitative data was transcribed, anonymised, and coded using abductive logic in MaxQDA software (Braun & Clarke, 2012; Braun & Clarke, 2021; Charmaz & Belgrave, 2012; Conlon et al., 2020). Codes were iteratively clustered by interdependence, frontline configuration (interaction, interface, time), and capacity domain (anticipatory, adaptive) (Corbin & Strauss, 2015; Creswell & Poth, 2018; Susan, 1994; Thornberg & Charmaz, 2014; Timmermans & Tavory, 2012). This analytical matrix allowed us to triangulate patterns across multiple data sources and enhance the validity of our interpretations.

## 4. Findings:

The findings are structured around the manner in which diverse forms of interdependence, namely: relational, institutional, and infrastructural, shape the adaptive and anticipatory capacities of organisational frontlines in community-based social prescribing. Each form of interdependence manifests in distinct frontline configurations: interaction (e.g. relational work with patients), interface (e.g. coordination across actors and organisations), and time (e.g. ensuring continuity and appropriate timing of engagement). Below sections detail how each type of interdependence influences frontline work, drawing on illustrative examples from the WBCs.

Annex A presents the matrix that maps organizational frontline configuration (interaction, interface, time) to capacity domains (adaptive and anticipatory) and types of interdependencies (relational, institutional, infrastructure).

### 4.1 Relational Interdependence and Adapative Capacity

#### 4.1.1 Fostering trust as the basis of interactional engagement

WBCs consistently emphasized that initiating and sustaining client engagement depends on developing relational trust, particularly given patients' low health system literacy and social withdrawal. Adaptive capacity in this context involves tailoring the tempo and tone of interaction to the patient's emotional readiness and needs:

"*Sometimes I spend up to an hour with them at home, simply talking—because I want to see them beyond their medical conditions. They are not just patients with high blood pressure or diabetes. They are individuals, and I want to understand them on a personal level...*" (Patrick)

WBCs often engage individuals who are highly vulnerable and socially isolated, with poor social determinants of health. In cases involving trauma, chronic isolation, or mental health challenges, relational interdependence is magnified. Effective engagement requires time-intensive, emotionally attuned interactions and patience on the part of the coordinator. As one WBC noted, meaningful change in these situations is gradual:

"*… change takes time. The outcomes of our work are not immediate—but that doesn't mean they're not real."* (Hui Xin)

By fostering trust and showing personal commitment, WBCs adapt their approach to each client's pace. This relational groundwork is crucial for motivating vulnerable individuals to re-engage with care on their own terms.

### 4.2 Institutional Interdependence and Anticipatory Capacity

#### 4.2.1 Navigating Eligibility Criteria and Fragmented Mandates

Institutional misalignments such as conflicting referral pathways, unclear program boundaries, and rigid eligibility criteria, often undermine the potential for proactive, preventative care. WBCs frequently find themselves in situations where formal rules or siloed program mandates fail to accommodate the complex realities of community-based care. One coordinator described the frustration of a client being deemed ineligible for a beneficial service due to an arbitrary geographic boundary:

"*Although we arranged the visit and she liked the centre, she was told her home falls outside the*

*boundary. That really disappointed her.*" (Hui Xin)

Such structural gaps impede anticipatory engagement, where early intervention or pre-emptive support could prevent deterioration in a client's well-being. A lack of horizontal alignment between organizations arises when healthcare, social services, and community agencies operate under different rules or criteria. Such misalignment translates into missed opportunities for early intervention. At the same time, limited vertical flexibility in how policies are implemented locally constrains WBCs' discretion to bypass or adjust rigid rules. In short, WBCs' anticipatory capacity is curtailed when agencies fail to coordinate or when top-down rules leave little room for frontline judgment. Consequently, problems with institutional interdependence problems make it difficult to intervene before minor issues become crises.

### 4.3 Infrastructural Interdependence and Frontline Capacity

Infrastructural interdependence encompasses the tangible and intangible resources that link patients to services. Such tangible and intangible resources include transportation, technology, protocols, and information flows. This form of interdependence influences both adaptive and anticipatory capacities on the frontline. WBCs must often compensate for gaps in the service infrastructure in two ways: by bridging knowledge asymmetries at the interface between patients and providers, and by improvising solutions when formal support structures for risk management are lacking.

#### 4.3.1 Bridging informational and epistemic gaps through the interface

Many patients have low awareness of available services or misperceive their own needs. In response, WBCs act as knowledge brokers, translating between institutional logics and the patient's personal context. They demonstrate adaptive capacity by modifying official messages, simplifying complex information, and adjusting expectations to fit the practical constraints of patients' lives:

*"We conduct on-site interventions, primarily providing psychosocial support. When necessary, we also make referrals to relevant services. For instance, if clients are unable to shower or clean their homes independently, we can refer them to home help services for additional support. If they have difficulties attending medical appointments, we can arrange for medical escort services as well."* (Anjali)

In this example, the WBC aligns service offerings with the client's circumstances and motivation. Interface-level adaptability means calibrating the scale, intensity, and format of interventions to what is logistically feasible and culturally acceptable for the client. By leveraging their system knowledge and the flexibility of community resources, WBCs fill informational gaps and help clients navigate a complex care landscape that would otherwise be overwhelming.

#### 4.3.2 Improvising safety and care in high-risk environments

WBCs also routinely encounter clients with escalating psychosocial or health risks—such as expressed suicidal intent, domestic violence situations, or severe mobility limitations—without clear protocols or sufficient support for escalation. Given that social prescribing targets patients experiencing significant social inequities, such high-risk scenarios are not uncommon. WBCs often must exercise anticipatory judgment in the moment, improvising safety measures in real time where the formal infrastructure is absent or slow to respond:

"*What happens when someone says, 'I want to beat my wife' or 'I want to kill myself,' and still*

*refuses counselling? Then you're left thinking, 'So now what?'*" (Chien Ming)

"*Sometimes we even need to push them in a wheelchair. What if something happens while we're out with them? Who's responsible then?*" (Priya)

These frontline risks illustrate a need for infrastructural support from training, legal protection, to transport protocols for WBCs. There is a clear need for safeguards such as better training for handling crises, legal protections for staff acting in risky community settings, and protocols for transportation or emergency response. However, in the current decentralized system, such support may be lacking or inconsistently available. The absence of a reliable, system-wide safety net compels WBCs to rely on personal judgment and ad-hoc solutions, placing excessive emotional and operational burdens on individual coordinators. This underscores how infrastructural interdependence in terms of both physical resources, procedural and knowledge support, can constrain the anticipatory capacity of the frontline.

### 4.5 Synthesis: Interdependence, Frontline Configuration, and Capacity

Together, these findings show that WBCs enact adaptive capacity by tailoring care pathways in response to relational and informational asymmetries as well as develop anticipatory capacity by recognising risks and attempting to act preventatively despite structural constraints. These capacities are exercised through interaction (e.g., relationship-building with patients), interface (e.g., cross-boundary coordination and knowledge brokering), and time (e.g., sustained engagement and timely interventions).

The analysis reveals that organisational frontlines are not passive implementation sites but active zones of interdependence management, where formal institutional rules are continuously interpreted, or negotiated to enable value co-creation. Without appropriate relational, institutional, and infrastructural support in place, these frontlines face limits in achieving the holistic, long-term outcomes envisioned by social prescribing.

## 5. Discussion:

This study advances public management and service ecosystem scholarship by conceptualising the organisational frontline as a dynamic site in managing interdependence in community-based care. Drawing on the lived experiences of Well-Being Coordinators (WBCs) operating in Singapore's social prescribing landscape, we illustrate how frontline actors mediate between institutional intent and the complex, lived realities of communities. Far from serving as passive conduits for policy execution, WBCs function as relational knowledge agents who adapt, negotiate, and reconfigure service pathways in response to both human and systemic contingencies.

Three key insights are evident from our findings.

First, WBCs operate at the intersection of multiple forms of interdependence: relational, institutional, and infrastructural. Each form of interdependence shapes what is possible at the organisational frontline. Relational interdependence is evident in fostering trust and emotional labour is required to motivate vulnerable individuals to re-engage with the goals of care. Institutional interdependence is manifested in the need to align goals and processes across service boundaries. For example, navigating referral protocols, and eligibility criteria so that patients do not fall through the cracks. Infrastructural interdependence relates to the physical, procedural and informational pathways through which services are accessed. This includes the knowledge networks and information flows necessary to connect patients with resources and to enable WBCs to assist clients overcome low system literacy or navigational challenges. These

interdependencies impact service processes and care outcomes, and they must be actively managed by frontline actors in real time.

Second, the distinction between anticipatory and adaptive capacities clarifies the dual expectations placed on frontline actors. Anticipatory capacity involves proactive engagement, and early risk identification. For instance, detecting signs of psychosocial distress in a client and acting before a crisis, or navigating bureaucratic hurdles to overcome a service gap. Adaptive capacity, by contrast, is needed when plans falter or contexts shift, demanding on-the-ground improvisation, relational recalibration, and logistical workarounds. Our data illustrate that WBCs routinely toggle between these two modes, yet they often do so with limited formal infrastructure or guidance to support transitions. These findings underscore how frontline discretion is undervalued, despite being a critical governance mechanism in community-based care.

Third, effective service ecosystems require the convergence of relational, institutional and infrastructural capacities at the frontline. When institutional arrangements are fragmented or inter-organisational coordination is delayed, frontline actors are pushed into constant improvisation, compromising both their well-being and the continuity of care. In contrast, where systems enable bottom-up learning, cross-organisational responsiveness, and shared understanding of risks and roles, the efforts of frontline actors are amplified rather than constrained. This underscores the importance of designing frontline configurations across interaction, interface, and time, that are structurally supported and contextually responsive. The ecosystem of community-based care must integrate relationship-centred practice, flexible protocols for person-centred care, and robust infrastructure (including information and knowledge support) to fully leverage frontline contributions.

Collectively, these insights reposition the organisational frontline as a strategic interface where public value is negotiated and co-created under conditions of uncertainty. This perspective has direct implications for how relational care is conceptualised, operationalised, and evaluated in complex service ecosystems.

## 6. Conclusion

This paper examined how Well-Being Coordinators function as organisational frontlines in community-based social prescribing system. By analysing the key interdependencies (relational, institutional, and infrastructural) that shape their practice, we illuminate how frontline actors are either enabled or constrained in delivering adaptive, anticipatory care for vulnerable populations.

We advance a novel analytical matrix that links these interdependencies to frontline capacities (interaction, interface, and time), clarifying how different configurations either support or strain continuity of care. In doing so, we reconceptualise organisational frontlines as epistemic sites of care innovation, where discretion, knowledge brokering, and emotional labour are central to the creation of public value.

Our findings offer two core contributions to public management theory and practice. First, we show that frontline capacity is not simply a function of individual skill or professionalism. Rather, frontline capacity is deeply contingent on ecosystem design wherein flexibility in institutional arrangements, supportive coordination infrastructure, and relationally attuned governance are essential. Second, we argue for performance frameworks and accountability metrics that are non-linear given the co-created nature of care outcomes in community settings. Traditional metrics premised on transactional service delivery and linear accountability are insufficient for capturing the recursive, adaptive logic of relational care.

To strengthen the organisational frontlines of social prescribing, public managers including

public healthcare and community care leaders should consider investing in:

- Structured training for community workers in the frontline in areas such as risk navigation, relational engagement, and boundary-spanning collaboration.
- Escalation and feedback mechanisms that support anticipatory governance, so that early warnings and on-the-ground insights from frontliners inform higher-level decision-making.
- Evaluation tools and timelines that account for time-lagged and diffused outcomes of preventive care, instead of focusing only on immediate, individual-level outputs.
- Collaborative governance structures that integrate institutional and community perspectives, enabling cross-sector alignment and shared responsibility for patient well-being.

Future research should explore how these frontline roles and capacities evolve in different policy contexts. It should also investigate models of distributed accountability for shared care outcomes, and co-design participatory monitoring tools that make visible the contributions of frontline actors within complex, adaptive service ecosystems.

**Annex A:**
**Matrix mapping organizational frontline to capacity domains and types of interdependencies**

| Types of Interdependencies | Organizational Frontline Configuration | | | Capacity Domains | Description |
|---|---|---|---|---|---|
| | Interaction | Interface | Time | | |
| Relational | Build relationships and emotional connection | Earning patient trust | Longitudinal engagement | Adaptive | Sustaining motivation and trust over time through empathy, presence, and cultural sensitivity |
| | Emotional containment and de-escalation | Crisis response across health-social boundaries | Real-time responsiveness | Adaptive | Managing behavioural or emotional risk in the community |
| | Establish legitimacy with patients and professionals | Clarifying role in unfamiliar systems | Early or initial engagement | Anticipatory | Establishing credibility of WBC role for cooperation and recognition |
| Institutional | Escalate complex cases | Cross-system referrals, ethical decision-making | Contingent on risk escalation | Anticipatory | Creating formal mechanisms for structured escalation and accountability |
| | Monitor post-discharge needs | Operating beyond formal case closure | Post-discharge continuity | Adaptive | Extending care beyond institutional timelines to support community reintegration |
| | Structured risk assessment and pre-visit preparation | Data-sharing across systems and actors | Pre-engagement | Anticipatory | Proactively identifying safety, infection, or psychosocial risks |
| Infrastructural | Safe and practical service delivery | Negotiating unsafe home settings and volunteer shortages | During field operations (i.e., in community settings) | Anticipatory | Enabling protective protocols for frontline actors |
| | Patient mobility and access facilitation | Coordinating transport, escorts, physical support | Between appointments | Adaptive | Overcoming logistical barriers to community participation |
| | Data access and communication tools | System interconnectivit y across institutions | Just-in-time planning | Anticipatory | Ensuring WBCs can access and contribute to relevant patient records |

**REFERENCES:**


Aal, K., Di Pietro, L., Edvardsson, B., Renzi, M. F., & Mugion, R. G. (2016). Innovation in service ecosystems: An empirical study of the integration of values, brands, service systems and experience rooms. *Journal of Service Management*, *27*(4), 619-651.

Akaka, M. A., & Vargo, S. L. (2015). Extending the context of service: from encounters to ecosystems. *Journal of Services Marketing*, *29*(6/7), 453-462. https://doi.org/10.1108/jsm-03-2015-0126

Anderson, S., Nasr, L., & Rayburn, S. W. (2018). Transformative service research and service design: synergistic effects in healthcare. *The Service industries journal*, *38*(1-2), 99-113. https://doi.org/10.1080/02642069.2017.1404579

Beirão, G., Patrício, L., & Fisk, R. P. (2017). Value cocreation in service ecosystems: Investigating health care at the micro, meso, and macro levels. *Journal of Service Management*, *28*(2), 227-249. https://doi.org/10.1108/JOSM-11-2015-0357

Borgermans, L., Marchal, Y., Busetto, L., Kalseth, J., Kasteng, F., Suija, K., Oona, M., Tigova, O., Rösenmuller, M., & Devroey, D. (2017). How to Improve Integrated Care for People with Chronic Conditions: Key Findings from EU FP-7 Project INTEGRATE and Beyond. *International Journal of Integrated Care*, *17*(4), 7. https://doi.org/10.5334/ijic.3096

Bovaird, T. (2008). Emergent Strategic Management and Planning Mechanisms in Complex Adaptive Systems. *Public Management Review*, *10*(3), 319-340. https://doi.org/10.1080/14719030802002741

Braun, V., & Clarke, V. (2012). Thematic analysis. In P. H. Cooper, M. Camic, D. L. Long, A. T. P. Rindskopf, & K. J. Sher (Eds.), *APA handbook of research methods in psychology, vol. 2:*
*Research designs: Quantitative, qualitative, neuropsychological,*
*and biological* (pp. 57-71). American Psychological Association.

Braun, V., & Clarke, V. (2021). To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales. *Qualitative research in sport, exercise and health*, *13*(2), 201-216.

Chandler, J. D., Danatzis, I., Wernicke, C., Akaka, M. A., & Reynolds, D. (2019). How Does Innovation Emerge in a Service Ecosystem? *Journal of Service Research*, *22*(1), 75-89. https://doi.org/10.1177/1094670518797479

Charmaz, K., & Belgrave, L. (2012). Qualitative interviewing and grounded theory analysis. . In J. F. Gubrium, J. A. Holstein, A. B. Marvasti, & K. D. McKinney (Eds.), *The SAGE Handbook of Interview Research: The Complexity of the Craft* (2 ed. ed., pp. 347-366). SAGE Publications, Inc. https://doi.org/https://doi.org/10.4135/9781452218403

Chen, T., Dodds, S., Finsterwalder, J., Witell, L., Cheung, L., Falter, M. G., Tony , Snyder, H., & McColl-Kennedy, J. R. (2021). Dynamics of wellbeing co-creation: a psychological ownership perspective. *Journal of Service Management*, *32*(3), 383-406. https://doi.org/10.1108/JOSM-09-2019-0297

Conlon, C., Timonen, V., Elliott-O'Dare, C., O'Keeffe, S., & Foley, G. (2020). Confused About Theoretical Sampling? Engaging Theoretical Sampling in Diverse Grounded Theory Studies. *Qual Health Res*, *30*(6), 947-959. https://doi.org/10.1177/1049732319899139

Corbin, J. M., & Strauss, A. L. (2015). *Basics of qualitative research : techniques and procedures for developing grounded theory* (Fourth edition. ed.). SAGE.

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry & research design : choosing among five approaches* (Fourth edition. ed.). SAGE.

Duit, A., & Galaz, V. (2008). Governance and complexity—emerging issues for governance theory. *Governance*, *21*(3), 311-335.

Eshuis, J., & Gerrits, L. (2021). The limited transformational power of adaptive governance: a study of institutionalization and materialization of adaptive governance. *Public Management Review*, *23*(2), 276-296. https://doi.org/10.1080/14719037.2019.1679232

Guston, D. H. (2014). Understanding 'anticipatory governance'. *Social Studies of Science*, *44*(2), 218-242. https://doi.org/10.1177/0306312713508669
Harley, A. (2012). Picturing Reality: Power, Ethics, and Politics in Using Photovoice. *International Journal of Qualitative Methods*, *11*(4), 320-339. https://doi.org/10.1177/160940691201100402
Holtby, A., Klein, K., Cook, K., & Travers, R. (2015). To be seen or not to be seen: Photovoice, queer and trans youth, and the dilemma of representation. *Action Research*, *13*(4), 317-335. https://doi.org/10.1177/1476750314566414
Lamothe, L., & Dufour, Y. (2007). Systems of interdependency and core orchestrating themes at health care unit level. *Public Management Review*, *9*(1), 67-85. https://doi.org/10.1080/14719030601181225
Lipsky, M. (2010). *Street-level bureaucracy: Dilemmas of the individual in public service*. Russell sage foundation.
Lune, H., & Berg, B. L. (2017). *Qualitative Research Methods for the Social Sciences*. Pearson.
Lusch, R. F., Vargo, S. L., & Gustafsson, A. (2016). Fostering a trans-disciplinary perspectives of service ecosystems. *Journal of Business Research*, *69*(8), 2957-2963. https://doi.org/10.1016/j.jbusres.2016.02.028
Marmot, M. (2006). Health in an unequal world. *The Lancet (British edition)*, *368*(9552), 2081-2094. https://doi.org/10.1016/S0140-6736(06)69746-8
Mccoll-Kennedy, J., R., Vargo, S., L., Dagger, T., Sweeney, J., & Kasteren, Y. V. (2012). Health Care Customer Value Cocreation Practice Styles. *Journal of Service Research*, *15*, 370 - 389. https://doi.org/10.1177/1094670512442806 ,
Ministry of Health Singapore. (2022). *The White Paper on Healthier SG*. Singapore: MOH Singapore Retrieved from https://www.healthiersg.gov.sg/resources/white-paper/
National Academy for Social Prescribing. (2023). *The future of social prescribing in England*. National Academy for Social Prescribing. Retrieved July 28 from https://socialprescribingacademy.org.uk/resources/the-future-of-social-prescribing-in-england/
Nau, C., Adams, J. L., Roblin, D., Schmittdiel, J., Schroeder, E., & Steiner, J. F. (2019). Considerations for Identifying Social Needs in Health Care Systems: A Commentary on the Role of Predictive Models in Supporting a Comprehensive Social Needs Strategy. *Medical Care*, *57*(9), 661-666. https://doi.org/10.1097/mlr.0000000000001173
Ostrom, A. L., Field, J. M., Fotheringham, D., Subramony, M., Gustafsson, A., Lemon, K. N., Huang, M. H., & McColl-Kennedy, J. R. (2021). Service Research Priorities: Managing and Delivering Service in Turbulent Times. *Journal of Service Research*, *24*(3), 329-353. https://doi.org/10.1177/10946705211021915
Payne, A. F., Storbacka, K., & Frow, P. (2008). Managing the co-creation of value. *Journal of the Academy of marketing Science*, *36*(1), 83-96. https://doi.org/https://doi.org/10.1007/s11747-007-0070-0
Raveendran, M., Silvestri, L., & Gulati, R. (2020). The Role Of Interdependence In The Micro-Foundations Of Organization Design: Task, Goal, And Knowledge Interdependence. *The Academy of Management annals*, *14*(2), 828-868. https://doi.org/10.5465/annals.2018.0015
Sandhu, S., Alderwick, H., & Gottlieb, L. M. (2022). Financing Approaches to Social Prescribing Programs in England and the United States. *The Milbank Quarterly*, *100*(2), 393-423. https://doi.org/10.1111/1468-0009.12562
Singh, B. (2023). Singapore and the Politics of Ageing: An Overview. In *Singapore Ageing* (pp. 41-59). https://doi.org/10.1142/9789811265198_0003
Singh, J., Brady, M., Arnold, T., & Brown, T. (2017). The emergent field of organizational frontlines. *Journal of Service Research*, *20*(1), 3-11.
Singh, J., & Bridge, R. G. (2023). Interfaces, Interactions, Time, and the Frontline Nexus: Foundational Constructs and Focus for the Field of Organizational Frontlines. *Journal of Service Research*, *26*(3), 310-329. https://doi.org/10.1177/10946705231177385

Strokosch, K., & Roy, M. (2024). Health and social care integration: fixing a fixed service ecosystem for value co-creation. *Public Management Review*. https://doi.org/10.1080/14719037.2024.2375566

Susan, S. (1994). Analysis and Interpretation of Qualitative Data in Consumer Research. *Journal of Consumer Research*, *21*, 491-503. https://doi.org/10.1086/209413 ,

Sweeney, J. C., Danaher, T. S., McColl-Kennedy, J. R., Ostrom, A., & Anderson, L. (2015). Customer Effort in Value Cocreation Activities: Improving Quality of Life and Behavioral Intentions of Health Care Customers. *Journal of Service Research*, *18*(3), 318-335. https://doi.org/10.1177/1094670515572128

Teisman, G. R., & Klijn, E.-H. (2008). Complexity Theory and Public Management. *Public Management Review*, *10*(3), 287-297. https://doi.org/10.1080/14719030802002451

Teo, K. W., Low, L. L., Gan, W. H., Low, L. S. G., & Lee, C. E. (2025). Expanding the role of community hospitals to promote population health in Singapore. *Lancet Reg Health West Pac*, *55*, 101477. https://doi.org/10.1016/j.lanwpc.2025.101477

Tham, T. Y., Tran, T. L., Prueksaritanond, S., Isidro, J. S., Setia, S., & Welluppillai, V. (2018). Integrated health care systems in Asia: an urgent necessity. *Clin Interv Aging*, *13*, 2527-2538. https://doi.org/10.2147/cia.S185048

Thornberg, R., & Charmaz, K. (2014). Grounded Theory and Theoretical Coding. In U. Flick (Ed.), *The SAGE Handbook of Qualitative Data Analysis* (pp. 153-169). SAGE Publications Ltd. https://doi.org/10.4135/9781446282243

Timmermans, S., & Tavory, I. (2012). Theory construction in qualitative research: From grounded theory to abductive analysis. *Sociological theory*, *30*(3), 167-186.

Turner, J. R., & Baker, R. M. (2019). Complexity Theory: An Overview with Potential Applications for the Social Sciences. *Systems*, *7*(1).

Vargo, S. L., Peters, L., Kjellberg, H., Koskela-Huotari, K., Nenonen, S., Polese, F., Sarno, D., & Vaughan, C. (2023). Emergence in marketing: an institutional and ecosystem framework. *Journal of the Academy of marketing Science*, *51*(1), 2-22.

Wang, C. C., & Redwood-Jones, Y. A. (2001). Photovoice Ethics: Perspectives from Flint Photovoice. *Health Education & Behavior*, *28*(5), 560-572. https://doi.org/10.1177/109019810102800504

Wilson, N., Dasho, S., Martin, A. C., Wallerstein, N., Wang, C. C., & Minkler, M. (2007). Engaging young adolescents in social action through photovoice: The youth empowerment strategies (YES!) project. *The Journal of Early Adolescence*, *27*(2), 241-261.

World Health Organization. (2022). *A toolkit on how to implement social prescribing.* (9789290619765).

World Health Organization. (2024, December 13, 2024). *WHO designates SingHealth Community Hospitals as the world's first Collaborating Centre for social prescribing*. WHO Regional Office for the Western Pacific. Retrieved July 28 from https://www.who.int/westernpacific/newsroom/feature-stories/item/who-designates-singhealth-community-hospitals-as-the-world-s-first-collaborating-centre-for-social-prescribing