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Research Articles

Development Challenges and Economic Evaluation on Community-based Palliative Care Service in Thailand's Rural Area

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Citation:
Naruepatr, J.; Tanasritunyakul, A. (2026). Development challenges and economic evaluation on community-based palliative care service in thailand's rural area. *Parichart J. 39*(5),186-203. https://doi.org/10.55164/pactj.v39i5.285595

Article history:
Received: December 10, 2025
Revised: September 9, 2026
Accepted: September 21, 2026

Publisher's Note:
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Abstract:

Background and Objectives: Despite the growing recognition of palliative care in Thailand, further development is needed to address differences in lifestyles, social relationships, and care needs across urban and rural communities. Community based palliative care is particularly relevant in rural areas, where family and community networks play an important role in long-term care. The involvement of families, community volunteers, local authorities, and health care providers can support continuity of care and facilitate the use of available community resources. Strengthening these local networks may contribute to the sustainability of palliative care and improve coordination between community-based and formal health-care services. This study aimed to identify key factors supporting sustainable community-based palliative care in Kalasin Province, Thailand.

Methods: A mixed methods approach was conducted in Kalasin Town Municipality and Kamalasai Subdistrict Municipality. Participants included family members and primary caregivers of older patients receiving long-term care, together with stakeholders involved in community-based palliative care. Qualitative data were collected through in-depth interviews and focus group discussions. Quantitative data were obtained from questionnaires assessing palliative care expenditures incurred by patients, families, and caregivers. The qualitative and quantitative findings were considered together to provide a comprehensive understanding of factors supporting sustainable community based palliative care and the potential benefits of community-based care for patients, families, and caregivers.

Results: The findings identified social capital, strong local leadership, and community health coordinators as key drivers of sustainable community-based palliative care. Collaboration among families, volunteers, local authorities, and health-care providers facilitated care coordination and resource mobilization. These collaborative relationships also supported the connection between community resources and the care needs of patients and caregivers. Quantitative findings also suggested that community-based palliative care can reduce the financial burden of health care by lowering expenditures associated with hospital-based services and travel. The findings indicate that community resources and social relationships can play an important role in supporting both the continuity and sustainability of community-based palliative care.

Application of This Study: The findings provide guidance for local governments and health-care organizations in strengthening community networks, local leadership, and coordination mechanisms. These findings can support the development of community-based

palliative care approaches that utilize existing social relationships and resources while responding to the specific needs and context of each community. Strengthening collaboration among families, community volunteers, local authorities, and health-care providers may also help complement existing formal health-care services.

Conclusions: Sustainable community-based palliative care depends on strong social relationships and effective local coordination. The Compassionate Community approach can complement formal health services and should be adapted to local social structures and available community resources. Strengthening community participation, local leadership, and coordination among relevant stakeholders may contribute to continuity of care and the sustainable development of community-based palliative care.

Keywords: Palliative Care; Community-based Palliative Care; Compassionate Community

บทคัดย่อ:

ที่มาและวัตถุประสงค์: แม้ว่าการดูแลแบบประคับประคองจะได้รับการยอมรับมากขึ้นในประเทศไทย แต่ยังจำเป็นต้องมีการพัฒนารูปแบบการดูแลให้สามารถตอบสนองต่อความแตกต่างด้านวิถีชีวิต ความสัมพันธ์ทางสังคม และความต้องการการดูแลของประชาชนในพื้นที่เมืองและชนบท การดูแลแบบประคับประคองโดยชุมชนมีความเหมาะสมเป็นพิเศษสำหรับพื้นที่ชนบท เนื่องจากครอบครัวและเครือข่ายชุมชนมีบทบาทสำคัญในการดูแลผู้ป่วยระยะท้าย การศึกษานี้มีวัตถุประสงค์เพื่อระบุปัจจัยสำคัญที่สนับสนุนความยั่งยืนของการดูแลแบบประคับประคองโดยชุมชนในจังหวัดกาฬสินธุ์ ประเทศไทย

ระเบียบวิธีการศึกษา: การศึกษานี้ใช้ระเบียบวิธีวิจัยแบบผสมผสานในพื้นที่เทศบาลเมืองกาฬสินธุ์และเทศบาลตำบลกมลาไสย ผู้เข้าร่วมการศึกษาประกอบด้วยสมาชิกในครอบครัวและผู้ดูแลหลักของผู้สูงอายุที่ได้รับการดูแลระยะท้าย รวมถึงผู้มีส่วนเกี่ยวข้องกับการดูแลแบบประคับประคองโดยชุมชน ข้อมูลเชิงคุณภาพรวบรวมด้วยการสัมภาษณ์เชิงลึกและการสนทนากลุ่ม ส่วนข้อมูลเชิงปริมาณรวบรวมด้วยแบบสอบถามเพื่อประเมินค่าใช้จ่ายในการดูแลแบบประคับประคองที่เกิดขึ้นกับผู้ป่วย ครอบครัว และผู้ดูแล

ผลการศึกษา: ทุนทางสังคม ภาวะผู้นำท้องถิ่นที่เข้มแข็ง และผู้ประสานงานสุขภาพชุมชน เป็นปัจจัยสำคัญที่ช่วยขับเคลื่อนความยั่งยืนของการดูแลแบบประคับประคองโดยชุมชน ความร่วมมือระหว่างครอบครัว อาสาสมัคร หน่วยงานท้องถิ่น และผู้ให้บริการด้านสุขภาพช่วยส่งเสริมการประสานงานด้านการดูแลและการระดมทรัพยากรในชุมชน นอกจากนี้ ผลการศึกษาเชิงปริมาณยังสะท้อนว่า การดูแลแบบประคับประคองโดยชุมชนมีศักยภาพในการลดภาระค่าใช้จ่ายด้านสุขภาพ โดยเฉพาะค่าใช้จ่ายที่เกี่ยวข้องกับบริการในโรงพยาบาลและการเดินทาง

การประยุกต์ใช้: ผลการศึกษาสามารถใช้เป็นแนวทางสำหรับองค์กรปกครองส่วนท้องถิ่นและหน่วยงานด้านสุขภาพในการเสริมสร้างเครือข่ายชุมชน ภาวะผู้นำท้องถิ่น และกลไกการประสานงาน เพื่อสนับสนุนการพัฒนาระบบการดูแลแบบประคับประคองโดยชุมชนให้มีความเข้มแข็งและยั่งยืน โดยควรปรับรูปแบบการดูแลให้สอดคล้องกับบริบททางสังคมและทรัพยากรของแต่ละชุมชน

บทสรุป: ความยั่งยืนของการดูแลแบบประคับประคองโดยชุมชนขึ้นอยู่กับความเข้มแข็งของความสัมพันธ์ทางสังคม การมีส่วนร่วมของชุมชน ภาวะผู้นำท้องถิ่น และประสิทธิภาพของการประสานงานในระดับท้องถิ่น แนวคิดชุมชนกรุณาสามารถทำหน้าที่เสริมระบบบริการสุขภาพแบบเป็นทางการ และควรได้รับการปรับให้สอดคล้องกับโครงสร้างทางสังคมและทรัพยากรที่มีอยู่ในแต่ละชุมชน

คำสำคัญ: การดูแลแบบประคับประคอง การดูแลแบบประคับประคองโดยชุมชน ชุมชนกรุณา

Introduction

Thailand is one of the fastest aging societies in Southeast Asia. In 2024, the country officially entered a *completely aged society*, with 22% of the population aged 60 years and above, ranking second only to Singapore (23%) in the region. More than half of the elderly population are early-stage older adults (aged 60–69), while the proportion of very old persons (aged 80 and above) is expected to increase significantly in future years. Studies indicate that by 2040, a growing number of elderly women will live alone without children, and across generations, the average number of surviving children is declining. These trends highlight an increasing dependency ratio and reduced capacity of families to provide care.

Traditionally, Thailand has relied heavily on informal care—care provided by family members and close relatives—as the primary approach to elderly care. However, socio-economic shifts such as urbanization, migration of working-age populations to other provinces or abroad, declining multigenerational households, increasing involvement of women in the external labor force, and caregiving burdens have diminished the ability of families to care for elderly members, particularly those in the terminal phase. Consequently, there is a growing proportion of elderly individuals living alone or only with another elderly partner, often with limited support. This intensifies the importance of end-of-life care within an aging society, given that mortality rates are higher among the elderly than any other age group.

Despite progress in implementing palliative care services in Thailand since 2009—including policy development and capacity building among health personnel—major systemic challenges remain. A national survey conducted in public hospitals by the Thai Association of Palliative Care (2019) found that while 18% of terminally ill patients were eligible for palliative care and 46% were admitted to intensive care units (ICUs), only 3% actually received palliative care services. The majority of these patients were elderly. This highlights insufficient accessibility to holistic end-of-life care that addresses physical, psychological, social, and spiritual needs.

Internationally, the World Health Assembly in 2014 emphasized that palliative care should be integrated as a core component of comprehensive life-course healthcare systems and included within universal health coverage (UHC), to support Sustainable Development Goal target 3.8 on equitable access to health services and financial risk protect, particularly in primary and community-based care settings. Thailand's operational definition of palliative care (National Health Commission Office, 2020) aligns with this principle by underscoring lifelong care from early diagnosis of life-limiting conditions until death and extending support to family members after bereavement.

However, implementation in Thailand remains hindered by (i) the absence of a national long-term strategy that reflects the intensifying demographic transition, (ii) inadequate training and awareness among health professionals and communities regarding the right to a "good death", (iii) limited capacity in formal healthcare service delivery and rising terminal care costs, and (iv) fragmentation in continuity of care between hospitals and communities, particularly among vulnerable subgroups.

In this context, the concept of the "Compassionate Community", based on social capital theory [12-], a promising model for community-based palliative and end-of-life care. A compassionate community recognizes the collective rea sponsibility of society to support individuals during life crises, emphasizing that both dignified living and peaceful dying require multi-sectoral collaboration at the community level. Leveraging local social, cultural, and spiritual assets can enhance community resilience, reduce dependence on the formal health system, promote cost efficiency, support social inclusion—particularly for vulnerable groups—and contribute to the SDGs through balanced socio-economic and environmental impacts.

Objectives

This study aims to assess the economic viability of community-based palliative care provided by local government organizations by comparing the Compassionate Community Model with hospital-based palliative care in two municipalities

in Kalasin Province: Kalasin City Municipality and Kamala Sai Subdistrict Municipality. It also examines the facilitating factors and barriers to developing compassionate community mechanisms for supporting older patients at the palliative care stage and their families.

Literature Review

1. Compassionate Communities and Social Engagement

The concept of Compassionate Communities has been recognized internationally, including by the World Health Organization, as an effective approach to enhancing the quality of end-of-life care. Its primary objective is to extend palliative care beyond hospital-based clinical services into society and community settings. While medical care plays an essential role in the final stages of life, it is often insufficient to fully address the multidimensional needs of terminally ill patients. Most end-of-life care concerns relate not only to physical symptoms but also to psychosocial aspects, which can be supported through basic skills and community-based assistance provided by families and social networks. Limiting palliative care responsibilities solely to health professionals may fail to meet patients' genuine needs and further constrain already overburdened healthcare systems.

The compassionate community model therefore promotes the collective responsibility of families, community members, and various social institutions to support individuals during life crises. It prepares communities with the attitudes, knowledge, and capability to assist patients and families, aiming to create end-of-life equity—that is, the opportunity for all individuals to die with dignity and optimal quality of life [3]. Death, as a universal experience, requires compassionate care that involves all sectors of society.

A growing body of literature highlights the importance of social capital, teamwork, and community engagement in supporting terminally ill patients and their families. Social relationships formed through caregiving activities, social networks, emotional bonds, and mutual support contribute to improved continuity of care, service accessibility, and overall quality of life at the final stage [46-]. Leonard, Horsfall, and Noonan (2010) further argue that caregiving both requires and generates social capital: where state welfare support is insufficient, social capital may substitute economic capital and contribute to human capital development.

Within the Thai context, particularly in rural Northeastern communities, strong kinship systems, cultural beliefs such as filial piety, Buddhist teachings (e.g., the Four Brahmavihāras), and traditions like Bun Samha and Bun Phra Vess reflect deeply embedded compassion and reciprocity. These elements of social capital foster community resilience and mutual support, especially in moments of illness, death, and grief. Applying this cultural foundation to compassionate community development offers valuable potential for strengthening community-based palliative care in Thailand.

2. Compassionate Communities in Thailand

In Thailand, the emergence of compassionate communities has been shaped by both civic and religious movements that brought the topic of death and dying into public discourse. Kanjanopas traces early public engagement with "good death" to high-profile cases in the 1990s [7], such as the home-based end-of-life care of Supaporn Pongprueksa, a yoga teacher and writer who used Buddhist practices to cope with breast cancer. Her case illustrated that a dignified death could occur at home through collaboration between family, community social capital, and supportive healthcare professionals, and highlighted the feasibility of community-oriented models that respect patient values and shared decision-making. At the research level, the paradigm review on death and health further laid an intellectual foundation for work on death, dying, and end-of-life care in Thai society.

Parallel to this, Buddhist civil society networks played a central role in building public literacy on death and spiritual care. The Buddhika network, led by Phra Paisal Visalo and partners, launched the "Facing Death Peacefully" programme in 2003, offering retreats and training for both laypeople and health professionals. These initiatives stimulated interest in spiritual aspects of end-of-life care and cultivated a pool of doctors and nurses interested in palliative care.

However, many of these professionals initially lacked institutional space, time, and organisational support to integrate their new competencies into formal hospital practice, as palliative care was not yet fully recognised within routine service frameworks.

To address this gap, Buddhika and its partners began to explore mechanisms that could link hospitals with community and religious resources, especially for spiritual care. This led to volunteer-based initiatives such as the "Bedside Volunteers" project (2006), which trained volunteers to provide emotional and spiritual support to terminally ill patients in hospitals, and later programmes to strengthen the role of monks, hospitals, and communities in spiritual care for chronically ill and end-of-life patients. A critical turning point came in 2017, when the "Death Talk" project organised the public event Happy Death Day and attracted wide participation, particularly from younger generations. Building on this experience, the team evolved into an independent group named Peaceful Death in 2018, with a mission to create social environments conducive to "good death" and to develop compassionate communities for living and dying well.

Peaceful Death and, later, the Compassionate Communities Research and Development Institute Foundation (Moo-so-chok, established 2022), have been instrumental in conceptualising and operationalising compassionate communities in Thailand. They define compassionate communities as a preventive and promotive social approach that equips individuals and communities with knowledge, skills, and attitudes needed to cope with suffering related to illness, caregiving, death, and loss, grounded in compassion, participation, attention to local ecology, and social justice. Drawing on Kellehear's framework [3], Thai scholars such as Naruepatr emphasise communities as key resources for both living and dying, and stress multi-sectoral collaboration beyond hospitals and health facilities [8].

Between 2018 and 2022, Peaceful Death supported 21 compassionate community initiatives across Thailand, adapting the Compassionate City Charter to local contexts. Activities included volunteer training, death education, advance care planning, grief support, and psychosocial support. These initiatives strengthened volunteer networks, collaboration with local health providers and municipalities, and community engagement in end-of-life care.

A key contribution of the Thai model is the development of practical tools for death education, advance care planning, and psychosocial support. These include the "Light-Hearted Notebook," card-based discussion tools, and Care Clubs, which help normalise conversations about death, support care planning, and strengthen the emotional resilience of patients, caregivers, and health workers.

Compassionate community development in Thailand generally involves network mapping, capacity-building, support for local initiatives, monitoring, and shared learning. Key success factors include effective learning tools, committed facilitators, systematic training, and knowledge management. However, many initiatives remain small-scale and informal, with limited integration into formal public-sector structures, constraining their scalability and sustainability.

Buddhist organisations have also contributed through spiritual and end-of-life care. Groups such as the Volunteer Kilanadhamma Group and Santipawan Centre provide counselling, meditation-based support, and holistic care for patients, families, and monks, illustrating the role of religious institutions in compassionate community development.

Overall, compassionate communities in Thailand have evolved through civil society, local networks, and Buddhist institutions. Although these initiatives remain decentralised, they align with Thai values of compassion and mutual support. Greater integration into local government, welfare, and national ageing and palliative-care policies could strengthen their long-term impact and sustainability.

3. Palliative Care: Defintion and Expenditure Costs

In 2002, The World Health Organization (WHO) defines palliative care as an approach that improves the quality of life of patients and their families facing life-threatening illness through the early identification, prevention, and relief of suffering. Care addresses pain and other problems across physical, psychological, social, and spiritual

dimensions [9]. More recent WHO guidance further emphasizes palliative care as a holistic and person-centred approach for both adults and children, aimed at preventing and alleviating suffering associated with serious and life-threatening illness.

In Thailand, the National Health Commission Office established an operational definition of palliative care in 2020. It defines palliative care as comprehensive support for people with life-limiting or life-threatening conditions, with the aim of improving quality of life and relieving physical, psychological, emotional, social, and spiritual suffering from the early stages of illness until death. The definition also extends care to family members and significant others and recognizes that palliative care may be provided both within and outside healthcare facilities. Importantly, palliative care is not limited to the final stage of life but may begin at diagnosis of an incurable or treatment-resistant condition and continue for months or years before death.

Since the 2010s, literature on palliative and end-of-life care has expanded significantly, reflecting global shifts towards aging populations and increased need for cost-efficient care models. Palliative or hospice care has been shown to contribute to improvements in symptom management, peaceful dying, and communication between health professionals, patients, and families [1013-]. However, the structure and delivery of palliative care services vary considerably across settings—hospital-based, home-based, community-based, and hybrid models—posing challenges in service readiness, cost management, and patient satisfaction.

A number of international studies compare healthcare costs between conventional medical care and palliative care, consistently indicating significant cost reductions under the latter. For example, research in the United States reported savings between USD 1,285 and 20,719 per case during 2008–2018 through palliative care interventions [14]. In Spain, average end-of-life care costs per patient decreased from EUR 5,068 in 1992 to EUR 1,963 in 2001 [15]. Some studies suggest minimal cost differences between home-based and hospital-based palliative care when assessed in the final week of life [16]. Nevertheless, cost analysis must consider the duration of care and the type of illness, as cost variance is influenced by disease characteristics and timeframes [17].

In Thailand, palliative care was formally integrated into national clinical service standards in 2006 and has progressively expanded across urban and provincial hospitals. Studies indicate that palliative care can reduce overall healthcare expenditure for terminally ill patients by approximately 45%, principally due to shorter hospital stays and reduced use of high-cost diagnostics and medical equipment [18]. Community-based care also incurs fixed costs related to modifying home environments and procuring necessary equipment [19], with average costs per home-based patient estimated at THB 41,437.39. However, existing studies seldom include the cost of developing infrastructure or ecological systems to support palliative care, and none have yet incorporated social capital as part of the economic evaluation, despite the potential of community-based support to mitigate costs.

Regarding patient preferences, most studies report high satisfaction among terminally ill patients receiving palliative care, attributable to a peaceful care environment and greater opportunities to spend time with family [13, 20]. However, satisfaction levels differ depending on the provider type—patients receiving care from religious organizations, university hospitals, or hospice centers tend to have higher quality-of-life scores than those treated in community hospitals [21].

Care readiness frequently depends on the capacity of nurses, who play a central role in initiating and coordinating palliative care. Key determinants include communication among healthcare workers and families, availability of opioids and pain management, and staffing resources [20]. Despite progress, palliative care systems still face multiple challenges, particularly related to insufficient public health financing and constraints on medication access, especially among home- and community-based patients.

Recent studies suggest a shift toward home-based and community-based care as the preferred model for terminal care [20, 22]. This indicates an increasing need to strengthen community capacity, promote skill development,

and mobilize social capital within communities. In this regard, applying the compassionate community approach to palliative care—informed by Thailand's unique cultural foundation—represents a highly promising strategy for promoting high-quality end-of-life care that supports emotional, spiritual, and communal well-being, contributing to long-term social sustainability.

Research Methodology

This study adopts a mixed-methods design combining quantitative household cost surveys with qualitative interviews and focus group discussions. The research is conducted in two municipalities in Kalasin Province, Northeastern Thailand: (1) Kalasin City Municipality and (2) Kamalasai Subdistrict Municipality. These areas were selected as pilot sites for developing and comparing a *Compassionate Community–based palliative care model* for terminally ill older adults.

Our qualitative interviews involved two main participant groups: (1) 24 family members and primary caregivers of older patients receiving end-of-life care, and (2) 53 stakeholders involved in palliative care under the Compassionate Community Model, including local government officials, healthcare personnel, charitable organizations, private-sector representatives, community leaders, and community members[1]. Qualitative data were collected through 34 in-depth interviews, focus group discussions with 14 participants, and non-participant observation to examine facilitating factors and barriers to developing a social capital-based compassionate community mechanism.

The quantitative component assessed the costs incurred by patients, families, and caregivers receiving community-based palliative care and compared them with costs borne by public healthcare facilities. A total of 200 households with terminally ill older adults were surveyed across the two study areas. Cost and benefit data were further obtained from service providers to evaluate the economic value of promoting the Compassionate Community Model within Thailand's palliative care system.

Results and Discussion

1. Community-Based Palliative Care under the Compassionate Community Model

1.1 Kalasin City

In Kalasin City, a locally rooted and increasingly institutionalised compassionate community model has emerged over the past several years. Since 2018, a volunteer group known as *Muang Nam Dam Volunteers*—composed largely of municipal staff with a shared interest in volunteerism—has worked with the municipality to provide social and health-related support for end-of-life care. The group initially organised itself informally as a community-based volunteer network and gradually extended its activities beyond routine municipal duties, especially in areas related to public health and social welfare.

The first major initiative, the "Juti Sukhawadee" project, focused on organising dignified funerals for impoverished or unclaimed bodies. The project mobilised donations and voluntary labour from community members to ensure that individuals could complete their lives with dignity, regardless of economic status. Its success relied on transparent management of donations and deep-seated cultural norms of compassion grounded in Buddhist teachings. Building on this, the volunteers and municipality launched the "Volunteers for a Happy Last Journey" project, which sought to prepare terminally ill patients and their families to face suffering with understanding, acceptance, and reduced anxiety, thereby supporting "good death" and revitalising compassion and mutual support within the urban community. These initiatives complemented the early stages of formal palliative care services and enabled more patients' wishes to die at home to be realised in practice.

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[1] This study adopts the definition of palliative care established by Thailand's National Health Commission Office (NHCO) in 2020.

A critical turning point occurred when the municipal leadership embraced the compassionate community approach and formally integrated it into local policy. The mayor and executive team adopted an open, participatory leadership style that encouraged collaboration between municipal staff and community members. This led to the incorporation of compassionate community activities into the municipality's four-year development plan and the formal establishment, in early 2024, of the Kalasin Municipality's Compassionate Community Learning Center. The Center functions as a coordinating hub for the Kalasin Municipality's Voluntary Palliative Care Network, which now includes more than 800 individual volunteers representing 101 organisations across 41 communities.

Network members encompass health facilities (palliative care doctor and nurse at Kalasin Hospital, community health centres, village health volunteers, etc.), monks and religious leaders from Buddhism, Christianity, and Islam, charitable organisations, private businesses (coffin shops, furniture shops, etc.), educational institutions (municipal schools, the municipal elderly school, Kalasin University, Kalasin Technical College, etc.), the Kalasin provincial prison[2], and other community-based groups. The network also collaborates with external partners such as the Compassionate Communities Research and Development Institute Foundation and the Thai Health Promotion Foundation's Walking and Cycling initiatives.

Social capital refers to resources embedded in social relationships, particularly norms of reciprocity, trust, and networks of civic engagement. Putnam[3] emphasizes that such networks strengthen a community's capacity for collective action by connecting individuals and organizations through shared values, mutual obligations, and common interests. These relationships can transform network members into social actors capable of mobilizing cooperation to improve collective well-being.

In Kalasin City Municipality, the volunteer palliative care network has accumulated and expanded collective social capital through sustained relationships among volunteers, service providers, and families. Relationships often continued after formal care had ended, as reflected in continued visits, food sharing, and reciprocal support from former beneficiary families. Within the network, companionship, shared values, mutual trust, and respect for complementary roles strengthened collaboration. A common objective was to support the psychological and spiritual well-being of patients and families and to enable acceptance of death and the possibility of a "good death."

The network operates largely through an informal structure comprising both local and external partners. Core local actors include Kalasin City Municipality and its primary care services and village health volunteers[4], the elderly school[5], emergency rescue services, Buddhist monks, palliative care physicians and nurses at Kalasin Hospital, community leaders, and charitable organizations. These actors provide complementary forms of physical, psychosocial, spiritual, and socioeconomic support, while also facilitating patient identification, referral, home visits, and public awareness.

Secondary partners, including the Kalasin Provincial Social Development and Human Security Office, Kalasin University, private businesses, and community members, provide supplementary support based on their respective capacities. An important external partner is the Compassionate Communities Research and Development Institute Foundation, which supports network expansion, knowledge exchange, and practical capacity-building in compassionate community approaches.

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[2] In 2023, the network expanded its activities into prisons, initially by providing training for prison health volunteers on end-of-life care for incarcerated patients.

[3] A prominent American political scientist who played a major role in popularizing the concept of social capital in contemporary academic discourse.

[4] All village health volunteers affiliated with the municipality's primary care units are members of the network. Their roles include screening and referring patients to network services and coordinating preparations for home visits.

[5] The municipality provided initial support for establishing the network and continues to serve as an institutional mentor.

Overall, the Kalasin case illustrates how social capital, expressed through trust, reciprocity, shared norms, and cross-sector networks, provides an important institutional foundation for community-based palliative care.

The Kalasin Compassionate Community Learning Center represents the formal institutionalization of the volunteer network's activities. It operates under a formal governance structure based on a networked partnership model, with the municipality's Social Welfare Division serving as the secretariat and coordinating collaboration among participating organizations and community stakeholders. Also, all 41 community leaders act as a joint steering committee. The committee meets quarterly to review progress and implement four core action plans, which are aligned with the Kalasin Health Charter (initiated in 2016): (1) *Compassionate Citizenship*—encouraging mutual care and volunteerism grounded in Buddhist virtues (the Four Brahmaviharas); (2) *Compassionate Public Health*—supporting community volunteers to monitor and assist vulnerable groups (e.g., psychiatric patients, the poor, the homeless); (3) *Compassionate Education*—promoting lifelong learning beyond formal education, including training on compassionate community palliative care and basic caregiving for terminally ill patients and families, as well as applying the Sufficiency Economy Philosophy to everyday life; and (4) *Compassionate Welfare*—enhancing access to public welfare and support services for those in distress. Each community receives a modest budget (THB 10,000) and additional resources to implement locally appropriate activities under these four domains.

Despite this formal structure, the operational character of the network remains intentionally informal and flexible. Members understand their roles based on their skills and available resources, and there is no dominant actor; instead, relationships are horizontal and collegial. A key coordinator facilitates communication, convenes meetings, and organises joint planning—often through social media platforms such as LINE—prior to service activities. This arrangement allows the network to respond sensitively to the psychosocial and socioeconomic needs of patients and families and to adjust care approaches to individual circumstances. The diversity of membership, the fact that all members are residents of Kalasin with shared local culture, the continuity of volunteer activities over time, and the emergence of a local "death can be spoken about" culture have all contributed to strong community acceptance of compassionate community palliative care.

The primary healthcare system in Kalasin also plays a crucial enabling role. Local primary care units and village health volunteers (VHVs) are highly committed to "serving their fellow Kalasin residents," and have been continuously empowered through municipal support, including training on end-of-life care and annual recognition events on National Health Volunteer Day. This synergy between formal primary care services and informal volunteer networks helps to close gaps in the end-of-life care pathway and creates a more seamless care continuum.

Overall, the Kalasin model illustrates a productive blend of formal organisational support and informal community networks. The Learning Center acts as an *advocacy organisation*, linking the compassionate community concept to municipal policy, budget allocation, and performance monitoring, while the volunteer network provides the flexible operational backbone. Together, they help reduce fragmentation in end-of-life care and strengthen compassionate citizenship, public health, education, and welfare. Key enabling factors include: (1) the diversity and commitment of network member organisations and a dedicated coordinator; (2) the strength of local primary healthcare and VHVs; and (3) political and administrative leadership that actively opens space for citizen participation. At the same time, the model remains vulnerable to changes in municipal political leadership, which could undermine policy continuity and long-term support for end-of-life initiatives—now a major structural barrier identified by this study.

1.2 Kamalasai City

The experience of Kamalasai Subdistrict Municipality reflects an effort to replicate and adapt the Kalasin compassionate community model. Drawing on Kalasin City's experience, the research project designed a participatory capacity-building process for the Kamalasai Compassionate Community Committee and local volunteers. This process involved several steps: online learning sessions on the concept of compassionate communities and a concise

written summary of key ideas; two study visits to the Kalasin Voluntary Palliative Care Network and participation in a compassionate community event in April 2025; and three training workshops on Thai compassionate community practices and communication tools related to death and end-of-life planning (e.g., the “Life-Answering Card Game” , ect.). Trainers included experienced facilitators from the national compassionate community movement and volunteer leaders from the Kalasin Municipality’s Voluntary Palliative Care Network.

In addition, the volunteer leaders participated in joint home visits to terminally ill patients in Kamalasai, followed by reflective sessions that emphasised not only patient and family support but also the emotional well-being of “providers” and volunteers. The research project then applied a Training of Trainers strategy, inviting representatives of the Kamalasai Compassionate Community Committee to design and deliver volunteer training in their own community, with Kalasin volunteers acting as mentors.This approach was intended to strengthen local ownership, deepen understanding of compassionate community principles grounded in local governments’ responsibility to promote community well-being, and build capacity to apply practical tools for community-based palliative care under the Compassionate Community Model.

However, the Kamalasai model developed under markedly different conditions from the Kalasin City. The compassionate community committee in Kamalasai was initiated primarily by the governor, and its membership is dominated by village heads, subdistrict leaders, and senior VHVs who already have long-standing ties with local government. In contrast to the Kalasin, where the movement first emerged from civil society volunteerism and subsequently connected to the municipality, the Kamalasai initiative has been more top-down type. As a result, participation in compassionate community activities has remained largely concentrated among the same group of VHVs and a limited circle of community actors, with relatively little involvement from diverse professional groups, organizations, and the community.

This structure has important implications. While the committee and health personnel demonstrate empathy and a genuine desire to support terminally ill patients, drawing on the strong kinship-based culture of the Northeastern region that regards community members as “relatives”. The compassionate community in Kamalasai functions more as an extension of existing state-led services than as a broad-based social partnership. The model has not yet fully mobilised wider community participation, cross-sectoral resource sharing, or collaborative caregiving consistent with the principles of compassionate communities and social capital, including shared ownership of care, collective responsibility, and patient- and family-centred support.

Therefore, the Kamalasai structure does not fully align with the principles of compassionate communities, which emphasize social partnership, shared responsibility, and collective support for patients and families. Such an approach requires mobilizing community members and resources across sectors to provide collaborative care, patient-centred care that responds to individual needs and preferences while respecting patients’ rights, dignity, and choices regarding a dignified death.

Moreover, the time constraints and limited human resources of key health personnel further constrain the initiative. The core palliative care team at Kamalasai Hospital have limited capacity to participate in community activities despite their strong interest and understanding of the concept[6]. The highest-level political leadership in the municipality has not demonstrated the same degree of explicit and sustained commitment to compassionate communities as observed in Kalasin. The Kamalasai local development plan (2023–2027), which uses SWOP analysis, recognises weak citizen participation and limited public scrutiny of municipal work as a key institutional weakness[7]. These contextual factors directly impede the expansion and institutionalisation of compassionate community activities.

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[6] The unit provides 24-hour on-call coverage by one physician and two nurses and has six beds for palliative care, including patients with dependency requiring long-term care.

[7] See more information on http://www.kamalasai.go.th/2010/index.php.

The study identifies a number of enabling factors—including the underlying kinship culture, the motivation and positive attitudes of some health professionals and local administrators, and the presence of committed VHVs—but also highlights significant barriers: limited political leadership and strategic prioritisation at the top level, restricted time and human resources among health staff, and weak tradition of community participation in local governance. For compassionate communities to take root in Kamalasai, broader engagement of community-based organisations and lay citizens, stronger policy backing, and more deliberate strategies for cultivating public awareness and ownership will be indispensable.

Based on the comparative analysis of Kalasin and Kamalasai, the key facilitating factors and barriers to building compassionate communities are summarized in Table 1.

Table 1. The facilitating factors and barriers to compassionate communities

Facilitating Factors	Barriers
1. Engagement of local government executives at all administrative levels.	1. Limited local policy support for the development of palliative care under the Compassionate Community Model.
2. Raising awareness of compassionate community principles within the community, particularly among local government decision-makers.	2. Insufficient community empowerment to develop and sustain compassionate community-based palliative care.
3. Building knowledge and practical skills in palliative and end-of-life care through approaches that promote community participation.	3. Limited diversity of partner organizations and professional groups involved in compassionate community-based palliative care.
4. Establishing a Community Health Coordinator as a local mechanism to facilitate coordination and service integration.	4. Lack of clear national policy direction on palliative and end-of-life care, particularly regarding the role of local governments.

Source: Authors' analysis

2. Community-Based Palliative Care: Empiriacal Survey

This section presents the economic evaluation of palliative care among 200 terminally ill elderly patients and their families residing in Kalasin City and Kamalasai City. The analysis highlights patient and caregiver characteristics, patterns of care and total care expenditure among Hospital-based PC, Home-based PC, and Combined home-based and hospital-based PC. This empirical survey represents the benefit of compassionate community on community-based palliative care.

2.1 Patient and Caregiver Characteristics

Table 2. Patient and Caregiver Characteristics in Kalasin and Kamalasai

Indicators	Kalasin	Kamalasai
Number of households	100	100
Average patient age (years)	76.4	77.0
Caregivers aged >60 years*	42.7%	32.7%
Caregivers with no income or income < THB 15,000 per month	75.0%	64.0%
Relatives involved in caregiving	81.0%	83.0%
Neighbors involved in caregiving	30.0%	63.0%
Patient Care System (cases)		
Long-term care	35	53
Palliative care	44	36
End-of-life care	21	11

Table 2. Patient and Caregiver Characteristics in Kalasin and Kamalasai (continue)

Indicators	Kalasin	Kamalasai
Health Care Modes (cases)		
Home-based care as the primary mode of care	60	33
Hospital-based care as the primary mode of care	4	24
Combined home- and hospital-based care	36	43
Duration of caregiving ≥3 years	56.0%	80.0%

Source: Authors' survey.

Table 2 shows that the two study areas had the same sample size, with 100 households in each municipality. The average age of patients was similar, at 76.4 years in Kalasin and 77.0 years in Kamalasai. However, caregiver characteristics differed somewhat between the two areas. Kalasin had a higher proportion of caregivers aged over 60 years and a higher proportion of caregivers with no income or monthly income below THB 15,000, suggesting greater socioeconomic vulnerability among caregivers in Kalasin. Family involvement in caregiving was high in both areas, at 81.0% in Kalasin and 83.0% in Kamalasai, while neighbor involvement was substantially higher in Kamalasai (63.0%) than in Kalasin (30.0%).

The distribution of patient care systems also differed between the two municipalities. In Kalasin, palliative care accounted for the largest share of patients (44%), followed by long-term care (35%) and end-of-life care (21%). In contrast, Kamalasai had a greater concentration of patients in long-term care (53%), followed by palliative care (36%) and end-of-life care (11%). These figures indicate that Kalasin had a relatively larger proportion of patients receiving palliative and end-of-life care, whereas long-term care was more prominent in Kamalasai.

Differences were also observed in the primary mode of health care. Home-based care was considerably more common in Kalasin, where 60.0% of patients were primarily cared for at home, compared with 33.0% in Kamalasai. By contrast, hospital-based care was more common in Kamalasai (24.0%) than in Kalasin (4.0%). Combined home- and hospital-based care was also somewhat more prevalent in Kamalasai (43.0%) than in Kalasin (36.0%). In addition, long-duration caregiving was more common in Kamalasai, with 80.0% of caregivers providing care for three years or longer, compared with 56.0% in Kalasin.

Overall, the two areas had similar patient age profiles but different caregiving and service-use patterns. Kalaa sin was characterized by greater reliance on home-based care and a higher proportion of palliative and end-of-life patients, together with greater caregiver income vulnerability. Kamalasai, in contrast, showed greater reliance on long-term care, hospital-based or combined care, longer caregiving duration, and stronger involvement of neighbors in caregiving.

Table 3. Underlying Health Conditions of Patients

Disease/Condition	Kalasin (%)	Kamalasai (%)
Hypertension	63	75
Diabetes mellitus	29	33
Osteoarthritis	15	27
Stroke	23	14
Dementia	14	10
Ischemic heart disease	10	5
Osteoporosis	5	13
Others (Kidney disease, Tuberculosis, and Cancer)	13	12

Note: More than 60% of patients in both study areas had two or more comorbid conditions. As multiple conditions could be reported for each patient, the percentages therefore sum to more than 100%.

Source: Authors' survey.

Table 3 shows that chronic non-communicable diseases were common among patients in both study areas. Hypertension was the most prevalent condition, affecting 63% of patients in Kalasin and 75% in Kamalasai, followed by diabetes mellitus at 29% and 33%, respectively. Osteoarthritis was more common in Kamalasai (27%) than in Kalasin (15%), while stroke was more prevalent in Kalasin (23% versus 14%). Dementia and ischemic heart disease were also somewhat more common in Kalasin, whereas osteoporosis was more frequently reported in Kamalasai. Multimorbidity was common, with more than 60% of patients in both areas having at least two comorbid conditions.

Table 4 indicates that household spending on care was substantial in both study areas, but the overall level and composition of expenditure differed noticeably. The average monthly household care cost was THB 11,942 in Kalasin and THB 13,122 in Kamalasai, meaning that households in Kamalasai spent approximately THB 1,180 more per month, or about 9.9% more, than those in Kalasin.

The most important difference concerned caregiver subsistence at home. In Kamalasai, this item averaged THB 7,546 per month, compared with THB 2,925 in Kalasin, a difference of more than THB 4,600 per month. This suggests that the financial burden of maintaining care at home was considerably greater in Kamalasai and represented the dominant component of total household expenditure there. In contrast, the cost profile in Kalasin was more dispersed across several categories.

Table 4. Average Monthly Household Care Expenditure

Cost Item (Baht)	Kalasin	Kamalasai
Transportation	1,089	634
Hospital room	279	586
Caregiver subsistence at home	2,925	7,546
Medical/out-of-pocket treatment	358	2
Patient food/supplements	3,008	1,111
Hired caregiver	1,440	1,560
Miscellaneous expenses	2,844	1,683
Total care cost	**11,942**	**13,122**

Source: Authors' survey.

In Kalasin, the largest expenditure item was patient food and supplements, averaging THB 3,008 per month, followed by caregiver subsistence at home (THB 2,925) and miscellaneous expenses (THB 2,844). These three items accounted for a large share of household care spending. Transportation costs were also higher in Kalasin, at THB 1,089 per month, compared with THB 634 in Kamalasai. Similarly, out-of-pocket medical expenses were much higher in Kalasin (THB 358) than in Kamalasai (THB 2).

Kamalasai, by contrast, showed a more concentrated expenditure pattern. Besides caregiver subsistence at home, the main costs were miscellaneous expenses (THB 1,683), hired caregivers (THB 1,560), and patient food and supplements (THB 1,111). Spending on hired caregivers was slightly higher than in Kalasin, while spending on food, transportation, and medical out-of-pocket treatment was lower.

The comparison therefore suggests that the difference in total care expenditure between the two areas was not simply due to uniformly higher spending across all categories. Rather, it reflected different cost structures. Kamalasai households faced a particularly high burden associated with sustaining care at home, whereas Kalasin households incurred relatively greater expenses across food, transportation, medical payments, and miscellaneous caregiving needs.

From an economic evaluation perspective, this distinction is important because it suggests that the financial

burden of care depends not only on the total amount spent, but also on how costs are distributed across caregiving activities. The very high home-caregiver subsistence cost in Kamalasai may reflect a more intensive or prolonged home-care arrangement, while the more diversified cost structure in Kalasin may indicate a broader mix of direct medical and non-medical household expenses.

Figure 1 shows substantial variation in monthly care costs across patient ages in both Kalasin and Kamalasai, with most observations below THB 20,000 per month. No clear linear relationship between age and care expenditure is evident, although a few high-cost outliers occur in both areas. This suggests that factors other than age, such as care setting, disease profile, and caregiving intensity, may better explain differences in household care costs.

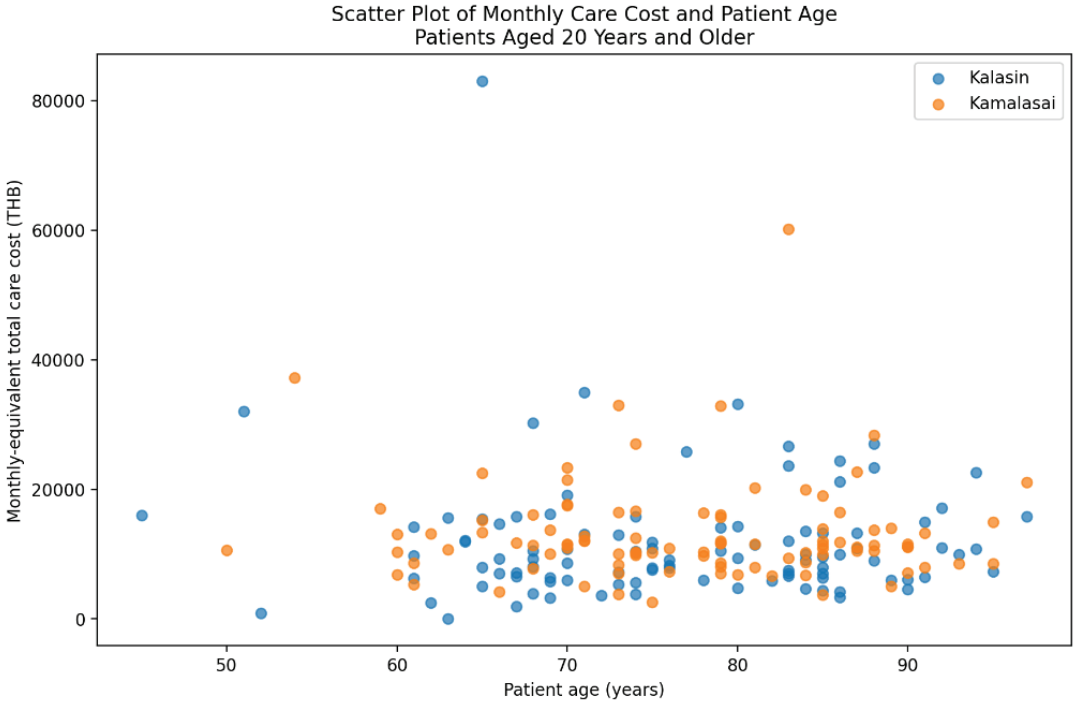


Figure 1. Monthly Care Cost and Patients Aged

Source: Authors' survey.

Table 5. Monthly Household Care Expenditure by Health Care Modes

Health Care Modes (Baht)	Kalasin		Kamalasai	
	case	Total care cost	case	Total care cost
All sample	100	11,942	100	13,121
Home-based care	60	10,836	33	13,289
Hospital-based care	4	12,117	24	13,912
Combined home-and hospital-based care	36	13,766	43	12,552

Source: Authors' survey.

Table 5 demonstrates that household care expenditure varied considerably by palliative care mode and that the pattern differed between Kalasin and Kamalasai. Across all households, average monthly care expenditure was higher in Kamalasai than in Kalasin, at THB 13,121 and THB 11,942, respectively, representing a difference of approximately THB 1,179 per month.

In Kalasin, home-based care was the most common mode, covering 60% of households, and also had the lowest average monthly cost at THB 10,836. Hospital-based care accounted for only 4% of cases and averaged THB

12,117 per month, while combined home- and hospital-based care accounted for 36% of households and recorded the highest average cost at THB 13,766. This pattern suggests that, within Kalasin, greater reliance on home-based care was associated with lower household expenditure than either hospital-based or combined care.

In Kamalasai, the distribution of care modes was more balanced. Combined home- and hospital-based care was the most common mode, accounting for 43% of cases, followed by home-based care at 33% and hospital-based care at 24%. The cost pattern also differed from Kalasin. Hospital-based care had the highest average monthly expenditure at THB 13,912, followed closely by home-based care at THB 13,289, while combined care had the lowest average cost at THB 12,552.

A cross-area comparison shows that home-based care was substantially less costly in Kalasin than in Kamalasai, with a difference of approximately THB 2,453 per month. Hospital-based care was also less costly in Kalasin by about THB 1,795 per month, although the very small number of hospital-based cases in Kalasin should be interpreted cautiously. By contrast, combined care was more expensive in Kalasin than in Kamalasai by approximately THB 1,214 per month.

According to the different stages of community-based palliative care development under the Compassionate Community Model, Kalasin represents a relatively well-established compassionate community, whereas Kamalasai remains at an earlier stage of development. The empirical survey highlights the following key findings.

First, the health care costs in Kalasin on average is lower than Kamalasia in home-based care and hospital-based care, whereas the heal care cost in combined home-and hospital-based care was higher than Kamalasai. Also, the well-developed compassionate community in Kalasin is capable of provide more patiend share than Kamalasai, 60% and 33%, respectively.

Second, the role of compassinate community in health care cost is well observed in Kalasin and Kamalasai. In Kalasin, home-based care recorded the lowest average monthly household expenditure (THB 10,836), approximately 10.6% lower than hospital-based care and 21.3% lower than combined home- and hospital-based care. However, the healt care costs in three modes were relative small.

Third, the average cost of home-based care in Kalasin was approximately THB 2,453, or 18.5%, lower than in Kamalasai. This difference is consistent with the qualitative findings indicating a stronger and more diversified compassionate community network in Kalasin, where local government, health professionals, volunteers, community organizations, and other partners collectively support patients and caregivers. Such community-based social capital may help reduce household expenditure by sharing caregiving responsibilities, facilitating access to services, and mobilizing local resources. However, given the observational nature of the data, these findings should be interpreted as an association rather than a causal effect.

Fourth, the empirical findings are broadly consistent with a TDRI study on medical expenditures during the final month of life among cancer patients in 2014[8]. That study reported that patients who died in hospital incurred substantially higher treatment costs than those who died at home, at approximately THB 45,000 and THB 26,000, respectively. This suggests that home-based palliative care may offer greater economic value by reducing treatment expenditures borne by both households and the healthcare system. The role of compassionate communities may further enhance these economic benefits by enabling patients to access and transition to home-based palliative care earlier.

Finally, interviews with hospital personnel in Kalasin and Kamalasai indicated that home-based palliative care can reduce the burden on hospitals in caring for patients requiring long-term and palliative care, while also allowing beds to become available more quickly for other patients. However, physicians and nurses may need to invest considerable time at the initial stage in counselling patients and families and designing appropriate care plans, particularly because public awareness of home-based palliative care remains limited. In Kalasin, healthcare professionals

[8] See more details from https://tdri.or.th/201802//interview-dr-worawan-national-health-insurance/.

also reported relatively smooth coordination with compassionate community volunteers, which may facilitate continuity of care and strengthen the delivery of home-based palliative services.

Table 6. Barriers to Patient Care in Household

Barrier	Kalasin	Kamalasai
Transportation	30%	18%
Lack of suitable accommodation at the hospital	43%	7%
Lack of caregiving support	33%	19%
Lack of caregiving knowledge	49%	17%
Difficulty contacting relevant agencies	27%	3%
Financial difficulties	60%	45%

Source: Authors' survey.

Table 6 indicates that the economic burden of long-term and palliative care is shaped not only by the mode of care, but also by local service arrangements, caregiving intensity, household resources, and patterns of service use. In Kalasin, home-based care appears to be the least costly option for households, whereas in Kamalasai the differences across care modes are smaller and hospital-based care is the most expensive. These findings are relevant to the economic evaluation of community-based care, although they should be interpreted as descriptive associations rather than causal evidence of cost-effectiveness, given differences in patient characteristics and care patterns across the two study areas.

The survey further identifies financial difficulties and limited caregiving knowledge as major barriers faced by households. These constraints highlight an important role for compassionate communities in both Kalasin and Kamalasai. By mobilizing community networks, facilitating access to information and services, supporting caregivers, and linking households with local organizations and other social-sector partners, compassionate communities may help mitigate both the financial and non-financial burdens associated with long-term and palliative care. As these challenges become more pronounced, the role of compassionate communities is likely to expand beyond direct caregiving toward broader coordination, resource mobilization, and partnership-building across community and social networks.

Conclusion and Policy Recommendation

This study compared the development and economic implications of compassionate community-based palliative care in Kalasin and Kamalasai. Kalasin has developed a relatively strong and diversified compassionate community network, whereas the Kamalasai structure remains less fully aligned with compassionate community principles. The comparison suggests that continuity of local leadership and the presence of a Community Health Coordinator are important institutional conditions for sustaining coordination, mobilizing local actors, and strengthening community ownership of care.

The main facilitating factors include active local-government engagement, awareness of compassionate community principles, capacity-building in palliative and end-of-life care, and effective local coordination. In contrast, major barriers include weak policy support, limited community empowerment, insufficient diversity of participating organizations and professions, and unclear national policy direction regarding the role of local governments. At the household level, financial difficulties and limited caregiving knowledge remain important constraints, indicating a continuing need for compassionate communities to provide information, coordinate services, mobilize resources, and strengthen social support networks.

The economic findings also suggest a potentially important role for compassionate communities in supporting

lower-cost home-based care. In Kalasin, where the compassionate community network is more developed, %60 of patients received home-based care compared with %33 in Kamalasai, and the average monthly cost of home-based care was THB 10,836, approximately THB 2,453 or %18.5 lower than in Kamalasai. Home-based care was also the least costly care mode in Kalasin. These findings are consistent with earlier evidence that home-based palliative care may reduce household and health-system expenditure relative to hospital-based care. Interviews with health personnel further indicated that home-based care can reduce pressure on hospital beds and improve continuity of care, particularly where coordination with community volunteers is well established. However, because the analysis is observational, these cost differences should be interpreted as associations rather than causal effects.

The policy recommendations for strengthening and scaling sustainable compassionate communities are as follows.

(1) Strengthen social capital by preserving community relationships based on trust, reciprocity, and kinship as a foundation for compassionate communities.

(2) Increase awareness among local government leaders of compassionate community principles, particularly in relation to palliative and end-of-life care.

(3) Develop Community Health Coordinators to identify local health needs, mobilize resources, and coordinate collaboration among community actors.

(4) Build the capacity of families and primary caregivers through training in palliative and end-of-life care.

(5) Integrate and scale up the Compassionate Community Model within local welfare policies to improve access to end-of-life care, particularly for vulnerable populations.

Overall, compassionate communities can contribute not only to psychosocial and community support, but also to the economic sustainability of palliative care by facilitating earlier access to home-based care, sharing caregiving responsibilities, and mobilizing local social capital. Strengthening local leadership, coordination mechanisms, and community participation will therefore be essential for scaling up the model in other areas.

For future research, the long-term economic and social impacts of compassionate community-based palliative care should be assessed using more comprehensive evaluation frameworks, such as Social Return on Investment (SROI). Such analysis could help quantify broader social value, capture benefits beyond direct healthcare costs, and provide stronger evidence to guide future policy and investment decisions.

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