

SYNOPSIS OF (PhD) DISSERTATION

**Towards a Sustainable Long-Term Care System in China:
Legal and AI-based Care Solutions from Germany and Japan**

By

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A. Background of the Dissertation

China entered an ageing society in 2000 when the proportion of people aged 65 and above reached 6.96%. Driven by its large population and the long-term effects of the one-child policy, family structures such as 4-2-1 and 8-4-2-1 have accelerated the ageing process, making it faster than in many other countries. By 2024, people aged 65 and over accounted for more than 15.6% of the population, and projections suggest this share will reach nearly 30%—around 380 million people—by 2050. At the same time, fertility has fallen sharply, producing an age pyramid with a “narrowing base and expanding top.” These demographic shifts have sharply increased long-term care (LTC) needs: China already has over 40 million disabled elderly individuals, a number expected to exceed 52 million by 2050. Traditional informal care continues to weaken as household sizes shrink, leading to escalating demand for formal LTC services.

China’s institutional response to LTC began with the Qingdao pilot in 2012 and expanded significantly through the 2016 and 2020 national LTCI pilot schemes, reaching 49 cities. Yet, despite pilot achievements, China still lacks a unified national LTC system and has not enacted a long-term care law to provide stable legal safeguards. Parallel to these policy developments, advances in artificial intelligence (AI) and the introduction of care robots have raised expectations for their potential to alleviate labour shortages, reduce physical caregiving burdens, and support daily care tasks. However, these technologies also introduce significant ethical and legal concerns, including impacts on privacy, autonomy, interpersonal relations, and dignity. Experiences from countries such as Japan illustrate both the potential and the risks associated with robocare adoption.

Identification of Research Tasks

Against this background, this dissertation undertakes the following research tasks:

- 1) Institutional diagnosis: Map and evaluate China’s long-term care (LTC/LTCI) policy–legal evolution since 2012, identifying core challenges in rights/benefits, eligibility and financing, quality and oversight, and responsibility and accountability.
- 2) Comparative analysis: Systematically compare Germany (SGB XI) and Japan (Kaigo Hoken Law) with China in terms of public insurance design, regulatory frameworks, service provision, and governance.
- 3) Transfer and localization: Specify which elements from Germany and Japan are transferable to China, which require adaptation, and which are not suitable—defining clear conditions and boundaries.
- 4) Robocare governance: Based on Japanese experience, assess the ethical–legal–organizational conditions for responsible introduction of intelligent care technologies (including care robots) into China’s LTC (home, community,

institutional).

Reasons for doing the research

The reason for conducting this research lies in the convergence of rapid population ageing, rising care demand, institutional and governance gaps, and the accelerating deployment of intelligent caregiving technologies. Together, these developments create an urgent need for a systematic socio-legal inquiry into how China can meet LTC needs while ensuring ethical and legally sound care practices.

Demographic and family-structure pressures: Rapid ageing, low fertility, and 4-2-1/8-4-2-1 family structures have weakened informal care capacity, while the population of disabled older adults is rising, widening the care gap.

Institutional and governance gaps: China lacks a unified national LTC law and a stable rights-based framework; pilots are fragmented and largely temporary, with insufficient clarification of rights–obligations, quality assurance, and accountability.

Technology: opportunities and risks: AI/Robocare can relieve labour and physical burdens, yet raise concerns about privacy, autonomy, dignity, and human contact—requiring coherent ethical–legal responses.

Comparative feasibility: Germany offers a codified rights-and-insurance foundation; Japan provides mature experience in service integration, user choice, and robocare adoption—together offering practical, complementary lessons for China.

Current Literature and the Research Gap

The current literature and the research gap also reflect the necessity of the study. Although existing studies on LTC in China provide valuable insights into demographic pressures, financing models, and pilot programme experiences, significant gaps remain. Most research has focused on economic feasibility and policy design, but little attention has been paid to the legal and institutional foundations of LTC. Unlike Germany and Japan, where LTC insurance is codified in comprehensive legal frameworks that clearly define citizens' rights and providers' obligations, China's current LTC initiatives are still governed largely by temporary regulations and administrative measures. This highlights a lack of scholarship examining how China could build a sustainable, legally grounded LTC system capable of ensuring quality standards, accountability, and long-term stability. Furthermore, while comparative studies have drawn lessons from Germany and Japan, there is insufficient analysis of how these models can be realistically adapted to China's specific governance structures and socio-economic environment.

In parallel, research on Robocare in the Chinese context remains fragmented. Most studies emphasize the technological feasibility of robocare, digital platforms, or smart eldercare applications, but few explore their integration into actual LTC settings such as home care, community-based services, or institutional care. Critical dimensions such as ethics, human rights, regulatory safeguards, and the interaction between caregivers, care recipients, and robotic technologies are largely underexplored. International experiences, particularly from Japan, demonstrate both opportunities and challenges in adopting robocare, yet in China, there is a lack of systematic examination of how such technologies could be responsibly implemented. This creates an urgent need for interdisciplinary research that combines legal, social, and technological perspectives, ensuring that Robocare can support the LTC system without compromising the dignity and rights of the elderly.

Aims of the Research

The overall aim of the research is to articulate how China can construct a sustainable, legally grounded LTC system (learning from Germany and Japan) and to delineate conditions for the responsible integration of robocare.

And the Specific Objectives, including:

- 1) Map China's evolving LTC policy–legal landscape since the 2016 pilot and identify core legal and policy challenges;
- 2) Compare Germany's and Japan's LTC legal frameworks (public insurance schemes, eligibility/entitlements, quality and oversight) with China's current arrangements;
- 3) Extract design and reform lessons that are realistically transferable to China;
- 4) Assess Japan's experience with robocare and specify conditions for responsible introduction in China.

Accordingly, the dissertation addresses the following research questions:

RQ1: What are the main legal and policy challenges in China's long-term care system after the 2016 pilot programme?

RQ2: How do Germany's and Japan's LTC systems (particularly their public insurance schemes and regulatory frameworks) compare to China's?

RQ3: What design and reform lessons from Germany and Japan are transferable to the Chinese context?

RQ4: Under what conditions could robocare be responsibly introduced into China's

LTC system based on the experiences from Japan?

Data collection and Applied methodologies

This study relies primarily on publicly available legal and policy documents from China, Germany, and Japan to ensure comparability and transparency across jurisdictions. The corpus includes national legislation on long-term care insurance (LTCI), official policy reports, regulatory guidelines, rights charters, and ethical frameworks governing the use of care robotics in eldercare. To strengthen analytical depth and enable triangulation, the legal–policy texts are complemented by peer-reviewed journal articles, statistical reports, and expert commentaries relevant to LTC governance and robocare. Where appropriate, official statistical yearbooks and government white papers are used to contextualise demographic trends and evaluate policy trajectories. Given the dissertation’s focus on governance and rights, the document set also incorporates data-protection and AI governance instruments pertinent to robocare oversight. Together, these sources provide a coherent evidentiary base for cross-jurisdictional analysis of legal foundations, policy design, and the ethical–regulatory conditions of technology adoption in LTC.

Methodologically, the dissertation is anchored in jurisprudential reception theory, which supplies the conceptual and analytical lens for assessing the transferability of LTC rules and institutions. Reception is treated as a process of translation, adaptation, and hybridisation rather than mechanical import, allowing the analysis to examine how foreign models (notably from Germany and Japan) interact with the recipient system’s demographic realities, fiscal capacity, administrative structures, and cultural values. In line with this intermediate stance in comparative law, the project recognises that rules and institutions may be functionally transferable, but only through context-sensitive adaptation. The principal empirical approach is Qualitative Document Analysis (QDA), enabling rigorous, systematic interpretation of legal, policy, and normative texts to uncover meaning, structure, and underlying assumptions across jurisdictions. QDA is complemented by historical-institutional analysis to situate the evolution of social security and care regimes in China, Germany, and Japan, and by selective quantitative methods to support demographic projections and policy evaluation where relevant. The overall design is interdisciplinary, integrating insights from law, sociology, economics, public health, ethics, and demography, and is embedded in international academic networks to facilitate comparative dialogue within European and East Asian contexts. This integrated methodology ensures that the legal-technical, socio-political, and ethical dimensions of LTC and robocare are analysed in a coherent and mutually reinforcing manner.

Overall Presentation of the Dissertation

Chapters II–IV provide doctrinal and institutional analyses of China, Germany, and

Japan, using QDA and Historical analysis to trace the historical development of long-term care systems in China, Germany, and Japan, highlighting how demographic, social, and political factors shaped their evolution. These chapters examine the early stages of policy formation, subsequent legal enactments, and institutional adaptations that underpin today's care structures. In Germany, the analysis covers the establishment and evolution of the statutory Long-Term Care Insurance (LTCI) system, showing how universal coverage, institutional oversight, and social insurance principles developed over decades. Japan's LTCI system is explored in terms of its community-oriented and comprehensive approach, alongside policies supporting the integration of technology into care provision. China is analyzed as a developing context, where LTCI pilot programs are still being implemented regionally, and family care remains heavily relied upon. Across all three countries, these chapters identify both achievements and challenges, including financial pressures, uneven regional implementation, workforce shortages, and gaps in legal or institutional frameworks. By combining historical analysis with contemporary institutional evaluation, the chapters provide a clear picture of how each system has arrived at its current state and where vulnerabilities persist.

Chapter V employs Jurisprudential Reception Theory to synthesise comparative insights, synthesizes the findings of the preceding chapters through a comparative lens. The analysis reveals both the diversity of institutional arrangements and the convergence of policy challenges across Germany, Japan, and China. Germany demonstrates the strengths and weaknesses of a mature social insurance system: universal coverage enhances equity, yet sustainability pressures continue to challenge policymakers. Japan exemplifies a comprehensive, community-based model, balancing service coverage with local engagement, though the rapid growth of care demand and fiscal constraints present ongoing difficulties. China, still in the pilot phase, faces the challenge of constructing a coherent LTCI system within a developing context, marked by uneven regional implementation, continued reliance on family care, and the need for robust legal and institutional frameworks. Despite these differences, several common themes emerge. All three countries struggle to maintain financial sustainability while ensuring adequate care quality. Declining family support increases reliance on professional caregivers, highlighting workforce development as a key concern. Additionally, formal recognition of caregivers' rights and the legal structuring of LTCI systems are central to promoting equity and efficiency. China's ongoing LTCI reform can draw concrete lessons from the German and Japanese experiences, which are further elaborated in Chapter VII.

Chapter VI focuses on robocare as a test case for applying socio-technical governance and care ethics, and examines robocare as a practical test case for integrating technology into long-term care. Both Japan and China confront demographic pressures, including ageing populations and shrinking labour forces, and are increasingly turning to robotic technologies to alleviate the strain on LTC systems. However, the success of robocare depends on more than technological sophistication; effective legal frameworks, ethical oversight, and public trust are equally crucial. Neither country has

enacted dedicated legislation specifically for robocare. Japan has linked assistive technology initiatives with its LTCI Act and has begun experimenting with governance frameworks, yet adoption remains limited due to technical constraints, high costs, and user acceptance issues. China, by contrast, is still in an early stage, facing low public acceptance and limited digital literacy among the elderly population. These challenges reflect broader global tensions between innovation, ethics, and accessibility, emphasizing that the deployment of robocare must navigate both societal realities and the legal and moral complexities of human–robot interaction.

Chapter VII: Building on the comparative insights and the robocare case study, Chapter VII translates empirical and doctrinal findings into concrete reform proposals for China’s LTCI system. Drawing lessons from Germany’s established social insurance model and Japan’s community-oriented, technology-integrated approach, the chapter outlines legislative, regulatory, and administrative measures to strengthen the pilot LTCI programs. Recommendations focus on promoting financial sustainability, ensuring equitable access, developing a trained workforce, and establishing clear ethical and legal guidelines for technological integration, including robocare. Emphasis is placed on practical feasibility and alignment with China’s demographic, cultural, and institutional context, offering a roadmap for *de lege ferenda* reforms that are both effective and socially acceptable. Chapter VIII is the conclusion of the dissertation.

Chapter VIII concludes the dissertation by synthesizing the key findings and contributions of the study.

Through this design, the dissertation moves from historical description to comparative analysis and normative evaluation and finally gives the reform recommendations, ensuring a coherent link between research objectives, methodology, and structure.

B. New Scientific Results and Their Application to Practical and Theoretical Problem-Solving

The analysis undertaken in this dissertation demonstrates that the establishment of a sustainable LTC system is not only a demographic necessity but also a legal and ethical imperative for modern welfare states. China’s experience reveals both the progress and limitations of a rapidly evolving system: while significant steps have been taken toward piloting LTCI in selected cities, the absence of a national legislative framework, limited coverage, uneven benefit structures, and lack of oversight mechanisms remain key obstacles to universality and fairness.

By contrast, Germany and Japan provide two instructive, though distinct, models. Germany’s system is deeply rooted in the tradition of social insurance, codified by law, and financed through a solidarity-based mechanism that ensures broad coverage. However, it faces enduring challenges of financial sustainability, workforce shortages,

and rising demand. Japan's LTCI system, in turn, stands out for its emphasis on community-based integrated care, its responsiveness to demographic realities, and its openness to technological innovation. Yet it too confronts fiscal pressures, workforce inadequacies, and the difficulty of balancing formal and informal care responsibilities.

The comparative perspective highlights that no system offers a perfect solution. Instead, each country's LTCI reflects a negotiation between demographic necessity, cultural expectations, economic constraints, and political will. For China, this implies that a viable LTCI reform must be multi-dimensional: codifying a unified legal framework, expanding statutory entitlements to ensure equity, securing a multi-pillar financing system, and embedding robust oversight mechanisms to guarantee rights protection and quality of care.

Robocare emerges as both an opportunity and a challenge in this reform agenda. Japan's pioneering use of therapeutic, assistive, and monitoring robots demonstrates the potential of technology to mitigate workforce shortages, enhance care quality, and foster dignified ageing. Nevertheless, technological adoption raises profound ethical questions regarding human dignity, privacy, and fairness, as well as practical concerns about digital divides and cultural acceptance. China's path toward industrializing Robocare will therefore require careful legal regulation, policy coordination, and societal dialogue to ensure that technology serves as an aid rather than a substitute for human care.

1. Comparative Analysis of LTCI Systems and Challenges for China

The comparative analysis of the LTCI systems in Germany, Japan, and China reveals both the diversity of institutional arrangements and the convergence of policy challenges. Germany demonstrates the strengths and weaknesses of a long-established social insurance system, where universal coverage has improved equity but sustainability pressures persist. Japan illustrates the benefits of a comprehensive and community-based model, though the rapid growth of care demand and financial strain pose ongoing difficulties. China, while still in the pilot phase, reflects the tensions of building an LTCI system in a developing context, with uneven regional implementation, reliance on family care, and the need for stronger legal and institutional frameworks.

Despite these differences, several common themes emerge. All three countries grapple with the dual challenge of ensuring financial sustainability while maintaining adequate care quality. The role of family support is gradually declining, making the availability of a trained care workforce increasingly critical. Moreover, the recognition of caregivers' rights and the legal structuring of LTCI systems have become central issues in promoting both equity and efficiency. China's ongoing LTC reform can draw on many concrete lessons from Germany and Japan

As for the challenges of China's LTC system, it faces multiple structural challenges, including the absence of formal legislation, limited coverage, unstable financing, uneven service quality, and fragmented benefit schemes.

First, there is no dedicated legal framework for LTC insurance; current governance relies primarily on administrative regulations and pilot policies, unlike systems such as Germany's, where statutory law clearly defines rights and obligations.

Second, coverage remains restricted both geographically and demographically, as pilot programs are limited to selected regions and often exclude rural residents or non-elderly individuals with care needs, thereby exacerbating social inequalities and urban-rural disparities.

Third, the system lacks an independent financing mechanism, with heavy reliance on medical insurance funds, which undermines financial sustainability and increases systemic risk amid rapid population ageing.

Fourth, service quality remains uneven, particularly in rural areas, due to insufficiently trained personnel, weak institutional management, and limited provision of medical, psychological, and social support services.

Finally, benefit schemes vary significantly across regions, ranging from comprehensive coverage to highly limited reimbursement, reflecting a lack of national standardisation and coherence.

Collectively, these challenges hinder the equitable, efficient, and sustainable development of China's LTC system and highlight the need for comprehensive legal, financial, and institutional reforms.

2. Comparative Analysis of Robocare and Challenges for China

Japan and China both face severe demographic challenges, including ageing populations and shrinking workforces, and are turning to robotic technologies to ease pressure on LTC systems. Yet the success of robocare depends not only on technological advances but also on sound legal frameworks, ethical oversight, and public trust.

Neither country has enacted dedicated legislation for robocare. Japan has linked assistive technology policy with its LTCI Act and begun exploring governance frameworks, but adoption remains slow due to technical limits, high costs, and user acceptance issues.

China's development of elderly care and LTC robotics has been predominantly policy-driven and initially reliant on foreign technologies, particularly from Japan, Germany, and the United States. Core components such as sensors, actuators, and intelligent control systems were largely imported, constraining domestic innovation in high-end robotics. Although top-down policies and pilot programs facilitated rapid deployment, technological capacity remained limited. Compared with Japan's long-term, system-integrated approach, China's early development was characterized by fragmented applications and adaptive use of existing technologies. While recent advances in AI-enabled robotics indicate a shift toward domestic innovation, significant gaps persist in core technologies, especially in high-precision and ethically compliant systems.

At the societal level, public awareness and acceptance of care robots remain limited, particularly among older adults. Unlike Japan's sustained promotion across policy, media, and culture, China lacks long-term, multi-level engagement strategies. Moreover, Confucian values—especially filial piety—continue to shape elder care expectations. The increasing use of robots risks weakening traditional family-based caregiving by separating emotional responsibility from practical care, thereby challenging established ethical norms and potentially diminishing intergenerational bonds.

A significant digital divide further constrains the adoption of robocare. Although more than half of elderly internet users possess basic digital skills, this accounts for only a minority of the total elderly population. Internet penetration among individuals aged 60 and above remains substantially lower than the national average, with rural populations particularly disadvantaged. Economic limitations, low digital literacy, and insufficient age-friendly design of digital technologies further restrict access, leaving many older adults excluded from digital and robot-assisted care services.

Legal and ethical challenges constitute another critical dimension. Fundamentally, robocare must uphold human dignity and autonomy; however, robots lack genuine empathy and may undermine privacy, autonomy, and emotional well-being if inadequately designed. In the Confucian context, robotic care cannot replicate meaningful human relationships, raising concerns about the erosion of humane care practices. Ensuring informed consent—especially for cognitively impaired individuals—remains difficult, particularly in the absence of specific legal frameworks regulating robotic care. At the same time, issues of social justice and accountability arise. High costs limit access to advanced care robots, reinforcing inequalities between affluent and disadvantaged populations and exacerbating urban-rural disparities. Unclear liability frameworks further complicate responsibility for malfunctions, damages, and costs. Although existing laws such as product liability regimes provide partial regulation, rapid developments in AI challenge traditional legal boundaries, particularly regarding algorithmic bias, transparency, and accountability.

From a technical and governance perspective, overreliance on automated systems without sufficient human oversight may increase safety risks. China's care robotics sector also suffers from a weak technical foundation, fragmented platforms, and a lack of unified standards, limiting interoperability and scalability. Cybersecurity risks, including data breaches and unauthorized access to sensitive health information, further threaten patient safety and privacy. In addition, algorithmic bias and limited transparency complicate ethical implementation, especially for vulnerable groups such as older adults with cognitive impairments. Bridging the gap between policy and practice therefore requires not only technological improvements but also comprehensive training and institutional support.

Finally, the industrialisation of robocare faces structural barriers, including high costs, uneven technological capacity, and workforce adaptation challenges. Smaller care providers often lack the resources to adopt and sustain new technologies and face financial risks associated with failed implementation. Moreover, misalignment between technological design and local care practices—particularly in rural areas—limits usability and trust. Evidence also suggests that rapid technological adoption may increase psychological stress among vulnerable populations. These challenges indicate that the development of robocare in China cannot rely solely on technological innovation but requires integrated socio-technical and institutional strategies to ensure equitable, ethical, and sustainable implementation.

3. Recommendations for Reforming China's LTCI System

Drawing on the mature experiences of Germany and Japan, the recommendation proposes legal and institutional reforms for China, focusing on legal codification, equitable coverage, financial sustainability, rights protection, and the responsible integration of Robocare.

China should first enact a unified Long-Term Care Insurance Law to establish a clear legal foundation for the LTCI system. This framework should define entitlements, financing responsibilities, and quality standards, while combining primary legislation with flexible secondary regulations. National minimum standards for eligibility, benefits, and service quality should be introduced to reduce regional disparities, supported by transparent assessment mechanisms, provider licensing, and effective complaint procedures.

Building on this legal foundation, China should expand LTCI coverage both geographically and demographically by moving from pilot programs toward nationwide implementation. Eligibility should be extended to rural residents, informal workers, migrants, and non-elderly individuals with care needs, with a shift toward residency-based criteria to enhance inclusiveness and equal access.

To ensure sustainability, a multi-pillar financing mechanism should be established. This includes creating an independent LTCI fund separate from medical insurance, supported by contributions from individuals and employers, as well as government subsidies. A balanced co-payment structure and stronger central–local fiscal coordination should further enhance financial stability.

In parallel, statutory rules on eligibility and benefits should be clarified through standardized care-need assessments. Professional assessment teams, transparent procedures, and a graded care system linking dependency levels to benefit packages are essential to ensure fairness and legal certainty.

Furthermore, benefit provision should be standardized nationwide through a mixed model of cash and in-kind services, prioritizing home- and community-based care. At the same time, informal caregivers should be recognized and supported through training, financial allowances, and respite services.

The system should also clearly define the rights and obligations of all parties. Care recipients must be guaranteed dignity, autonomy, and informed choice, while care providers should be subject to strict quality, transparency, and professional standards, supported by a comprehensive workforce development framework.

To reinforce accountability, independent oversight and grievance mechanisms should be established, including supervisory bodies, accessible complaint procedures, and effective regulatory enforcement powers. These measures should be complemented by integrating LTCI into the broader legal system as a distinct branch of social insurance, with clear coordination with medical insurance and other legal frameworks.

In addition, China should develop a legal framework for Robocare, addressing safety, certification, liability, and data protection, while embedding ethical principles such as privacy and informed consent. This should be supported by closer coordination between technology and LTC policies, including industrial support, technical standards, and gradual inclusion of robot-assisted care in LTCI reimbursement schemes.

At the societal level, public engagement should be strengthened to improve acceptance of Robocare through education, community programs, and open discussion of ethical concerns. At the same time, responsible innovation should be promoted through interdisciplinary collaboration to ensure that technologies align with user needs and ethical standards.

Finally, a person-centred care approach should guide Robocare development, emphasizing user participation and maintaining hybrid care models that combine human and technological support. Efforts to bridge the digital divide—through age-

friendly design, improved accessibility, and targeted digital literacy programs, which are equally essential to ensure that older adults can fully benefit from technological advancements.

4. Research Limitation and Further Research

This research faces three main limitations:

This dissertation focuses primarily on national-level policy analysis and selected pilot cities in China. Given significant regional disparities in demographic, economic, and healthcare conditions, the findings remain relatively general and lack detailed local applicability. The proposed recommendations are therefore largely theoretical and require further empirical validation at the regional level.

Methodologically, the study relies mainly on qualitative analysis, which may involve a degree of subjectivity. In addition, the relatively recent implementation of LTCI pilot programs (since 2016) and policy time lags limit the availability of robust quantitative data. Future research should incorporate longitudinal and large-scale datasets to evaluate policy effectiveness more rigorously.

Finally, language constraints may have affected the comprehensiveness of the analysis. Although English, Chinese, and Korean sources were extensively used, reliance on translated German and Japanese materials may introduce inaccuracies, suggesting the need for further research based on original-language sources.

Future research should focus on several key areas:

First, future research could explore the empirical evaluation of LTCI pilot programs in China, particularly through longitudinal data, to assess their effectiveness in improving care quality, accessibility, and financial sustainability. Micro-level studies focusing on regional disparities, especially between urban and rural areas, would be valuable for identifying context-specific policy adjustments.

Second, further research is needed on the interaction between LTCI and informal care systems, including the role of family caregivers, gender dynamics, and intergenerational support structures. As China undergoes rapid demographic and social transformation, understanding how formal insurance systems can complement rather than replace traditional care arrangements remains a critical issue.

Third, the financing sustainability of LTCI deserves deeper quantitative and actuarial analysis. Future studies could model different contribution schemes, co-payment

structures, and fiscal transfer mechanisms to evaluate long-term solvency under varying demographic and economic scenarios. Comparative research incorporating additional countries may also provide broader insights into sustainable financing pathways.

Fourth, the legal and ethical governance of Robocare represents an emerging and underexplored field. Future research should examine how regulatory frameworks can address issues such as liability allocation, algorithmic bias, data protection, and human dignity in care settings. Interdisciplinary approaches combining law, ethics, and technology studies would be particularly valuable in this regard.

Fifth, more attention should be given to the social acceptance and usability of care technologies, especially among older adults with diverse levels of digital literacy. Empirical research on user experience, cultural attitudes, and behavioural responses to Robocare can inform more inclusive and person-centred design.

Finally, future research could investigate the integration of LTCI within broader social security and healthcare systems, including coordination mechanisms, governance structures, and policy coherence. In particular, examining how LTCI interacts with medical insurance, social assistance, and community-based care systems will be essential for building a holistic and resilient long-term care framework in China.

C. Publications within the Topic of the Dissertation.

- 1) Chen, M. (2025). *Analysis of the development of China's long-term care system*. Journal of Legal Theory and Practice of the Bar Association of Vojvodina, 96(3), 754–802.
- 2) Chen, M. (2025). *Combating abuse for older adults: Examining the impact of robocare in long-term care settings*. The Journal of Adult Protection, 27(4), 213–233.
- 3) Chen, M. (2025). *The right to privacy of workers under workplace surveillance in China*. Central European Academy Law Review, 2(1), 171–190.
- 4) Chen, M. (2025). *Closing the digital gap: Promoting the right to health of elderly individuals in long-term care settings*. In Z. Pavlović (Ed.), *The right to health* (pp. 377–391). Belgrade & Novi Sad, Serbia.
- 5) Hajdú, J., & Chen, M. (2024). *Az ápolási robotok alkalmazásának lehetősége az idősek tartós ápolásában*. Máltai Tanulmányok, 6(4), 29–45.
- 6) Chen, M. (2024). *The framework of long-term care for the elderly in the EU*. In L. Stajic (Ed.), *Harmonisation of Serbian and Hungarian law with the European Union law* (pp. 361–378). Novi Sad: Univerzitet u Novom Sadu.
- 7) Chen, M. (2023). *Exploring the potential of robocare in anti-ageism and protecting human rights for elderly people in long-term care settings*. In Z.

- Pavlović (Ed.), *Elderly People and Discrimination: Prevention and Reaction* (pp. 643–661). Belgrade & Novi Sad, Serbia.
- 8) Chen, M. (2022). *Privacy protection and robocare in long-term care*. *Journal of the Faculty of Law Oradea*, 1(2), 97–109.