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Home Accessibility Renovation for Households with Disabilities in China: International Practices and Policy Implications

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Abstract: Background: Home accessibility modifications are crucial for promoting independent living and quality of life among persons with disabilities. While developed countries have established comprehensive policy frameworks, developing nations like China face unique challenges in program design and implementation. **Objective:** This study conducts a systematic comparative analysis of home accessibility modification policies across China, Japan, Germany, and Sweden, identifying key policy dimensions and proposing evidence-based recommendations for strengthening China's policy framework. **Methods:** We employed a multi-dimensional analytical framework examining legislative foundations, eligibility criteria, funding mechanisms, and service delivery models. Data were collected from primary legislation, governmental regulations, official statistics, and peer-reviewed literature. **Results:** Significant cross-national variations exist in policy approaches. Japan and Germany utilize social insurance models with standardized assessments, Sweden adopts a universal rights-based approach, while China employs a targeted assistance model focused on economically disadvantaged households. China completed 1.28 million household renovations during its 14th Five-Year Plan, demonstrating strong implementation capacity; future policy refinement could draw on international experience to strengthen assessment standardization, broaden effective coverage, and improve the sustainability of financing. **Conclusions:** China can benefit from international experience in developing standardized assessment protocols, diversifying funding mechanisms, and establishing professional service delivery systems, while acknowledging contextual constraints unique to developing country settings.

Keywords: Home Accessibility Modification; Disability Policy; Comparative Analysis; Barrier-Free Environment

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1.Introduction

The global population of persons with disabilities is estimated at approximately 1.3 billion (about 16% of the world's population), and this proportion is expected to increase with population aging and the growing burden of chronic diseases [1]. As the home is the primary setting for daily living, residential accessibility is closely linked to independence, safety, and quality of life among persons with disabilities [2]. The International Classification of Functioning, Disability and Health (ICF)

frames disability as an outcome of interactions between health conditions and contextual factors, underscoring the critical role of modifiable environmental features—particularly within the home—in reducing activity limitations and participation restrictions [3]. Accordingly, home accessibility modifications, including structural adaptations (e.g., ramps, widened doorways, and bathroom modifications) and the provision of assistive devices, are widely used to support aging in place and independent living. Accumulating evidence indicates that appropriately designed home modifications can reduce caregiver burden, lower fall risk, improve functional independence, and enhance overall well-being [4, 5].

Developed countries have established a range of policy frameworks to support home accessibility modifications for persons with disabilities, reflecting different welfare traditions. Japan and Germany largely embed home modification support within social insurance–based long-term care systems with standardized eligibility assessment and defined benefit ceilings [6, 7]. Sweden adopts a universal, rights-based model in which municipalities provide needs-based grants funded through general taxation [8]. The United Kingdom operates a targeted scheme (e.g., the Disabled Facilities Grant) that is means-tested and delivered through local authorities [9]. China has also made substantial strides in developing home accessibility modification policies for persons with disabilities. During the 14th Five-Year Plan period (2021–2025), China completed barrier-free renovations for 1.28 million households with severely disabled members, surpassing the original target of 1.1 million households [10]. Despite these achievements, significant gaps persist compared to developed country models. First, China's modification programs primarily target families in economic hardship with severely disabled members. Second, the financing mechanism relies predominantly on government fiscal allocations rather than sustainable social insurance systems. Third, standardized assessment protocols and professional service delivery systems remain underdeveloped compared to the occupational therapist-led evaluation processes prevalent in developed countries.

Comparative policy analysis offers valuable insights for improving home accessibility modification programs in developing countries. However, existing comparative studies have predominantly focused on Western developed nations, with limited attention to China's policy approaches and the unique contextual factors shaping implementation in the world's most populous country [11]. Furthermore, while developed countries have accumulated decades of experience in program design, service delivery, and outcome evaluation, knowledge transfer requires careful consideration of differences in welfare traditions, housing stock characteristics, family structures, and fiscal capacities [12]. Understanding these cross-national variations is particularly crucial as China confronts accelerating population aging—with projections indicating that individuals aged 60 and above will exceed 400 million by 2035—alongside a rapidly evolving disability support system [13]. This study aims to conduct a systematic comparative analysis of home accessibility modification policies for families with disabilities across China, Japan, Germany, and Sweden. Based on the findings, we propose evidence-based recommendations for strengthening China's home accessibility modification policies, with implications for other developing countries seeking to enhance support systems for persons with disabilities within resource-constrained environments.

2.Methods

2.1 Study Design

This study employs a comparative policy analysis approach, examining home accessibility modification policies across four countries: China, Japan, Germany, and Sweden. These countries were selected based on the following criteria: (1) representation of diverse welfare state models (social insurance, universal, and targeted assistance); (2) availability of comprehensive policy documentation and outcome data; (3) varying stages of population aging and disability policy development; and (4) geographic and cultural diversity to ensure broader applicability of findings. The comparative analysis follows a structured framework adapted from established health policy comparison methodologies [14, 15].

2.2 Analytical Framework

We developed a multi-dimensional analytical framework encompassing four key policy dimensions:

Legislative and Policy Foundations: Constitutional provisions, primary legislation, and regulatory frameworks governing home accessibility modifications.

Eligibility Criteria and Assessment Systems: Target populations, assessment protocols, and certification processes for program access.

Funding Mechanisms: Financing sources (social insurance, taxation, out-of-pocket), subsidy levels, and cost-sharing arrangements.

Service Delivery Models: Professional involvement, service providers, and quality assurance mechanisms.

2.3 Data Sources

Data were collected from multiple sources, including: (1) primary legislation and governmental regulations from official legal databases of each country; (2) policy documents and implementation guidelines from relevant ministries and agencies; (3) official statistics from national statistical offices and social insurance agencies; (4) peer-reviewed academic literature identified through systematic searches of PubMed, Web of Science, and Scopus databases using keywords including "home modification," "accessibility," "disability policy," "long-term care," combined with country-specific terms; and (5) reports from international organizations, including the World Health Organization, Organisation for Economic Co-operation and Development (OECD), and European Commission. Literature searches were conducted between January and October 2024, with no language restrictions applied.

2.4 Analysis Approach

A structured comparative approach was employed, systematically analyzing each country's policies across the four analytical dimensions. Cross-national comparisons were conducted to identify similarities, differences, and distinctive features. The analysis also considered contextual factors including welfare state traditions, demographic characteristics, housing stock features, and fiscal capacities that influence policy design and implementation. Findings were synthesized to derive policy implications and recommendations for China, with attention to transferability considerations in developing country contexts.

3.Comparative Policy Analysis

3.1 Legislative and Policy Foundations (Table 1)

3.1.1 Japan

Japan's home accessibility modification policy is embedded within its Long-Term Care Insurance (LTCI) system, established under the Long-Term Care Insurance Act in 1997 and implemented nationwide in April 2000. Under the LTCI, all residents aged 40 and above are enrolled as insured persons, and benefits are available to those aged 65 and above, as well as to those aged 40-64 with specified age-related conditions [16]. Within this framework, municipalities provide an allowance for home renovation (e.g., installation of handrails and the removal of level differences) as part of in-home long-term care support, thereby institutionalizing home modification assistance within a broader long-term care arrangement. The LTCI was introduced in response to rapid population aging and the "socialization of care" principle, aiming to shift caregiving responsibility from individual families toward society while prioritizing aging in place [17]. Subsequent policy revisions have further strengthened preventive and community-based care orientations, while maintaining home renovation support as a component of home-based services [18].

3.1.2 Germany

Germany's approach to home accessibility modification is embedded within its social insurance-based Long-Term Care Insurance system, established under the Pflegeversicherungsgesetz (Long-Term Care Insurance Act) enacted in 1994 and implemented from 1995. As a "fifth pillar" of the German social security system, long-term care insurance is mandatory for all statutory insurance members, with contributions shared between employers and employees and periodically adjusted by policy. Under the Eleventh Book of the German Social Code (SGB XI), provisions for the improvement of the home environment constitute a legally recognized benefit within the long-term care framework, enabling financial support for residential adaptations that facilitate daily functioning. The 2017 Care Strengthening Acts (Pflegestärkungsgesetze I–III) introduced a five-tier care grade classification and expanded the range of benefits, including support for individuals with cognitive impairments. Reforms in the mid-2010s also raised benefit ceilings for home environment improvement measures, thereby enhancing accessibility support under the LTCI system [7].

3.1.3 Sweden

Sweden's housing adaptation policy is primarily governed by the Housing Adaptation Grant Act, first enacted in 1992 and subsequently revised. In contrast to the insurance-based models adopted in Japan and Germany, Sweden's approach reflects

the Nordic universal welfare tradition, under which housing adaptation is framed as a needs-based statutory entitlement administered by municipalities, rather than as an insurance benefit. The Act requires municipalities to provide grants for necessary housing adaptations to persons with disabilities, based on assessed functional needs, without means testing and irrespective of housing tenure [8]. This policy is complemented by the Planning and Building Act, which sets mandatory accessibility requirements for new construction and major renovations, as well as by Sweden's broader national disability policy framework emphasizing equality, accessibility, and full participation. Together with related disability support legislation, including the Act concerning Support and Service for Persons with Certain Functional Impairments (LSS), these measures form a comprehensive institutional context that supports independent living and social inclusion [19].

3.1.4 China

China's legislative framework for accessibility has evolved substantially over the past two decades. The Law on the Protection of Persons with Disabilities, originally enacted in 1990 and comprehensively revised in 2008, established fundamental rights related to accessibility and barrier-free environment construction [20]. The Regulations on the Construction of an Accessible Environment (2012) further provided China's first specialized regulatory framework in this field [21]. Most recently, the Law of the People's Republic of China on the Construction of Accessible Environments, adopted by the National People's Congress in June 2023 and effective from September 2023, marked a major legislative advancement. This law places explicit responsibility on governments at all levels to promote accessible environment construction and includes provisions relevant to residential settings, supporting modifications that enable persons with disabilities and older adults to safely travel, enter and exit buildings, use facilities and public transportation, access information, and participate in social services [22]

Table 1. Comparative Overview of Home Accessibility Modification Policies

Dimension	Japan	Germany	Sweden	China
Policy Model	Social Insurance (LTCI)	Social Insurance (Pflegeversicherung)	Universal Rights-based	Targeted Assistance
Year Established	2000	1995	1992	2012 (Regulation) / 2023 (Law)
Primary Legislation	Long-Term Care Insurance Act	SGB XI (Social Code Book XI)	Housing Adaptation Grant Act	Law on Barrier-Free Environments
Target Population	Age 65+ ; or 40-64 with specified conditions	Insured persons with assessed care needs (Pflegegrad)	Persons with disabilities based on assessed functional needs (no means testing)	Severely disabled persons in economic hardship
Maximum Subsidy	¥200,000 per beneficiary (home renovation allowance)	€4,000 per measure	Needs-based coverage of approved costs	Variable by region (¥2,000-8,000)
Funding Source	Insurance premiums + taxes + copayment (typically 10–30%)	Insurance premiums (employer/employee)	Municipal taxation	Government fiscal allocation
Assessment Method	Standardized eligibility assessment + care manager (care plan)	MD assessment, 5-tier Pflegegrad	OT-led needs assessment	Disability certification + means testing and local needs assessment procedures

Note: LTCI = Long-Term Care Insurance; SGB = Sozialgesetzbuch (Social Code); MD = Medizinischer Dienst; OT = Occupational Therapist

3.2 Eligibility Criteria and Assessment Systems

3.2.1 Japan

Japan employs a comprehensive, standardized assessment system as the gateway to Long-Term Care Insurance (LTCI) benefits, including home modifications. Primary insured persons (Category 1, aged 65 and above) are eligible regardless of the cause of disability, while secondary insured persons (Category 2, aged 40–64) must demonstrate care needs arising from

specified age-related conditions. The assessment process involves a 74-item standardized questionnaire covering physical function, cognitive status, and behavioral characteristics, administered by trained municipal investigators. Responses are processed through computer-based algorithms to generate a preliminary care-need classification, which is subsequently reviewed by Care Need Certification Boards composed of physicians, nurses, and other health and social care professionals. The resulting seven-level classification—Support Levels 1–2 and Care Levels 1–5—determines the scope of available benefits. For home modifications, certified care managers conduct individualized assessments to identify appropriate adaptations based on the person's functional limitations and residential environment [23]. This dual-layer assessment mechanism ensures system-wide standardization while allowing for individual tailoring.

3.2.2 Germany

Germany's assessment system was substantially reformed in 2017 with the introduction of the Pflegegrad (care grade) classification. In-home assessments are conducted by the Medical Service (Medizinischer Dienst, MD) using a standardized evaluation instrument that examines six domains: mobility; cognitive and communication abilities; behavioral and psychological problems; self-care; management of disease-related requirements; and the organization of daily life and social contacts. These domains are differentially weighted, with self-care carrying the greatest weight, to produce an overall score that is mapped onto five care grades (Pflegegrad 1-5). Individuals classified as Pflegegrad 1 exhibit minor impairments and receive limited benefits, whereas Pflegegrad 5 indicates severe functional limitations requiring intensive support. Home modification subsidies are available from Pflegegrad 1 onward, subject to a uniform ceiling of €4,000 per measure. The assessment framework explicitly recognizes the role of the home environment in maintaining independence, thereby positioning environmental adaptation as an integral complement to personal care services [24].

3.2.3 Sweden

Sweden's housing adaptation grant system is characterized by a needs-based approach without means testing. Individuals with permanent or long-term functional impairments that limit their ability to use their home independently may apply, regardless of age, income, or housing tenure. Assessments are conducted at the municipal level and typically involve occupational therapists, who evaluate functional limitations in relation to the specific residential environment. Rather than assigning applicants to standardized care levels, each case is assessed individually based on documented needs, often supported by medical documentation describing the functional implications of the impairment. Municipal authorities then determine whether the proposed modifications are "necessary" for the applicant's independent functioning at home—a criterion that has occasionally been subject to legal interpretation but generally allows for a broad range of adaptations [25]. Empirically, approximately 85% of grant recipients are aged 65 years or older, reflecting the strong association between aging and functional limitation.

3.2.4 China

China's eligibility determination for home accessibility modifications operates through a dual criterion of disability status and household economic circumstances. Applicants are required to hold a valid disability certificate issued through the national disability assessment system, which classifies disabilities into four grades (Level I being most severe and Level IV mild) across six categories: visual, hearing, speech, physical, intellectual, and psychiatric disabilities. Current programs primarily prioritize individuals with Level I or Level II disabilities. A second eligibility criterion concerns household economic status, with priority typically given to families registered as minimum livelihood guarantee, extreme poverty, or marginal low-income households. Assessments are conducted by county- or district-level Disabled Persons' Federations in coordination with civil affairs departments.

3.3 Funding Mechanisms

The four countries exhibit markedly different approaches to financing home accessibility modifications, reflecting broader welfare state configurations and fiscal capacities (Table 2).

Japan's LTCI system pools resources from three main sources: insurance premiums paid by insured persons, public funding from national and local governments, and user copayments, with premiums and public funding each accounting for roughly half of total expenditures and copayments representing a smaller share [16]. Premium rates vary across municipalities and are

income-adjusted for Category 1 insured persons (aged 65+). For home modifications, beneficiaries are eligible for coverage of up to ¥200,000 per dwelling over the lifetime, subject to a copayment typically set at 10% (and higher for higher-income beneficiaries). The lifetime cap can be reset upon relocation or substantial changes in care needs, allowing the benefit to respond to evolving functional circumstances. Overall, this insurance-based mechanism offers relatively predictable financing while incorporating cost-sharing to encourage appropriate use.

Germany's Pflegeversicherung similarly relies on mandatory premium contributions shared between employers and employees, with the contribution rate periodically adjusted by policy. The system provides subsidies of up to €4,000 per approved home modification measure, generally without direct copayment for the modification itself. Importantly, the ceiling applies per "measure" rather than per individual, meaning that households with multiple eligible members may access higher total amounts when needs are distinct. Reforms in the mid-2010s increased the benefit ceiling, improving access to adaptations, although some evidence suggests that part of the increase may have been absorbed by rising contractor prices rather than fully translating into lower out-of-pocket costs for recipients [7]. Unlike Japan, Germany does not impose a lifetime cap on cumulative modification benefits; additional measures may be funded as needs change.

Sweden's tax-financed system represents a universal, rights-based model. Municipalities are responsible for housing adaptation grants, financed primarily through local taxation, supplemented by fiscal equalization mechanisms. Eligible applicants are not subject to means testing or copayment requirements, and municipalities generally cover the full cost of approved and necessary modifications based on assessed need. National expenditure exceeds SEK 1 billion annually, supporting a substantial volume of adaptations each year [8]. While this model minimizes financial barriers, it can generate fiscal pressure for municipalities with aging populations and higher levels of functional limitation.

China's financing mechanism relies primarily on multi-level government fiscal allocations. Central government earmarked transfers are channeled through the China Disabled Persons' Federation system and supplemented by provincial and local government contributions. During the 14th Five-Year Plan period (2021–2025), substantial public investment supported large-scale implementation, including the completion of barrier-free renovations for approximately 1.28 million households by mid-2025. However, per-household subsidy levels remain modest by international standards and vary across provinces, with some localities experimenting with complementary sources such as charity donations and lottery welfare funds [26].

Table 2. Comparison of Funding Mechanisms and Coverage Levels

Aspect	Japan	Germany	Sweden	China
Financing Type	Social insurance + public funding	Social insurance	Tax-financed (municipal)	Government fiscal appropriation
Copayment	10–20% (income-related)	None (for approved measures)	None	None for eligible households
Means Test	No (copayment varies by income)	No	No	Yes (economic hardship criteria)
Annual Beneficiaries	Large-scale national program	Nationwide insurance-based program	70,000–75,000 approved adaptations annually	1.28 million households completed during the 14th Five-Year Plan

3.4 Service Delivery Models

Service delivery systems vary substantially across the four countries, reflecting different professional traditions and institutional arrangements.

In Japan, care managers play a central coordinating role within the Long-Term Care Insurance (LTCI) system, including home modification services. These professionals—typically nurses, social workers, or other qualified practitioners who have passed national certification examinations—conduct needs assessments, develop care plans, and coordinate services across providers. For home modifications, care managers work with designated contractors who meet prefectural registration requirements. The service delivery process emphasizes pre-modification consultation and post-modification follow-up to ensure that adaptations address actual functional needs. Building contractors, rehabilitation specialists, and welfare equipment advisors

often collaborate in the modification process. In addition, Japan has developed specialized training programs for renovation coordinators or specialists with expertise in accessibility-oriented housing adaptations, supporting professionalized service delivery [23].

Germany's service delivery model is centered on the long-term care insurance funds, which process applications, coordinate assessments, and approve home modifications. Upon receiving a request, the Pflegekasse may involve housing counseling services, which operate in most municipalities and are commonly staffed by architects, social workers, and occupational therapists. These services provide free advice on suitable modification options and assist applicants throughout the approval process. Modifications are generally implemented by private contractors selected by beneficiaries, with costs reimbursed after completion. Quality assurance is primarily embedded in the approval and reimbursement procedures rather than standardized post-modification outcome evaluations. Recent policy initiatives emphasize closer coordination between healthcare and social care systems, with potential implications for more integrated service delivery [24].

Sweden's decentralized system assigns primary responsibility for housing adaptation services to its 290 municipalities, resulting in some local variation in implementation. Nevertheless, occupational therapists (arbetsterapeuter) consistently occupy a central professional role in needs assessment and prescription of modifications. Following an application, municipal OTs typically conduct home visits to evaluate functional limitations and environmental barriers, and then specify the required adaptations. Municipalities may implement modifications through in-house construction teams or private contractors. A distinctive feature of the Swedish model is the integration of housing adaptation with other disability supports, such as assistive technology provision and personal assistance services, enabling comprehensive responses to independent living needs. Post-modification follow-up by OTs further supports effectiveness and adjustment where necessary [25].

China's service delivery system for home accessibility modifications is still evolving. Implementation is typically coordinated by county- and district-level branches of the China Disabled Persons' Federation (CDPF), in collaboration with civil affairs departments and community-level organizations. Assessment and modification activities may be undertaken by CDPF staff, community workers, or contracted service providers, but professional qualifications and service capacity vary considerably across regions. Although some localities have begun to involve rehabilitation professionals and social workers, a nationally standardized, occupational therapist–led functional assessment framework has not yet been fully established. Quality assurance mechanisms are also uneven, with some provinces adopting technical standards and inspection procedures while national standardization remains limited. Recent policy emphasis on "precise" assistance reflects increasing attention to individualized needs, and although implementation challenges persist, ongoing policy refinement and local experimentation indicate gradual improvements across different contexts.

4.Discussion

This comparative analysis reveals both convergent trends and persistent differences in home accessibility modification policies across the four countries. All four nations recognize home modifications as essential supports for independent living and have established legal frameworks to facilitate access. However, the policy instruments employed—social insurance, universal entitlement, or targeted assistance—reflect different welfare state traditions and fiscal contexts.

Across countries, home accessibility modification policies reflect distinct financing and assessment approaches shaped by welfare traditions and fiscal contexts. Japan and Germany rely on social insurance–based models that offer relatively sustainable and predictable funding, supported by standardized assessments and established professional roles, though at the cost of administrative complexity and incomplete population coverage. Sweden's universal, tax-financed system provides the most inclusive access based on assessed need but places substantial fiscal responsibility on municipalities. China's targeted assistance approach has enabled rapid scale-up and effective concentration of limited resources on households with the greatest combined disability and economic need, while necessarily prioritizing coverage within existing fiscal constraints. Correspondingly, assessment systems vary: professionally administered and standardized mechanisms in Japan, Germany, and Sweden help align modifications with functional needs, whereas China's reliance on disability certification and economic eligibility, while efficient, offers a more limited basis for individualized functional assessment.

Drawing on the above comparative findings, several policy implications emerge for the continued strengthening of China's

home accessibility modification programs. While the current focus on households with severe disabilities and economic hardship has been effective in directing limited resources to those most in need—particularly during the rapid expansion phase of the 14th Five-Year Plan—a gradual expansion of eligibility to include individuals with moderate disabilities or households slightly above poverty thresholds could further enhance equity and program reach. Income-adjusted cost-sharing mechanisms, similar to those used in Japan, may help balance expanded access with fiscal sustainability, a direction supported by the legal foundation established under the 2023 Law on the Construction of Accessible Environments. At the same time, international experience underscores the importance of standardized, professionally administered functional assessments in improving the appropriateness and effectiveness of home modifications. China could develop assessment tools tailored to domestic conditions, drawing on the ICF framework and adapting elements from Japan and Germany, while strengthening training for rehabilitation professionals, social workers, and community health workers to build long-term professional capacity. In terms of financing, although reliance on fiscal appropriations has enabled rapid implementation, exploring hybrid funding models—such as greater integration with long-term care insurance pilots, alongside government subsidies, charitable contributions, and carefully designed user copayments—could enhance financial resilience and program continuity. Finally, strengthening service delivery infrastructure through workforce development, technical standards, and quality assurance mechanisms, together with differentiated strategies to address urban–rural disparities in housing conditions and service availability, would support more consistent and effective implementation across diverse local contexts.

At the same time, policy learning from developed countries must be carefully contextualized. China's housing stock differs markedly from that of Japan, Germany, and Sweden, characterized by high rates of multi-generational living, diverse construction forms ranging from traditional courtyard dwellings to high-rise apartments, and complex property rights arrangements. Family structures and caregiving norms also differ, with family-based care remaining more prominent in China, which may moderate demand for formal modification services while increasing the importance of adaptations that support family caregivers. Fiscal capacity represents an additional constraint: although China's overall economic scale has expanded substantially, per capita GDP and government revenue remain below those of most developed countries, making the generous subsidy levels and universal coverage observed in countries such as Sweden difficult to replicate in the short term. Nevertheless, China's strong administrative capacity and demonstrated ability to implement large-scale programs—evidenced by the successful completion of approximately 1.28 million household accessibility modifications during the 14th Five-Year Plan—provide a solid foundation for continued policy refinement and gradual expansion.

This study has several limitations. First, data availability and quality vary across countries, limiting comparability of some metrics. Second, policy documents may not fully capture implementation realities, and grassroots-level challenges may be underrepresented. Third, the analysis focuses on policy frameworks rather than outcome evaluations, which remain limited, particularly for China's programs. Future research should examine program effectiveness and beneficiary outcomes across different policy models.

5.Conclusion

Drawing on international experience, China can further strengthen home accessibility modification policies through gradual expansion of eligibility, the development of standardized and professionally administered functional assessments, diversified financing—including closer integration with emerging long-term care insurance—enhanced workforce training and service delivery capacity, and context-sensitive strategies to address urban–rural differences. As China responds to rapid population aging and advances disability rights and barrier-free environment construction, these reforms offer a practical pathway to improving quality of life for millions of persons with disabilities and older adults, while China's experience in scaling up large-scale programs may also provide useful lessons for other countries pursuing inclusive development.

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Conflict of Interests

The authors declare that there is no conflict of interest regarding the publication of this paper.

Reference

[1] World Health Organization. (2023). Disability. Retrieved from https://www.who.int/news-room/fact-sheets/detail/disability-and-health

[2] Iwarsson S, Ståhl A. (2003). Accessibility, usability and universal design--positioning and definition of concepts describing person-environment relationships. Disabil Rehabil, 25(2), 57–66.

[3] World Health Organization. (2001). International Classification of Functioning, Disability and Health (ICF). Retrieved from https://www.who.int/standards/classifications/international-classification-of-functioning-disability-and-health

[4] Carnemolla P, Bridge C. (2019). Housing Design and Community Care: How Home Modifications Reduce Care Needs of Older People and People with Disability. International Journal of Environmental Research and Public Health, 16(11), 1951.

[5] Keall M D, Pierse N, Howden-Chapman P, et al. (2015). Home modifications to reduce injuries from falls in the home injury prevention intervention (HIPI) study: a cluster-randomised controlled trial. Lancet, 385(9964), 231–8.

[6] Suyama N, Inoue K, Kuniya S, et al. (2024). History of assistive devices and home modification services under long-term care insurance system in Japan across 20 years: A narrative review. Assist Technol, 36(6), 412–21.

[7] Joo B. (2017). The Effect of Increases in German Long-Term Care Insurance Subsidies for Senior-Friendly Housing. Innovation in Aging, 1(suppl_1), 457–8.

[8] Slaug B, Chiatti C, Oswald F, et al. (2017). Improved Housing Accessibility for Older People in Sweden and Germany: Short Term Costs and Long-Term Gains. Int J Environ Res Public Health, 14(9),

[9] Gov.Uk. (2022). Disabled Facilities Grant (DFG) delivery: guidance for local authorities in England. Retrieved from https://www.gov.uk/government/publications/disabled-facilities-grant-dfg-delivery-guidance-for-local-authorities-in-england

[10] The State Council Information Office of the People's Republic of China. (2025). High-Quality Completion of the Thematic Press Conference Series on the 14th Five-Year Plan. Retrieved from http://www.scio.gov.cn/live/2025/36823/qwxz/202507/P020250723376810107031.pdf

[11] Wu Y, Zhang L, Fang X. (2022). Evidence review of home adaptations in the UK and selected OECD countries. Retrieved from

[12] Tervonen-Gonçalves L, Lehto J. (2004). Transfer of Health for All policy - What, how and in which direction? A two-case study. Health Res Policy Syst, 2(1), 8.

[13] National Health Commission of China. (2024). Report on the Development of Health Undertakings for the Aged in China. Retrieved from

[14] Marmor T, Freeman R, Okma K. (2005). Comparative Perspectives and Policy Learning in the World of Health Care. Journal of Comparative Policy Analysis: Research and Practice, 7(4), 331–48.

[15] Blank R H, Burau V. (2014). Comparative health policy. In Book Comparative health policy (pp. Palgrave Macmillan.

[16] Tamiya N, Noguchi H, Nishi A, et al. (2011). Population ageing and wellbeing: lessons from Japan's long-term care insurance policy. Lancet, 378(9797), 1183–92.

[17] Campbell J C, Ikegami N. (2000). Long-term care insurance comes to Japan. Health Aff (Millwood), 19(3), 26–39.

[18] Ministry of Health L a W. (2024). Long-Term Care Insurance System of Japan. Retrieved from https://www.mhlw.go.jp/english/policy/care-welfare/care-welfare-elderly/

[19] Swedish Institute. (2024). Disability policy in Sweden. Retrieved from https://sweden.se/life/equality/disability-policy

[20] (2008). Law of the People's Republic of China on the Protection of Persons with Disabilities. Retrieved from https://www.gov.cn/guoqing/2021-10/29/content_5647618.htm

[21] State Council of the People's Republic of China. (2012). Regulations on the construction of barrier-free environments.

Retrieved from https://www.gov.cn/zwgk/2012-07/10/content_2179864.htm

[22] Standing Committee of the National People's Congress.(2023). Law of the People's Republic of China on the Construction of Accessible Environments. Retrieved from https://www.gov.cn/yaowen/liebiao/202306/content_6888910.htm

[23] Makigami K, Pynoos J. (2002). The evolution of home modification programs in Japan. Ageing International, 27(3), 95–112.

[24] Bundesgesundheitsministerium. (2024). Long-term care insurance. Retrieved from https://www.bundesgesundheitsministerium.de/en

[25] Iwarsson S, Slaug B. (2010). Housing Enabler: A method for rating/screening and analysing accessibility problems in housing. In Book Housing Enabler: A method for rating/screening and analysing accessibility problems in housing (pp. Veten & Skansen.

[26] Wu Y, Zhang L, Fang X. (2022). Evidence review of home adaptations in the UK and selected OECD countries. International Journal of Environmental Research and Public Health, 19(3),