

# Operational Efficiency Analysis of Community Elderly-Assistance Restaurant—Taking Restaurant A as an Example

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**Abstract.** As urban aging intensifies, there is an urgent need to enhance community-based senior support systems. Community elderly-assistance restaurant, as government-promoted public welfare initiatives, play a vital role in ensuring basic living needs for the elderly and strengthening community cohesion. Through field investigations and interviews at a community elderly-assistance restaurant in city C, this study identifies key operational challenges like insufficient coverage, uneven spatial distribution, declining user retention rates, and irregular data management. The paper proposes targeted solutions, offering valuable insights for the development of similar community elderly-assistance restaurants in other regions.

**Keywords:** community elderly-assistance restaurant, operational efficiency, statistics.

## 1. Introduction

In recent years, China has been experiencing rapid population aging characterized by its large scale and relatively uneven distribution across regions and between urban and rural areas. According to data from the National Bureau of Statistics, by the end of 2024, the elderly population aged 60 and above nationwide had reached 310 million, accounting for 22% of the total population. As the aging population deepens, the demand for meal assistance services for the elderly has become increasingly prominent, emerging as one of society's focal concerns. Meeting the elderly population's needs for convenient, healthy, and worry-free meals has become a critical societal issue. In 2023, the Ministry of Civil Affairs and 10 other departments jointly issued the Action Plan for Actively Developing Meal Assistance Services for the Elderly. This plan sets work objectives for the end of 2025 and 2026, outlining five key areas of implementation: expanding and optimizing service provision, ensuring service quality, guaranteeing service sustainability, strengthening quality and safety monitoring, and enhancing implementation safeguards. By the end of 2023, 18 provinces nationwide had implemented senior meal assistance policies across their entire jurisdictions, while the remaining provinces piloted the program in specific regions.

The dining issue for community seniors directly impacts their well-being. Guided by national policies, numerous regions across the country have launched pilot programs and practical initiatives to advance senior meal assistance services. According to the latest statistics from the Ministry of Civil Affairs, by the end of the second quarter of 2024, there were over 369000 community-based elderly care service institutions and facilities nationwide. Despite positive progress in community meal assistance services, significant uncertainties remain regarding their effectiveness and sustainability. Field research reveals that due to variations in public awareness, income levels, and infrastructure development, advancing community meal assistance programs in some small and medium-sized cities faces considerable challenges. Operational and promotional bottlenecks have significantly constrained the elderly population's access to comprehensive care services, impacting their sense of fulfillment and well-being. Given the current state of community meal assistance services for the elderly, it is particularly necessary to analyze the factors affecting their healthy development and further discuss strategies to enhance the sustainability of these services [1,2].

Community elderly-assistance restaurant, as a government-promoted public welfare initiative, have played a positive role in ensuring the basic livelihood of the elderly and enhancing community

cohesion. Since 2018, District B in city C has actively advanced the construction of community elderly-assistance restaurants, establishing 70 above locations by 2025. Among these, the restaurant A stands as a representative case. To gain deeper insights into the development of grassroots community-based elderly care service systems, this paper analyzes operational data from the restaurant A between 2020 and 2025. Combined with field research, it aims to identify operational challenges, explore difficulties in advancing community meal assistance programs, and propose targeted improvement recommendations based on local practices. These findings offer valuable references for establishing similar community elderly-assistance restaurants in other regions, enabling more seniors to share in the benefits of the times, meet their care needs, enhance their quality of life, and enjoy a happy and secure retirement.

## **2. Current Development Status of Community Elderly-assistance Restaurant**

As of September 2025, significant progress has been made in establishing community elderly-assistance restaurants across numerous regions nationwide. The operational framework of these restaurants is driven by both market demand and service provision.

From the demand perspective, elderly individuals face diminished physical capabilities and motivation for cooking as their bodily functions decline. Family members, unable to directly address this issue, exhibit high demand for meal assistance services—particularly for empty-nest seniors, the elderly living alone, disabled seniors, and those with functional limitations. A survey of 10,000 seniors across ten cities conducted by the National Committee on Aging in the year of 2014 revealed that 42.2% of respondents reported needing meal assistance. Among them, the demand was highest among seniors living alone (53.7%) and the oldest seniors (46.7%). Data from the 2020 China Longitudinal Aging Social Survey (CLASS) revealed that among 11,398 elderly participants, 1,546 (13.6%) expressed willingness to purchase senior dining or meal delivery services.

From the supply side, publicly available policies across multiple cities indicate that China's elderly meal assistance models are gradually diversifying. The sector is transitioning from traditional to multifaceted approaches, shifting from uniformity to variety. This evolution has fostered models such as community canteens, institutional meal assistance, social catering involvement, and internet platform meal delivery. Various providers of elderly meal assistance services are demand-driven, offering diverse meal support across different settings and categories. This approach is progressively forming a multi-tiered, diversified service structure.

Improving the quality of life for the elderly and addressing dietary challenges faced by empty-nest seniors and those of advanced age have become top priorities in community-based eldercare, with active exploration underway nationwide. Current approaches primarily involve government policy support for the establishment and operation of elderly-assistance restaurants, including subsidies for renovations, operational costs, and meal expenses. Additionally, operators of these restaurants offer discounted meals to seniors, with governments and businesses collaborating to advance solutions for this social issue [3,4].

## **3. Operational Efficiency Analysis of the Restaurant A**

### **3.1. Basic Overview**

Since 2018, District B in city C has conducted surveys across communities to establish community elderly-assistance restaurants where elderly residents can conveniently access meal assistance services. By February 2025, the district had established 70 above restaurants, alleviating meal challenges for seniors within its jurisdiction.

The restaurant A stands as a representative model promoted by Community H in District B. Under the District's meal subsidy policy for seniors, elderly residents at the restaurant A in Community H receive government-supported meal benefits as follows: Seniors from scattered-residence special hardship households and low-income families registered in District B receive up to 12 yuan in daily

subsidies for two meals: 7 yuan for lunch and 5 yuan for dinner. Elderly individuals from special family planning households, low-income households on the edge of poverty, and those aged 80-99 receive a 3-yuan subsidy for one lunch per day. The restaurant offers daily charitable breakfasts: seniors aged 60-79 can purchase four steamed buns and receive one free with a community-stamped charitable card, while those aged over 80 can claim one free bun daily with the card.

In addition to the government-supported meal benefits mentioned above, seniors can also enjoy extra discounts offered by senior-friendly restaurants: The lunch charity set meal for seniors eligible for senior assistance policies costs 12 yuan per person, while the lunch set meal for other customers costs 18 yuan per person, equating to an additional 6-yuan discount per senior.

### 3.2. Meal Data Analysis

The data used in this paper is based on the author’s long-term volunteer work at the restaurant A in Community H, District B. 1539 dining records for seniors aged 60 and above at the restaurant A from 2020 to June 20th 2025 were acquired. These records underwent data anonymization and cleansing to analyze the operational efficiency and primary challenges of the community senior dining hall. In recent years—especially since the pandemic ended—an increasing number of seniors have chosen to dine at community elderly-assistance restaurants. By gender, male diners accounted for 46.7% while female diners made up 53.3%, maintaining a balanced ratio. Generally, seniors at the restaurant A primarily ate breakfast and lunch, with lunch being the busiest meal and dinner seeing very few patrons.

#### 3.2.1. User coverage

Although the number of seniors served by the restaurant A has increased annually—from 86 in 2020 to 397 in 2025—the overall penetration rate remains low. Taking 2024 as an example, the restaurant served 298 seniors, which accounting for 3.6% of the total number of seniors aged 60 and above in Community H. Data indicates the restaurant’s coverage of potential customers remains limited, lacking sufficient inclusivity. Furthermore, the low number of diners resulting from insufficient coverage leads to high operational costs, undermining the restaurant’s sustainable operation.

Regarding the frequency of visits to the restaurant A, the majority of seniors dined fewer than 10 times annually, accounting for 84.6%. Many seniors may visit due to temporary inconveniences or out of curiosity. Relatively few seniors consistently dine at the restaurant throughout the year. The community elderly-assistance restaurant has yet to fully fulfill its function of addressing meal challenges for the elderly.

**Table 1.** Frequency of Meal Visits by Seniors at Restaurant A

Total Annual Visits	Percentage
<10 visits	84.6%
<100 visits and $\geq 10$ visits	11.4%
<365 visits and $\geq 100$ visits	3.2%
>365 visits	0.8%

#### 3.2.2. User retention

After excluding the impact of the 2022 renovation suspension, data indicates a declining trend in the restaurant’s user retention rate. The retention rate peaked at 69% in 2023 but has declined annually since then. Although new user sign-ups increased in 2024, the proportion of returning users who continued using the service decreased. This decline in retention indicates a weakening appeal of the restaurant to its elderly clientele, potentially linked to insufficient discounts, limited meal variety, outdated facilities, and a lack of social activities.

**Table 2.** One-Year User Retention Rate at Restaurant A

Year	Number of Users Retained After One Year	One-Year User Retention Rate
2021	57	66.3%
2022	56	17.8%
2023	80	69.0%
2024	164	50.0%
2025	114	38.3%

### 3.2.3. Spatial coverage

From the perspective of service distance distribution, the median (50th percentile) experienced a significant leap between 2020 and 2021, expanding from 13 meters to approximately 5,000 meters and remaining stable thereafter. The 90th percentile, which was only 622 meters in 2020, stabilized between approximately 8000–8500 meters after 2021, indicating a significant expansion in the effective service radius of these restaurants. This shift suggests that senior-friendly restaurants have gradually transitioned from an initial “community-based service” model to a “district-based service” model, extending their reach to serve older adults across larger geographical areas.

From the spatial distribution of services, care for the elderly is primarily concentrated within a 1000-meter radius of restaurants, accounting for 40.6% of the total. Three additional clusters are distributed between 5000 and 7000 meters. However, the 1000–5000-meter range exhibits fewer service visits, forming a blank zone. This indicates that while restaurants strongly attract nearby residents, elderly individuals in intermediate-distance areas lack convenient dining options, revealing an uneven service distribution.

**Table 3.** Number of Service Visits and Proportion by Distance

Scope	Percentage
<1000 meters	40.6%
<5000 meters and ≥1000 meters	8.4%
<6000 meters and ≥5000 meters	18.2%
<7000 meters and ≥6000 meters	12.5%
≥7000 meters	20.3%

### 3.2.4. Data normality

High false-positive rate in facial recognition payment devices. During statistical analysis, it was discovered that some elderly individuals exhibited consumption frequencies significantly exceeding reasonable ranges. For instance, one senior recorded 194 days of consumption in a year, yet the system logged 644 transactions—far surpassing the maximum plausible value. Estimates indicate that approximately 6.67% of seniors exhibited “excessive daily transaction frequency” anomalies, primarily due to overly sensitive devices prone to false positives. This not only risks misallocating government subsidies but also distorts accurate service volume statistics. Governments or communities must further standardize the accuracy and user-friendliness of facial recognition payment devices, provide guidance to seniors on proper usage, reduce false positive rates, and thereby achieve precise statistical tracking.

Incomplete or non-standard address information. Among the 1539 address records analyzed, approximately 50.4% featured non-standard formats, while 7.3% contained obvious errors. Some subsidies were even disbursed to seniors residing outside District B. This data irregularity undermines policy precision and regulatory effectiveness.

### **3.3. Operational Challenges**

#### **3.3.1. Limited funding sources and insufficient sustainability drivers**

Funding is a critical prerequisite for project implementation. Without adequate financial support, relying solely on individual initiative places significant economic demands on investors. Furthermore, community elderly-assistance restaurants incur substantial expenses in staff recruitment, ingredient procurement, premises rental, and equipment maintenance. Achieving this solely through personal effort is challenging, hindering large-scale societal promotion and development of such centers. Current supportive policies primarily focus on guiding service delivery and operational models, while direct financial support and incentive mechanisms remain absent—a critical constraint on their growth. The restaurant A faces limited fundraising channels and resources, resulting in insufficient momentum for sustainable development. This primarily stems from a lack of awareness and capacity to proactively expand resources and channels. Fundraising challenges remain the most significant constraint in maintaining the organization's operations. Moreover, the relatively closed and limited fundraising channels have become a pain point in the organization's operations, also restricting the long-term development of its public welfare initiatives to some extent [5].

#### **3.3.2. Lack of volunteer expertise and limited service offerings**

Currently, volunteers at the restaurant A are primarily college students. The service aims to benefit more seniors in surrounding communities with needs, requiring a large number of volunteers to expand meal preparation and delivery capacity—especially those with professional senior care skills. The current issues include insufficient volunteer numbers and limited expertise. Professional skills training should be provided to volunteers to enable them to offer more specialized services. Most volunteers perform physical tasks within their capabilities, primarily supporting daily restaurant operations such as meal delivery, cleaning, and answering seniors' questions. Volunteers with additional capacity typically provide basic companionship services, often failing to recognize more complex needs. This limitation prevents the delivery of diversified and higher-level professional services [6].

## **4. Analytical Findings and Recommendations**

### **4.1. Expand Service Coverage**

During research interviews, it was discovered that many residents outside Community H—particularly the elderly—lack awareness of the restaurant A. Investors also lack understanding of its specific operational model, often equating community elderly-assistance restaurants with ordinary restaurants. These programs are not purely charitable initiatives and sustainable operations require consideration of profitability. Expanding service coverage to attract more elderly diners can help spread operational costs and increase revenue. Firstly, intensify promotional efforts through community bulletin boards, WeChat groups, and door-to-door outreach by volunteers to raise awareness among seniors. Secondly, deploy mobile food trucks or simple meal stations within 5000–7000 meters of the restaurant to cover service gaps. Third, moderately expand dining capacity like increase seating areas where feasible to enhance accommodating ability.

### **4.2. Optimizing Service Experience**

Analysis of dining data indicates that restaurant A still have low user coverage, with retention rates showing a declining trend. Service experience optimization is urgently needed. Firstly, upgrade restaurant facilities to improve dining environments, enhancing comfort and convenience. Secondly, diversify meal options by incorporating low-salt, low-fat, and personalized meal plans tailored to seniors' nutritional needs. Thirdly, introduce community activities by regularly hosting cultural and recreational events (e.g., health lectures, interest groups) to strengthen social bonds among seniors. Fourth, institutionalize volunteer services by mobilizing community resources to provide

companionship, meal delivery, and psychological support, thereby enhancing the overall dining experience for the elderly.

#### **4.3. Standardizing Data Statistics and Management**

In today's complex and volatile market environment, business managers and operators rely on scientific methods to improve decision-making efficiency and accuracy. Statistics has extensive applications in enterprise management, enabling companies to enhance management and decision-making through data analysis, thereby boosting operational performance and market competitiveness. Currently, community elderly-assistance restaurants commonly suffer from non-standardized statistical processes. Hardware upgrades are needed, including replacing facial recognition devices with higher accuracy to reduce misidentifications. Simultaneously, data verification mechanisms should be strengthened by establishing standardized information entry procedures and incorporating manual review steps to prevent non-residents from accessing subsidies. Additionally, promote the use of information management platforms and facilitate integration with government elderly care databases to achieve "one person, one card, one file" for enhanced data accuracy.

#### **4.4. Securing Additional External Resources**

To address challenges in resource mobilization and volunteer expertise for community elderly-assistance restaurants, nonprofit organizations must continuously innovate, break free from traditional mindsets, and strengthen connections with government bodies, other nonprofits, and the public. This approach not only clarifies developmental direction but also fosters support from governmental and societal sectors, bolstering sustainable growth momentum. Secondly, volunteer professional skills training should be strengthened through regular service-related learning sessions. Explore more specialized elderly assistance services while revising and refining service guidelines to clarify volunteers' rights and obligations. This will further promote standardization and normalization of community elderly-assistance restaurants' services, bolstering volunteers' confidence and capability in providing elderly care services [7,8].

### **5. Conclusion**

Community-based meal assistance services for the elderly represent a robust initiative in China's proactive response to population aging and optimization of basic elderly care services. These programs address the demand for affordable dining options within or near seniors' homes, holding significant positive value. The community elderly-assistance restaurant A has played a positive role in meeting seniors' dining needs and advancing community-based elderly care services. However, operational challenges persist, including insufficient coverage, uneven spatial distribution, declining user retention rates, and irregular data management. Enhancing data management, expanding service coverage, and improving service quality can effectively boost operational efficiency and service equity. Moving forward, the government should continue its coordinating role, businesses should enhance management innovation, and social forces should participate extensively. Together, they should foster a long-term mechanism characterized by "government leadership, business participation, and social collaboration," ensuring community senior dining halls truly become warm second homes for the elderly.

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