MOOC 17 Strategies and Actions for Optimizing Intrinsic Capacity

Chapter 2 Improving intrinsic capacity through Community-level interventions

Community-level interventions play a vital role in addressing the physical, mental, and social challenges associated with ageing. This chapter explores how community-based initiatives, combined with digital and mobile health technologies, can align with WHO's ICOPE framework to empower older adults and promote healthy ageing.

Overview of Community-Level Interventions

Community interventions are programmes designed to address key health and functional issues faced by older adults in a holistic manner. They often involve local organizations, healthcare providers, and volunteers working together to meet the diverse needs of older populations.

Examples:

- **Physical Activity**:

    o Multimodal exercise to improve mobility, musculoskeletal function, and reduce risk of falls.

- **Nutrition Support**:

    o Community kitchens that provide healthy meals at low cost.

    o Home delivery of meals for housebound older adults.

    o Screening programmes for malnutrition, followed by nutritional counselling.

- **Social Engagement**:

    o Intergenerational programmes where youth volunteer to assist older adults with technology or daily tasks.

    o Local centres offering recreational activities like gardening, arts, or group excursions.

- **Access to Health Monitoring**:

    o Regular health checkups and workshops to educate older adults on recognizing early symptoms of chronic conditions and empower them on self-health management.

The Role of Digital Health in ICOPE

Digital Health Transforming Ageing Care

- Older adults rapidly adopted technology for healthcare, known as digital health, during the COVID-19 pandemic.
- Digital health tools, such as eHealth platforms, telehealth, smartphone apps, mobile and wearable devices, are transforming the landscape of ageing care by enhancing accessibility, efficiency, and personalization.
- They empower older adults to engage in preventive measures and manage their health conditions proactively.

Case study: Jockey Club Community eHealth Care Project

The **Jockey Club Community eHealth Care Project**, launched by the CUHK Jockey Club Institute of Ageing, is an exemplary initiative that integrates digital health technologies with community care to support older people. This innovative, city-wide project promotes preventive healthcare, empowers older adults in self-management, and fosters healthy lifestyles through accessible and equitable digital health solutions.

Project Objectives

- To apply eHealth and digital health solutions to empower older people to build self-health management habits.

- To promote elderly centres as the first point of contact for detecting and addressing the health and social needs of the elderly for healthy ageing.

- To pilot eHealth and digital health technology to improve quality of life for the elderly through innovative approach, and to collect, aggregate and analyse the health characteristics and patterns of the elderly through data analytics.

Key Features of the Project

1. **Community Needs Assessment & Health Promotion**
   - **ICOPE-Based Assessments:** Community elderly centres identify older adults in need of care by conducting assessments based on the ICOPE framework.
   - **Healthy Ageing Programmes:** Health interventions, such as the *[Multi-Component Intervention Programme](#)*, are designed to enhance intrinsic capacity and prevent frailty.
   - **Centralized Platform:** A digital platform enables healthcare providers to access and analyse health records, ensuring better care coordination.
   - **Social Prescribing:** Older adults are linked to non-medical community resources, including exercise classes, art workshops, and caregiver support networks. *(Concept of social prescribing will be further elaborated in the next part.)*
2. **Community Capacity Building**
   - **Empower Social Care Providers:** Training programs equip social care providers with the skills to conduct needs assessments and deliver health promotion activities.

Impact of the Project

Since its launch, the Project has:

- Supported over 20,000 of older adults in identifying and managing health risks.
- Fostered collaboration between community organizations and healthcare providers, leading to better-integrated care systems.
- Demonstrated significant improvements in both the physical and emotional well-being of participants, as evidenced by evaluation data.

*To explore more about the **Jockey Club Community eHealth Care Project** and its publications, [click here.](#)*

Mobile Health for Self-Management of Ageing

The Rise of Mobile Health (mHealth)
- Mobile health (mHealth) is defined as the use of mobile wireless technologies to support the achievement of health objectives, especially for public health purposes.
- It is a transformative approach to healthcare delivery that leverages smartphones, tablets, and wearable devices to provide health services and information.
- It assists older adults in the prevention, early detection, and management of chronic diseases and long-term conditions.
- The WHO promotes mHealth as a crucial tool for achieving healthy ageing, particularly through its mAgeing programme.

What is the WHO mAgeing Programme?

- The WHO launched *mAgeing* as part of its global strategy to support older adults in maintaining their intrinsic capacity and functional ability.
- This initiative aligns with the ICOPE framework and seeks to empower older adults through personalized, easily accessible, and actionable health tools.

Key Features of the mAgeing Programme

- Evidence-Based Messaging: Provides users with science-backed tips on healthy ageing, focusing on areas like nutrition, physical activity, mental health, and chronic disease management.

- Behavioural Support: Sends regular, motivational messages to help users adopt and maintain healthy behaviours.

- Adaptability: Tailor the programme to fit the cultural, linguistic, and healthcare needs of different regions.

Accessibility in mHealth Applications

To ensure inclusivity, mHealth apps are designed with older users in mind:

- Large Fonts and Simple Navigation: Enhances readability and usability.

- Voice Prompts and Audio Features: Assists users with visual impairments or low literacy.

- Reminders and Notifications: Helps older adults remember medication schedules, appointments, and healthy habits.

Key Advantages of mHealth

- Cost-Effective: Reduces the need for frequent in-person visits, saving time and money for users and healthcare systems.

- Improved Adherence: Notifications encourage users to stick to their treatment plans and daily routines.

- Increased Engagement: Features like gamification (e.g., tracking steps or earning badges for health achievements) keep users motivated and committed.

Case study: iHealth Screen App

The iHealth Screen App, developed under the **Jockey Club CADENZA e-Tools for Elder Care project**, is a pioneering mHealth initiative that aligns with the WHO mAgeing objectives. It was officially launched in August 2021 and upgraded to a new version in November 2024. This new version combines various functions such as self-health management, self-care education, and community resource map.

Empowerment Through mHealth

1. **Self-health Assessment:** Older adults can independently assess their health status using the apps.

   - **12 free self-health screenings:** These screening covers areas such as nutrition, cognition, mobility, mental health and frailty, enabling users to detect potential health risks early.
   - **Integrated health reports:** Personalized results are provided after each screening, along with actionable recommendations that guide users on the next steps in managing their health.

2. **Self-care Education:** Provides access to educational resources that help users manage functional declines.

   - **Videos, Infographics, and Articles:** These resources are tailored for older adults and caregivers, covering topics such as fall prevention, mental well-being, and proper medication use.

3. **Community Resource**: Enables older adults and caregivers can easily reach the resources in the community.

   - **Search and GPS Navigation:** Users can search for medical and community services based on health needs, resource types, and locations. The GPS feature helps users find service providers and navigate to them.
   - **Bookmark and Share Resources:** Users can bookmark relevant resources and share them with friends and family via social media, fostering social connections and improving access to local support service.

Impact of the Project

- **Over 23,000 Downloads**: Demonstrating the app's growing popularity among users.
- **Improved Health Awareness and Access**: Users report increased health awareness and better access to support services.
- **Enhanced Self-Management**: Studies show that the app's integrated approach has strengthened self-management capabilities among older adults, reducing the burden on caregivers and healthcare providers.

Expanding the Role of mHealth with WHO mAgeing Principles

The iHealth Screen app incorporates WHO mAgeing principles, showcasing how mHealth solutions can align with global healthy ageing goals:

- **Behavioural Support and Motivation**: Features like notification reminders for self-assessments, encouraging messages, and alerts about available community services help users maintain positive habits.

- **Tailored Health Messaging**: The app's educational materials and alerts are culturally sensitive and localized to meet the unique healthcare needs of older adults in Hong Kong.

- **Integration with Social Prescription**: Through the Community Resource Map, the app connects users to community activities, fitness programmes, and support networks, addressing their social and emotional well-being.

Strategies for Community Engagement

The proportion of individuals aged 65 and above using smartphones in Hong Kong increased significantly from 42.9% in 2016 to 90.7% in 2022 (Figure 3). While this progress highlights a positive trend in digital adoption among older adults, challenges remain. Over half of individuals aged 60 and above reported experiencing significant difficulties using smartphones (Figure 4). These challenges underscore the need for continued efforts to bridge the digital divide and ensure older adults can fully benefit from digital technologies.

(Research Office, Legislative Council Secretariat, 2023)

Figure 3 - **Smartphone ownership for persons aged 65 and above, 2012-2022**

Year	No. of persons ('000)	Ownership rate (%)
2012	63	6.9%
2013	97	10.2%
2014	246	24.3%
2015	374	35.4%
2016	474	42.9%
2017	605	52.1%
2018	696	57.2%
2019	824	65.1%
2020	895	68.1%
2021	1 000	73.0%
2022	1 333	90.7%
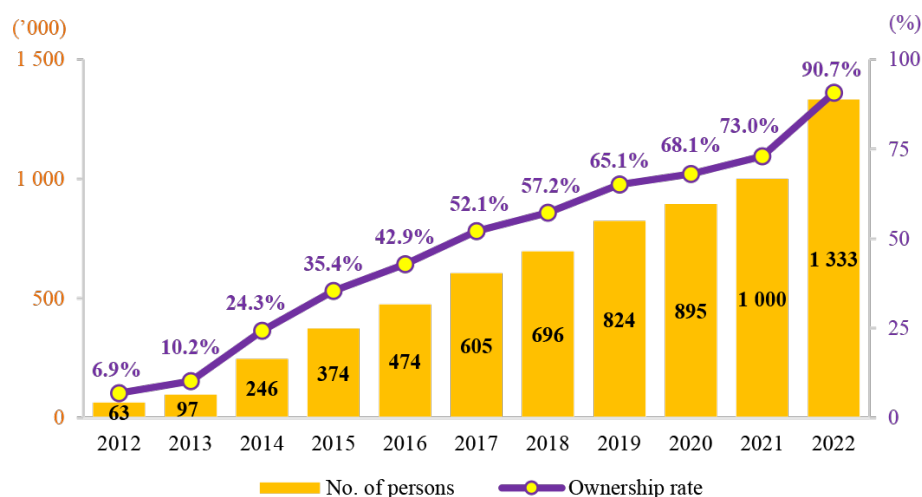
Figure 4 - **Use of smartphones by persons aged 60 and above** [a]

Levels of difficulty on using smartphones			
A lot of difficulty (54.1%)	Some difficulty (20.5%)	Little difficulty (17.8%)	No difficulty (7.5%)[b]

Channels to seek help			
Relatives or friends (47.3%)	Social welfare organizations (28.8%)	Others[c] (8.2%)	No support channel (15.8%)[b]
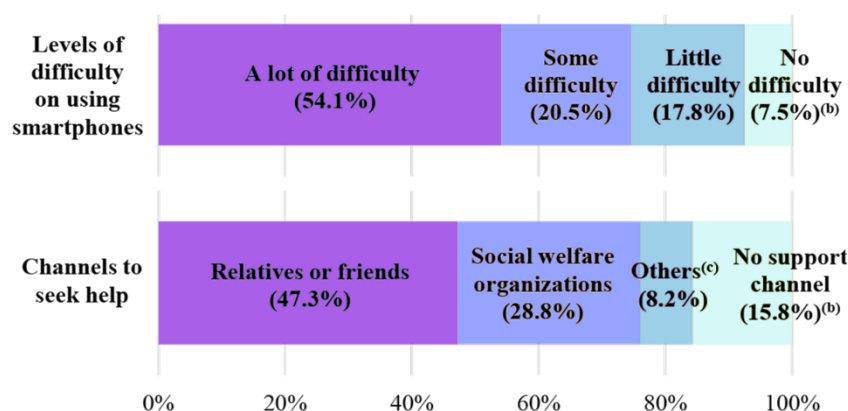
Notes: (a) Based on a survey conducted during July 2022 to January 2023. It covered 162 persons aged 60 and above who were living alone or with their partners only.
(b) The percentage shares may not add up to 100% due to rounding.
(c) Others include support from the mobile phone shops.

To address these challenges, Jockey Club CADENZA e-Tools for Elder Care project implemented a **dual-pronged approach** to promote the wider adoption of iHealth Screen App:

1. **Large-Scale Community Promotion Campaigns**: Using exhibitions and media marketing to raise awareness and engage a broader audience.

2. **Targeted Interactive Workshops**: Collaborating with over 40 elderly centers, district health centers, and health service units to deliver hands-on workshops, educating more than 1,000 older adults and caregivers on app usage and health management.

*You may watch the below videos and [download](#) it to learn more about the **iHealth Screen App**.*

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