

IMPLEMENTATION OF THE WHO INTEGRATED CARE FOR OLDER POPULATION FRAMEWORK AT PRIMARY HEALTH CARE IN EGYPT

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How this policy brief was developed:

This policy brief is based on the research project “Cognitive Impairment and Noncommunicable Diseases in Egypt’s Aging Population: Insights and Implications from the pilot of the Longitudinal Study of Egyptian Healthy Aging “AL-SEHA”. The research was conducted under the guidance of the Institute of Global Health and Human Ecology, The American University in Cairo, Egypt, and benefited from the incentive grant for young researchers provided by the World Health Organization Global NCD Platform and UNITAR’s Defeat-NCD Partnership in collaboration with the Alliance for Health Policy and Systems Research.



What is this policy brief about?

This policy brief presents the findings of a comprehensive analysis of the opportunities and strategies for implementing the “WHO Integrated Care for Older Population Framework” at Primary Health Care in Egypt.

Who is this policy brief for?

This policy brief primarily targets national, regional and local health policy-makers in Egypt, however other decision-makers, practitioners and researchers interested in integrated care for older population may find the content of this policy brief relevant.

This policy brief includes:

- Description of the conditions for implementing integrated care for older population in Egypt
- Methodology and key findings of the analysis study
- Four policy options with advantages, disadvantages, feasibility, equity and stakeholder participation for each option

This policy brief does not include:

- Strategies to implement the proposed policy options
- Recommendations on the best policy option

PROBLEM STATEMENT

- According to the last census (2017), older adults aged 60 and above accounted for 6.7% of Egypt's total population, growing at a rate of 3.2% and outpacing the overall population growth rate of 2.4%.
- Health care in Egypt increasingly faces challenges due to changing epidemiological patterns, the increasing prevalence of noncommunicable diseases and persistently high levels of certain communicable diseases in older populations.
- The proposed reorganization of the health system aims to provide a comprehensive package of services for older people, including prevention, self-management support, chronic disease management and rehabilitation.
- Personalized preventive interventions in primary care save money and add value to health services, especially with the increase in lifestyle-related diseases and conditions.
- The WHO's Integrated Care for Older People (ICOPE) Framework offers an opportunity for Egypt to implement integrated care for older people based on the best practices.

IMPLICATIONS

This brief offers four policy options for the implementation of the WHO Integrated Care for Older Population Framework at Primary Health Care in Egypt.

- **Option 1:** Capacity building through public health training of various public health profiles in geriatric services and interventional public health courses to develop personalized care plans.
- **Option 2:** Strengthened partnerships with Egyptian stakeholders, focusing on the Egyptian Ministry of Health, Ministry of Solidarity Affairs, Ministry of Planning, Ministry of Higher Education, academia, NGOs and social clubs.
- **Option 3:** Single point of access to care at the PHC level for the older population by creating a specific structure and pathway and services in existing facilities that enable older adults to access multiple health and social services through a single point of entry.
- **Option 4:** Integrated health information system that integrates and categorizes health information on the older population into the national health information system.

1. FRAMING THE PROBLEM

BACKGROUND

According to the 2017 Egyptian census, older adults aged 60 and above accounted for 6.7% of the total population, or more than 6 million people. This age group grew at a rate of 3.2%, outpacing the overall population growth rate of 2.4% [1]. The Egyptian health system is characterized by multiple entities responsible for regulation, financing and service delivery. However, the system faces challenges due to changing epidemiological patterns, including the increasing prevalence of noncommunicable diseases and persistently high levels of certain communicable diseases [2]. Healthcare coverage and outcomes are unequal, particularly among older adults, with reported

needs in several areas unmet in a significant majority of cases, and over 75% of areas surveyed lacking adequate support and services [3].

The proposed reorganization of the health service aims to provide a comprehensive package of services for older people, including prevention, self-management support, chronic disease management and rehabilitation. The role of secondary care geriatricians can be expanded to improve care for older people. Integrating geriatric health services into primary care can help prevent disease, improve health equity, and

reduce health care costs [4-6]. This includes enabling primary care to provide more protective, promotive and preventive services for older people, improving communication and coordination, sharing knowledge and data, and strengthening surveillance. Personalized preventive interventions in primary care save money and add value to health services, especially with the increase in lifestyle-related diseases and conditions [7,8].

In particular, the WHO has proposed the Integrated Care for Older People (ICOPE) Framework to inform the application of the integrated person-centred health services framework in the context of older people and to bridge the gap between what is

considered best practice for older people and emerging evidence [9-11].

Integrating personal and community health services is critical, and implementing the ICOPE Framework in Egypt can enable comprehensive primary care that reaches everyone, contributing to Universal Health Coverage [12]. To ensure a long-term integrated healthcare service for the elderly, it is critical to develop long-term financing mechanisms and appropriate legislation that facilitates access to services and ensures quality social care. This policy brief covers policy options for implementing the WHO Integrated Care for Older People framework at primary healthcare facilities in Egypt.

METHODS AND DATA SOURCES

This policy brief was developed using the recommended framework provided by the Division for Evidence and Data to Policy, Science, Information and Dissemination at the WHO Regional Office for Eastern Mediterranean.

The brief was developed through an extensive literature review and evidence analysis. Academic literature, policy documents, and grey literature on integrated healthcare services for older populations in primary care settings were included in the review. Experts were consulted to gain additional insights and perspectives on the policy issue.

The evidence analysis entailed identifying key themes, evidence strengths, and limitations, as well as developing clear and concise policy recommendations that align with the needs of the target audience. The policy recommendations emphasized capacity-building, stakeholder engagement, single point of entry for care and integrating health information of older population to the national health system data management, to aid in the implementation of integrated healthcare services.

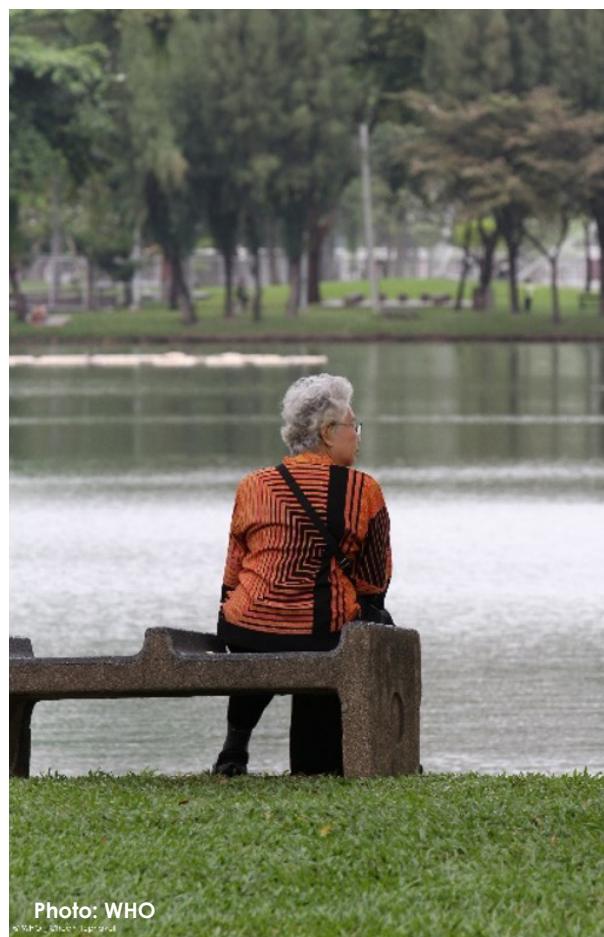


Photo: WHO

2. KEY FINDINGS

The recommended policy options in this brief were derived from the extensive analysis of the pilot phase of the Egyptian Longitudinal Study for Aging (AL-SEHA), a Health and Retirement Study (HRS) sister study adopting the SHARE (Survey of Health, Ageing and Retirement in Europe) questionnaire.

The pilot study included respondents aged 50 and over, with a sample size of 299 participants. The results reflect a diversity of conditions, with different percentages of cognitive impairment for different conditions. In response to this need, an Egyptian ageing study has been launched, modelled on the Health and Retirement Survey (HRS) network studies. Our findings are based on the AL-SEHA questionnaire, which is an adaptation of the SHARE survey, and targets non-institutionalized individuals aged 50 and over 17 years.

This comprehensive longitudinal survey covered all persons over 50 within selected households. The distribution of specific questionnaire modules varied between respondents in the household. AL-SEHA aimed to recruit 20,000 respondents aged 50+ for the first wave and follow them every two years with a translated, validated and culturally adapted questionnaire from SHARE. Cognitive function was assessed using a composite measure of

Where can I find out more about HRS?

The [Health and Retirement Study](#) by the University of Michigan is a longitudinal panel study that provides an invaluable and growing body of multidisciplinary data that researchers can use to address important questions about the challenges and opportunities of aging.

Where can I find out more about SHARE?

The [Survey of Health, Ageing and Retirement in Europe](#), is a research infrastructure for studying the effects of health, social, economic and environmental policies over the life-course of European citizens and beyond.

immediate and delayed verbal recall and verbal fluency (naming animals within one minute). Scores ranged from 0 to 10 for each test, and a composite score averaged from 0 to 1. Scores below 0.5 indicated impairment, while 0.5-1 indicated unimpaired function¹⁸. The preliminary findings of the pilot phase are presented in detail in **Annex 1**.

3. IMPLICATIONS AND RECOMMENDATIONS

We propose four policy options to be considered by the Egyptian Government for the implementation of the WHO Integrated Care for Older Population Framework at Primary Health Care in Egypt:

1. Capacity building through public health training in geriatric services and interventional public health courses (family doctors, nurses, paid and unpaid health and social care workers, formal carers and new carers such as students, trainees and new or expanded roles) to develop personalized care plans.
2. Strengthened partnerships with Egyptian stakeholders, focusing on the Egyptian Ministry of Health, Ministry of Solidarity Affairs, Ministry of Planning, Ministry of Higher Education, academia, NGOs and social clubs.
3. Single point of access to care at the PHC level for the older population by creating a specific structure and pathway and services in existing facilities that enable older adults to access multiple health and social services through a single point of entry.
4. Integrated health information system that integrates and categorizes health information on the older population into the national health information system.

For each of the four options, we present the advantages, disadvantages, cost and feasibility of implementation, equity considerations, and stakeholder responsibilities.

Option 1: Capacity building	
Description	Capacity building, through public health training on geriatric services and interventional public health courses (family doctors, nurses, paid/unpaid health and social care workers, formal caregivers, incl. emerging carers - students, trainees and new roles, or roles with extended scope) to develop personalized care plans.
Main advantages	<ul style="list-style-type: none"> • Design management plan for dealing with intrinsic capacity; • Decrease burden on secondary and tertiary facilities considering the low number of geriatricians; • Awareness of conditions of intrinsic capacity; • Improved disease prevention; • Regular training opportunities to develop competency-based skills and continuing professional development across the work force personalized care plans.
Main disadvantages	N/A
Cost and feasibility of implementation (also includes acceptability, organizational factors, etc.)	<p>Enablers:</p> <ul style="list-style-type: none"> • Relationships with partners including governmental (Ministry of Health) and organizational (WHO, academia and NGOs) through involvement and commitment; • Initiatives such as education to develop knowledge and skills in (ICOPE) and intersectoral collaboration across providers; • Physical and remote training through on-ground training and access to online training tools in Arabic; • Customized cost of training based on the needs of the community and availability of resources. <p>Barriers:</p> <ul style="list-style-type: none"> • Fragmented infrastructure system on health and social care; • A feasibility study is needed to identify the exact cost of needed capacity building.
Equity considerations (gender, ethnicity, socioeconomic, geographical)	<ul style="list-style-type: none"> • Regularly review the capacity to deliver care equitably; • Establish an equitable human resource management process to support the paid and unpaid workforce, and ensure equitable training opportunities in different geographical and socioeconomic levels.
Stakeholders' responsibilities	High-level collaboration and commitment required by the Ministry of Health, Ministry of Higher Education, WHO and other UN organizations, academia and NGOs to provide capacity building for health and social care workers.

Option 2: Strengthened partnerships with stakeholders	
Description	Strengthened partnerships with local stakeholders such as the Ministry of Health, Ministry of Solidarity Affairs, Ministry of Planning, Ministry of Higher Education, academia, NGOs, and social clubs and UN agencies (WHO and other UN organizations).
Main advantages	<ul style="list-style-type: none"> • Allocating resources for nationwide implementation and monitoring; • Creating a dynamic platform.
Main disadvantages	<ul style="list-style-type: none"> • Complex coordination and leadership mechanism between entities; • Long process; • Competing priorities.
Cost and feasibility of implementation (also includes acceptability, organizational factors, etc.)	<p>Enablers:</p> <ul style="list-style-type: none"> • Commitments made to the forthcoming phases of ICOPE implementation scale-up; • Positive past experiences in other partnerships and with the community can motivate the current partnership; • Mutual benefits such as access to resources, shared risk, shared costs, shared knowledge and skills are essential and must be clearly identified • Strategic partnerships that are effective, inclusive, and innovative to meet the needs identified; • Negotiation should be present in the establishment of the rules of the partnership, in the decision making, and should be mutual; • Favourable political climate for the sustainability and performance of the partnership; • Resource allocation through insurance payments, supporting with recruitment of workers and participants, supporting training for health and care workers, and providing referral and follow-up care. <p>Barriers:</p> <ul style="list-style-type: none"> • Bureaucracy in Egypt; • Lack of decision space for local-level administrative bodies; • Unwillingness on the part of governmental organizations to let go of control and their inflexibility; • Little or no experience of joint working; • Differing agendas between partners, lack of involvement and collaboration, and poor inter-professional partnerships; • Lack of trust/confidence.
Equity considerations (gender, ethnicity, socioeconomic, geographical)	N/A
Stakeholders' responsibilities	High-level collaboration between the Ministry of Health, Ministry of Social Solidarity, Ministry of Planning and NGOs to allocate and mobilize resources to expand the implementation of ICOPE nationwide.

Option 3: Single point of entry	
Description	Building a structured pathway within facilities for sharing information within a centralized system that enables older adults to access multiple health and social services through a single entry point by assigning a designated healthcare worker as a case manager.
Main advantages	<ul style="list-style-type: none"> • Improve accessibility and acceptability of service • Different cadres of the workforce can contribute • Improve coordination among healthcare providers and healthcare services • Provide comprehensive care • Decrease burden on secondary and tertiary facilities considering the low number of geriatricians • Preventing repeated examinations that can reduce health costs
Main disadvantages	<ul style="list-style-type: none"> • More workload on healthcare workers • Long waiting lists due to a shortage in the workforce • Rely on appointments
Cost and feasibility of implementation (also includes acceptability, organizational factors, etc.)	<p>Enablers:</p> <ul style="list-style-type: none"> • Creation of a case manager position for implementing integrated healthcare service; • Availability of screening tool in Arabic; • Capacity building at system (macro), service (meso) and clinical (micro) levels; • Streamlined systems for the referral of older people; • Financial incentives or reimbursement for the workforce; • Administrative support; • Changing work tasks from a process-oriented approach (i.e. ordering a blood test) to a patient-oriented process; • Standardized communication pathways between healthcare workers that are accessible to all members of the primary care team; • Developing infrastructure within the facility that encourages health-care professionals to work in common spaces; • Training on how to use efficient technologies for patient assessment and care coordination; • Balancing workloads and staying current with administrative duties; • Physician Buy-In and understanding of the Case Manager Role. <p>Barriers:</p> <ul style="list-style-type: none"> • Limited space for conducting the evaluation along with routine activities; • Lack of available staff; • Lack of integration in digital information platforms (medical records, health records, social care needs) • Poor collaboration between health-care providers; • Time pressure and workload on case managers through lengthy time spent with patients and administrative work; • Ethical, legal and professional boundaries of information sharing with patients' family members as they usually accompany the older adult.
Equity considerations (gender, ethnicity, socioeconomic, geographical)	<ul style="list-style-type: none"> • Consider the distribution of the older population among different geographical areas of Egypt (rural and non-accessible areas)

Option 3: Single point of entry	
Stakeholders' responsibilities	<ul style="list-style-type: none"> • The Ministry of Health is responsible for creating the legal and regulatory framework that enables the single point entry system to operate; • Healthcare providers are responsible for collaborating with each other.

Option 4: Integrated health data information	
Description	Integrated health data information by age group, stratification for 60+ population health profile including morbidity and mortality and medical history.
Main advantages	<ul style="list-style-type: none"> • Innovations such as big data analytics and artificial intelligence will enhance evidence-based decisions for patient care and health system governance; • Provide great potential for decision-making; • Managing health system performance on national level; • Assess health outcomes; • Can be used to plan care over time; • Monitor responses to treatment; • Facilitate collaboration between different health-care workers.
Main disadvantages	<ul style="list-style-type: none"> • Requires a significant amount of time and effort to implement due to the lack of infrastructure and bureaucracy in the country.
Cost and feasibility of implementation (also includes acceptability, organizational factors, etc.)	<p>Enablers:</p> <ul style="list-style-type: none"> • Use of mobile ICOPE handbook app and data dashboard as enabling tools; • Develop administrative orders to legally authorize and finance integration in the national health information system; • Create the conditions for agreed national standards for health data terminology and exchange for direct care and secondary uses; • A centralized healthcare system is more feasible to implement an integrated healthcare information system; • To facilitate implementation at the beginning, Relatively low-tech options such as telephone and fax can be used to ensure that information is shared appropriately among providers to collect data on intrinsic capacity; • The commitment of stakeholders to specifically integrate older population information in the national health information system through governmental infrastructure, stronger policies, and standardized data at a national level; • Performance incentives for healthcare providers to encourage using the system; • Workforce training on using shared information systems; • Availability of technical assistance. <p>Barriers:</p> <ul style="list-style-type: none"> • Poor communication between stakeholders; • Inability to allocate funds in an integrated manner; • Difficulties in using the system; • Privacy leaks; • High costs for first-time preparation; • Lack of standardization of data between vendors; • Capabilities of the staff that need further training; • Legal barriers and regulation.

Option 4: Integrated health data information	
Equity considerations (gender, ethnicity, socioeconomic, geographical)	<ul style="list-style-type: none"> • Ensure equitable data collection such as gender-disaggregated data.
Stakeholders' responsibilities	<ul style="list-style-type: none"> • The Ministry of Information Technology and Ministry of Health are responsible for developing and maintaining the technical infrastructure, and sharing data; • Responsible agencies should provide training for the health-care workforce on using health information systems.

FURTHER CONSIDERATIONS

It is important to assess the efficacy of ICOPE implementation, which can be done through:

- Short-term outcome indicators can be done by assessing covering of service in 12 months through the percentage of older persons having received health services in the last 12 months and the percentage of formal caregivers in need of support receiving training in the last 12 months;
- Implementing a combination of two or more of the suggested policy options can yield better outcomes.

However, some implementation barriers within the Egyptian healthcare system may influence this process, and therefore should be taken into consideration:

- Fragmented infrastructure and healthcare system: There is a lack of coordination and integration among healthcare providers, social services, and other stakeholders, which can hinder implementation
- Limited resources: A lack of resources, such as funding, staff, and equipment for ICOPE implementation.

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Annex 1.

Table 1. Preliminary results of the pilot phase of the Egyptian Longitudinal Study for Aging (AL-SEHA)

Disease Name		Diseases	No disease	Percentage	Disease	Percentage%
Cardiovascular Disease: (Heart disease, hypertension, cholesterol and angina)	Age group	50-60	492	81.46	112	18.54
		60-70	244	69.32	108	30.68
		70 and above	150	62.50	90	37.50
	Gender	Male	371	72.46	141	27.54
		Female	515	75.29	169	24.71
	Education	No education	150	78.13	42	21.88
		Basic/intermediate	335	72.83	125	27.17
		University/post grad	401	73.71	143	26.29
	Cognition	Unimpaired	563	77.76	161	22.24
		Impaired	323	68.43	149	31.57
Neuro/psychiatric Disease: (Parkinson's disease, Insomnia, Fall, Fear of Falling, Dizziness, Brain Clots)	Age group	50-60	834	92.15	71	7.85
		60-70	463	87.69	65	12.31
		70 and above	297	82.50	63	17.50
	Gender	Male	695	90.49	73	9.51
		Female	899	87.71	126	12.29
	Education	No education	254	88.50	33	11.50
		Basic/intermediate	621	90.00	69	10.00
		University/post grad	719	88.11	97	11.89
	Cognition	Unimpaired	1002	92.35	83	7.65
		Impaired	593	83.88	114	16.12
Metabolic Disease: (Diabetes)	Age group	50-60	127	84.11	24	15.89
		60-70	55	62.50	33	37.50
		70 and above	28	46.67	32	53.33
	Gender	Male	91	71.09	37	28.91
		Female	119	69.59	52	30.41
	Education	No education	34	70.83	14	29.17
		Basic/intermediate	77	66.96	38	33.04
		University/post grad	99	72.79	37	27.21
	Cognition	Unimpaired	137	75.69	44	24.31
		Impaired	73	61.86	45	38.14

Disease Name		Diseases	No disease	Percentage	Disease	Percentage%
Abdominal and Gastrointestinal Disease: (Stomach Ulcer, Urine Incontinence, Bowel Problems)	Age group	50-60	407	89.85	46	10.15
		60-70	215	81.44	49	18.56
		70 and above	148	82.22	32	17.78
	Gender	Male	339	88.28	45	11.72
		Female	431	84.02	82	15.98
	Education	No education	127	88.19	17	11.81
		Basic/intermediate	308	89.28	37	10.72
		University/post grad	335	82.11	73	17.89
	Cognition	Unimpaired	463	85.27	80	14.73
		Impaired	307	86.72	47	13.28
Chest Disease: (Asthma, Lung Disease, Hard Breathing, Cough)	Age group	50-60	565	93.54	39	6.46
		60-70	314	89.20	38	10.80
		70 and above	222	92.50	18	7.50
	Gender	Male	467	91.21	45	8.79
		Female	634	92.69	50	7.31
	Education	No education	185	96.35	7	3.65
		Basic/intermediate	428	93.04	32	6.96
		University/post grad	488	89.71	56	10.29
	Cognition	Unimpaired	689	95.17	35	4.83
		Impaired	412	87.29	60	12.71
Cancer	Age group	50-60	149	98.68	2	1.32
		60-70	85	96.59	3	3.41
		70 and above	58	96.67	2	3.33
	Gender	Male	124	96.88	4	3.13
		Female	168	98.25	3	1.75
	Education	No education	47	97.92	1	2.08
		Basic/intermediate	113	98.26	2	1.74
		University/post grad	132	97.06	4	2.94
	Cognition	Unimpaired	176	97.24	5	2.76
		Impaired	116	98.31	2	1.69
Musculoskeletal Disease: (Osteoporosis, Arthritis, Hip Fracture, Back/ Joint Pain)	Age group	50-60	480	79.47	124	20.53
		60-70	260	76.25	81	23.75
		70 and above	161	67.08	79	32.92
	Gender	Male	427	83.40	85	16.60
		Female	474	69.40	209	30.60
	Education	No education	131	68.23	61	31.77
		Basic/intermediate	365	79.52	94	20.48
		University/post grad	405	74.45	139	25.55
	Cognition	Unimpaired	554	76.52	170	23.48
		Impaired	347	73.67	124	26.33