Improving Service Delivery for the Elderly in the Russian Federation through Integration, Innovation, and Empowerment

June 2021
Table of Contents

ACKNOWLEDGEMENT .................................................................................................................. 3
EXECUTIVE SUMMARY ............................................................................................................... 4
INTRODUCTION ............................................................................................................................ 7
1. BURDEN OF DISEASE AND DEMOGRAPHY OF THE ELDERLY ........................................ 9
2. HEALTH SERVICES DELIVERY .............................................................................................. 15
   2.1 DEMAND FOR HEALTH SERVICES..................................................................................... 15
   2.2 KEY BARRIERS TO USE HEALTH SERVICES...................................................................... 16
   2.3 IMPROVING HEALTH SERVICES DELIVERY THROUGH INTEGRATION AND INNOVATIONS ................................................................................................................. 18
      2.3.1 Strengthening primary health care to support aging in place ........................................ 18
      2.3.2 Chronic disease management program .......................................................................... 23
      2.3.3 Improving access to medication ...................................................................................... 27
      2.3.4 Role of telemedicine in improving health service delivery to the elderly ......................... 30
   2.4 IMPROVING HOSPITAL SERVICES FOR THE ELDERLY .................................................. 39
      2.4.1 Specialized protocol for patients with frailty ................................................................. 39
      2.4.2 Organizing monitoring of patients at home ..................................................................... 44
3. SOCIAL CARE DELIVERY .......................................................................................................... 47
   3.1 IMPROVING SOCIAL CARE DELIVERY FOR THE ELDERLY ............................................. 49
   3.2 PRIVATE SECTOR ENGAGEMENT IN SOCIAL SERVICE DELIVERY ................................... 52
4. INTEGRATION OF HEALTH AND SOCIAL SERVICES ............................................................. 57
   4.1 ESTABLISHMENT OF MULTIDISCIPLINARY TEAMS ....................................................... 63
   4.2 DEVELOPMENT OF INTEGRATED PATHWAYS FOR SERVICE DELIVERY ......................... 66
   4.3 INFORMATION SYSTEMS TO SUPPORT INTEGRATION .................................................... 69
5. SOCIAL INCLUSION .................................................................................................................... 72
   5.1 LONELINESS ....................................................................................................................... 72
   5.2 HEALTH PROMOTION ......................................................................................................... 73
   5.3 EMPOWERING AND ENGAGING THE ELDERLY IN DECISION MAKING ............................. 74
   5.4 PREVENTION OF ELDER MALTREATMENT .................................................................... 76
   5.5 ACCESSIBILITY OF MODERN INFORMATION TECHNOLOGIES AND TELMEDICINE TO THE ELDERLY ......................................................................................... 77

RECOMMENDATIONS ................................................................................................................ 89
Acknowledgement

This study was prepared by a team led by Sevil Salakhutdinova (Senior Health Specialist, HECHN). The core team members were Jake Spitz (Extended-Term Consultant, HHNGE), Oxana Sinyavskaya (Consultant, Deputy Director, Institute for Social Policy, HSE University, Russian Federation), Elena Selezneva (Consultant, Senior Research Fellow, Institute for Social Policy, HSE University, Russian Federation), and Elizaveta Gorvat (Consultant, Research Assistant, Institute for Social Policy, HSE University, Russian Federation). The study was prepared under the oversight and management of Tania Dmytraczenko (Practice Manager, HECHN).

The team benefited from excellent comments from the peer reviewers: Ian Forde (Senior Health Specialist, HECHN), Anna Koziel (Senior Health Specialist, HECHN), and Elena Glinskaya (Lead Economist, HEASP).

The team is grateful for guidance and support from Renaud Seligmann (Country Director for Russia), Dorota Agata Nowak (Country Program Coordinator), David Wilson (Program Director, HHNDR), Nejma Cheikh (Health Specialist, HHNGE), Zara Shubber (Senior Health Specialist, HHNGE), Zlatan Sabic (Senior Operations Officer, HECHN), Lorena Vinuela (Senior Public Health Specialist, EECG2), Mirja Sjoblom (Senior Economist, HECHN), Tigran Shmis (Senior Education Specialist), and Oleg Petrov (Senior Digital Development Specialist).
Executive Summary

The population in the Russian Federation is aging rapidly, as in many countries of the ECA region and other parts of the world. In 2019, 15 percent of Russia's population of 146 million people was over the age of 65, and, according to the United Nations' medium-fertility demographic scenario, it could reach 20 percent by 2030 and 23 percent by 2050. The number of people of retirement age exceeded the number of children under 16 (37.4 million and 27.3 million, respectively). The old-age dependency ratio is projected to increase from 24.3 percent in 2019 to 34.7 percent in 2030.

Elderly people in Russia have poorer health than their peers in other countries, which explains their higher demand for health care and social services and their shorter life expectancy. According to the latest data on the Global Burden of Diseases, the healthy life expectancy in Russia is one of the lowest in ECA, at just 63.7 years.

Challenges facing care of elderly people in the Russian Federation

The elderly have specific needs as clients of healthcare and social systems. They often have multiple chronic diseases and comorbidities, difficulties interacting with health and social care institutions and workers, and adhering to doctors’ prescriptions as a result of physical and/or cognitive impairments (also termed “frailty”). Studies have shown that treatment in a home or community setting (rather than hospitals) is both better for patient outcomes and preferable to the patient. When in hospital, patients with frailty are often less suited to general hospital treatment and require specialist care.

Demand for health services is higher among the elderly because their health is worse than that of younger individuals, and they have a higher number of chronic diseases. Among the working-age population, 7.5 percent visit a doctor once a month or more often. By the age of 65, this percentage increases to 25.5 percent and, in the age group of 75 or older, it reaches 29.9 percent. During recent years there has been an upward trend in the average number of ambulance calls and hospital admissions for older people over 75 in Russia. This trend may indicate both improved access to such services and reduced access to and lower quality of outpatient care.

In addition, there are barriers impairing access to healthcare for Russia’s older population. The survey conducted by the World Bank, International Federation of Red Cross and Red Crescent (IFRC) and High School of Economics (HSE) found that 30 percent of the elderly are dissatisfied with the process of health care delivery, including the need for pre-registration, long lines, inattentive attitude, and poor conditions for inpatient hospital care. Lastly, mobility issues increase with age. Among those aged 75 and older, there is a substantial increase in the share who do not receive necessary treatment because they cannot get to the place of care delivery.

Demand for social services is not fully met in Russia. In the absence of adequate publicly-financed coverage, the burden of care falls disproportionately on informal caregivers, giving rise to significant economic and social costs. In 2017 66.5% of people above the working age in need of home-based medical and personal hygiene procedures sought such care from informal caregivers (relatives and friends), while 33.5% sought it from formal providers (social workers, physicians and nurses).
In addition, fragmented health and social care systems in Russia worsen standards of care and treatment outcomes. Primary health care plays a central function in organizing care of an elderly patient, and when systems are weak this can lead to poor case management and unnecessary hospitalizations. Primary health care doctors and geriatricians are in short supply, particularly in remote areas. Elderly people face challenges accessing free medication, with problems of polypharmacy and limited financial support. In hospitals, specialized protocols for treating elderly patients are often not put in place. Access to social services is hindered by low availability of services, excess paperwork, high costs, challenges with geographical access, and general lack of awareness about services. Recent policy shifts to privatize provision of social services also face challenges – survey results indicate a preference for public provision of services and distrust of private companies in the space.

Proposed solutions to improve care of elderly people in the Russian Federation

This report identifies six ways to improve health service delivery in Russia: (i) strengthening primary health care; (ii) chronic disease management programs; (iii) improving access to medication; (iv) telemedicine and digital health solutions; (v) protocol for patients with frailty; and (vi) remote monitoring of patients.

The report also makes several recommendations to improve social care delivery, and to facilitate the integration of health and social care. Measures to support informal carers are identified based on international experience, along with recommendations to help enhancing the engagement of private providers in social service delivery. To better integrate health and social services, the report recommends the use of multidisciplinary teams and integrated care pathways when treating elderly patients, underpinned by information systems to facilitate an integrated care experience.

These recommendations should reduce fragmentation of care so that patients receive care that is more tailored to their needs. This can happen through a number of channels: shifting care of elderly patients from the hospital setting to home and community settings through strengthened primary healthcare, establishing multidisciplinary teams better able to manage patients with multiple disease, and remote monitoring solutions; increasing the capacity of key workers using telemedicine and support initiatives for informal carers; chronic disease management programs and integrated pathways build continuity and better coordination of care, specialized hospital protocols for treating elderly patients make hospital a more accessible environment, as do digital infrastructure and information systems which facilitate sharing of data and support a “once-only principle”¹.

Telemedicine offers an exciting possibility to expand access, convenience and effectiveness of care; there is an opportunity to capitalize on the effects of COVID in shifting preferences and habits of patients towards online and remote care. Telemedicine in Russia has high growth potential, evidenced by several promising pilots offering free telemedicine services, but research by HSE found that it does not currently meet the needs of the elderly, and lags behind other developed countries. However, as outlined in the report, there are several applications of telemedicine that could help improve care offered to elderly people. Solutions that facilitate remote consultations and remote monitoring will help reduce the

¹ The “once-only principle” says that information should only be collected once from patients.
number of visits and nights spent in hospital by elderly people, allowing more care to be delivered at home or in the community. This is particularly valuable for elderly patients with mobility difficulties. The experience of the city of Moscow, where a telemedicine centre with capacity for 4,000 consultations per day was established to treat COVID patients, has helped demonstrate the benefits of telemedicine.

**Telemedicine and eHealth technology also pose risks when used to treat the elderly.** The digital divide threatens to create increased inequality in the availability of health care, as older people face far greater challenges with accessing digital technology, and typically exercise more caution about adopting technological innovations. Studies show that some patients are not comfortable with remote patient-doctor communication, which may reduce the level of satisfaction with health care. Survey data presented a mixed picture: only 36.5% of elderly people use the internet at least once a week (compared with 90% of those under 55), though usage is growing quickly. There is stronger interest among older adults in technological developments in healthcare than in other sectors, but equally older adults expressed more hesitancy around receiving medical services online compared with other sectors. Perception of one’s own ability to use telemedicine is a key factor in determining demand – it is clear that digital literacy among the elderly and development of solutions which are accessible and easy to use will be vital to support the effectiveness of telemedicine solutions among the elderly.

**Transformations to the patent-centered integrated care as described above are shown to be beneficial to clinical outcomes, and in some cases to improve cost effectiveness.** A wider meta-analysis of the costs and effects of integrated care found that integrated care was associated with a decrease in costs and an increase in patient outcomes.² A World Bank-funded Chronic Disease Management Program in Kazakhstan increased care quality and clinical outcomes: the proportion of patients with hypertension under control increased from 24 percent to 56 percent.³ The introduction of a protocol for handling frailty in Royal Surrey County Hospital led to a 30% reduction in length of stay for elderly patients, savings £0.37m and £1.08m per year, and improved surgical treatment outcomes.⁴ Provision of medication for hypertension in Xinjiang increased treatment adherence and self-reported health outcomes.⁵

**Finally, the paper also discusses another issue rendered more urgent by COVID-19: social inclusion of the elderly.** Social exclusion is an important risk factor in ill health among older people, particularly in the absence of family networks or insufficient support for families. Social inclusion, for example through social groups and citizens associations, can also encourage health promoting behaviors around nutrition and exercise. Greater engagement of the elderly in their care decisions can increase both satisfaction with care and efficiency of resource use. Social inclusion is also an important prerequisite to tackling elder abuse and maltreatment.

---

² Rocks, S et al. 2020. *Cost and effects of integrated care: a systematic literature review and meta-analysis*
⁵ Yin, H et al. (2020). *Effect of an outpatient copayment scheme on health outcomes of hypertensive adults in a community-managed population in Xinjiang, China*
Introduction

Improving health and social services for elderly people is among the key priorities for the Government of the Russian Federation, at both the federal and regional levels. This is reflected in the Demography and Health National Projects that propose measures to strengthen the provision of services to the elderly and encourage healthy and active aging. The national projects include measures to strengthen patient-centered health services delivery with a focus on primary health care (PHC), improve geriatric care and social services as well as educational, awareness, and active leisure services.

The World Bank team has provided technical assistance, aimed at strengthening integration of health and social care for the elderly in the Russian Federation between 2018-2020, through two Advisory Services and Analytics (ASAs) programs: (i) Improving Public Health and Health Service in the Russian Federation (P168710), and (ii) Strengthening Patient-Centered Integrated Care in the Russian Federation (P172062). A number of seminars were held to present innovative health care delivery models based on the best international practices, which fostered policy dialogue on integrated health care. A policy note on strengthening the integration of health care was prepared and disseminated to key counterparts. The World Bank team, in collaboration with the International Federation of Red Cross and Red Crescent Societies (IFRC) and High School of Economics (HSE), conducted an assessment of the needs of the elderly in health and social services in three regions of the Russian Federation (Orel Oblast, Republic of Karelia, and Republic of Ossetia). The results of the assessment were presented in the report that identified gaps in health and social service delivery and in their integration in urban and rural settings, and proposed recommendations to strengthen the provision of relevant health and social services to the elderly.

Box 1: World Bank studies on integrated health and social services in the Russian Federation.

In 2018-2020 the WB has conducted a number of studies that examined the elderly needs, barriers in access to care and challenges in integration of health services and social services. These studies have been complemented by policy notes that presented emerging innovative approaches to health service delivery that improve continuity of care and coordinate it around patient needs. The list of papers presenting the results of this work includes:

- **Policy Brief on Integrated Health Care for Non-Communicable Diseases (2018)** summarizes the definitions of integrated care, introduces an evidence-based framework for integrated care, and provides practical examples from around the world, which illustrate the concepts.
- **Policy Note on Strengthening Integrated Health Care (2019)** presents the challenges of integrating health services in Russia and critical overview of the potential applicability of the internationally recommended tools of integration in the Russian health care system.
- **Report on assessment of the level of integration of health services in Ulyanovsk region (2018)** presents the challenges and barriers in integration health services at regional level based on a survey with participation of Ulyanovsk region health authorities, health managers and health workers.
- **Report on Assessment of the Elderly Needs in Integrated Health and Social Services (2020)**, prepared in collaboration with IFRC and HSE, fills the gaps in available knowledge on the elderly needs in health and social care, barriers in access to care and challenges in integration of health care and social care systems in Russia.
This paper sets health and social services in the Russian Federation against international best practice, highlighting barriers and proposing solutions for the adoption of key technological advancements and developments of new models of care. It recommends that more care be delivered at the primary level, using both innovative models of care and new technologies to reduce hospitalization of elderly patients. Integration of care is one key avenue to this goal; specialized patient pathways and multidisciplinary teams featuring both health specialists and social workers ensure care is more person-centered and specialized. These measures have been shown to improve continuity of care, particularly when supported by an integrated data architecture facilitating a complete system of information exchange. Finally, the paper also makes recommendations to improve social inclusion of the elderly, who can often face institutional discrimination leading to poor access to care and worse health outcomes. Building a society in which elderly people are empowered to take control of their health outcomes and their care is an important step in advancing an agenda of healthy aging.

Research for this paper draws on a number of sources, including both new primary research in the Russian Federation, secondary research, and interviews with leading experts. In 2021, the High School of Economics (HSE) carried out a survey and produced a report on telemedicine in elderly care in Russia. In addition, previous work by prominent Russian researchers and academics on the topic of healthy aging was also used. To acquire a sense of international best practice, the World Bank’s rich repository of research work proved a useful source, along with guidance from expert colleagues and academic publications. Conducting interviews with experts in the field provided important information.
1. Burden of disease and demography of the elderly

The population in the Russian Federation is aging rapidly, as in many countries of the ECA region and other parts of the world. In 2019, 15 percent of Russia's population of 146 million people was over the age of 65, and the number of people of retirement age exceeded the number of children under 16 (37.4 million and 27.3 million, respectively). According to UN projections, the share of the population aged 65 years and older will increase to 19.5 percent in 2030 and to 22.9 percent in 2050. The old-age dependency ratio is projected to increase from 24.3 percent in 2019 to 34.7 percent in 2030. Declining fertility and increasing longevity lead to rising numbers of older persons as well as a continuously growing share of older persons in the population.

Elderly people in Russia have poorer health than their peers in other countries, which explains their higher demand for health care and social services and their shorter life expectancy. According to the latest data on the Global Burden of Diseases, the healthy life expectancy in Russia is one of the lowest in ECA, at just 63.7 years—see Figure 1.1.

Analysis of cohort life expectancy by gender and over time adds color to the health challenges facing the elderly in Russia. As shown in Figure 1.4, 60-year old men and women in Russia both have a lower life expectancy than the global average. In addition, Figure 1.3 shows that, from 1971 to 2021 male life expectancy has increased at a slower rate in Russia than in many countries around the world; despite

---

6 https://population.un.org

---

Figure 1.1: Healthy life expectancy (1995-2016)

Figure 1.2: Mean health scores for population aged 20 and over, by age (2007-2010)
increasing by a year over the period, male life expectancy at 60 in Russia is lower than far more countries – particularly in Africa and Asia – in 2021 than in 1971.

Figure 1.3: Russian male life expectancy at 60 compared with the rest of the world 1971 and 2021

There is a significant discrepancy by gender. Figure 1.4 shows that the mortality distribution for men shows far greater downward skew, with average life expectancy 5.1 years below the global average, compared to 1.6 years for women.
The Global Burden of Diseases Injuries and Risk Factors Study (GBD) by the Institute for Health Metrics and Evaluation (IHME) provides a comparison of the magnitude of diseases, injuries and risk factors across dimensions including age, gender, and geography. Using this data, it is possible to examine the main causes of death and disability in Russia, and to compare that to other countries. Below, in Figures 1.5 and 1.6, there is comparison of disability-adjusted life year (DALYs) by cause in Russia with High socio-demographic index (SDI) and High-middle SDI countries. These are two groupings defined by IHME’s socio-demographic index, a composite average of the rankings of income per capita, average educational attainment and fertility rate. Russia’s SDI of 0.805 is on the boundary between High SDI and the High-middle SDI categories. Ischemic heart disease (IHD) and stroke are the two largest causes of death in Russia for both over 70s and 50-69 year-olds, (50.1 percent of DALYS for 70+, 28.6 percent for 50-69) as well as in High SDI and Middle-high SDI countries. However, IHD and stroke cause a far greater proportion of deaths (30.4 percent and 19.7 percent respectively for 50-69) in Russia than they do in both High SDI (11.7 percent and 7.4 percent) and Middle-high SDI countries (19.6 percent and 15.1 percent; pattern also true for 50-69 group). There is also a challenge of alcohol abuse in Russia, particularly among men, with a higher proportion of DALYs lost to alcohol and cirrhosis compared with High SDI countries (2.5 percent of DALYs lost due to alcohol, 3.1 percent due to cirrhosis in Russia 50-69 group vs 1.2 percent due to alcohol
and 2.7 percent due to cirrhosis in High SDI countries). Cirrhosis is among the fastest growing causes of death and disability in Russia from 1990 to 2019. Alcohol use can also be a risk factor for falls, road accidents and other injuries; indeed, among 50-69 year-olds, a greater proportion of DALYs are lost in Russia to injuries than in High SDI countries, for both men and women.

**Figure 1.5: Causes of death in Russia, 70+, compared with High and High-middle SDI countries (2019)**

*Russia is on the boundary between High SDI and High-middle SDI*
Figure 1.6: Causes of death in Russia, 50-69, Male and female compared with High SDI countries (2019)
The demographic shift gives rise to many of the degenerative diseases of older age, highlighting the importance of introducing timely and effective interventions to slow the progression of these conditions. These diseases include sensory organ disorders – cataracts and macular degeneration – and hearing, as well as weakening of bones and joints leading to osteoarthritis and osteoporosis. Although not affecting mortality directly, these conditions can have important effects on disability levels, healthy life expectancy, and age at exit from the workforce. Falls among older people and the injuries to which they often lead are the underlying causes of a large share of the burden of disease and disability among older people and a major risk factor for developing frailty. The risk of falls increases steeply with age. Injuries from falls usually require hospitalization and costly interventions, including rehabilitation and need for long-term care.

The elderly have specific needs as clients of healthcare and social systems. They often have multiple chronic diseases and comorbidities, difficulties interacting with health and social care institutions and workers, and adhering to doctors’ prescriptions as a result of physical and/or cognitive impairments. As an Assessment of the Elderly Needs in Integrated Health and Social Care, prepared by the World Bank and IFRC has shown, the elderly in Russia tend to neglect their diseases, only seeking care when it is too late. Evidence suggests that this is a result of both insufficient availability of services and a habit of “enduring,” which formed in response to problems with obtaining the necessary care. Elderly people also have specific psychological problems. It can be assumed that this peculiarity of the elderly may result from: (i) natural brain and nervous system impairments that develop with age; (ii) the relatively high prevalence of mental problems among the elderly in Russia due to the low availability/affordability of psychologists’ services; (iii) the lack of social contact and challenges in communication with health and social workers; and (iv) difficulties with receiving health care and assistance.7

The COVID-19 pandemic has brought new challenges for the delivery of health and social care to elderly people. The Worldometer data source8 shows that the death rates of older persons are much higher than those of younger and healthier people. The fatality rate increases from 3.6 percent for the age group 60-69 years old to 14.8 percent for those aged 80 years old and above, compared to 0.2 percent for the age group 10-49 years old. The increasing numbers of cases in elderly care residential facilities indicate that such places are high-risk for the spread of COVID-19. The pandemic may also lead to a scaling back of critical services unrelated to COVID-19, further increasing risks to the lives of older people. Another challenge for the elderly is the impact of introducing quarantine and social distancing measures to avoid the spread of COVID-19, which increase social isolation. For elderly people in particular, such measures could aggravate mental health problems and decrease their access to essential health and social services.

---

2. Health services delivery

2.1 Demand for health services

Demand for health services is higher among the elderly because their health is worse than that of younger individuals, and they have a higher number of chronic diseases. Among the working-age population, 7.5 percent visit a doctor once a month or more often. By the age of 65, this percentage increases to 25.5 percent and, in the age group of 75 or older, it reaches 29.9 percent. During recent years there has been an upward trend in the average number of ambulance calls and hospital admissions for older people over 75 in Russia (Figure 2.1). This trend may indicate both improved access to such services and reduced access to and lower quality of outpatient care.

Figure 2.1: Distribution of age groups according to the frequency of visits to a doctor in 2017, %

![Chart showing frequency of doctor visits by age group in 2017.]

Source: RLMS-HSE.

According to RLMS-HSE data, in 2017, 2.9 percent of working-age people were admitted to the hospital during the three months before the survey date. For those under 65, between 65 and 74, and 75 or older, the percentages were 5.2 percent, 8.1 percent, and 9.7 percent, respectively, as presented below in Figure 2.2.
2.2 Key barriers to use health services

There are barriers impairing access to care for Russia’s older population. The Assessment of the Elderly Needs in Integrated Health and Social Care conducted by the World Bank, IFRC, and HSE indicated that 30 percent of the elderly are dissatisfied with the process of health care delivery, including the need for pre-registration, long lines, inattentive attitude, and poor conditions for inpatient hospital care. Furthermore, around one fourth of the elderly do not think prescribed treatments will be effective, indicating a significant distrust of medical providers. Additionally, mobility issues increase with age. Among those aged 75 and older, a substantial share does not receive necessary treatment because they cannot get to the place of care delivery. The barriers that older people face in accessing health care are summarized in Figure 2.3.
Elderly people who participated in the qualitative study conducted by the WB, IFRC, and HSE reported the following barriers to health care:

- lack of availability of necessary medical care near the place of residence;
- shortage of specialists and diagnostic equipment at public health care facilities (in the opinion of both patients and doctors);
- transportation networks that are inadequate to meet patient needs;
- absence of an elder-friendly environment at inpatient facilities;
- low affordability of medicines.

In 2019, under the Older Generation Federal Project, the transportation of rural people above 65 years of age to health facilities for preventive health examinations or regular health monitoring was initiated. To implement this activity, this project financed the procurement of 1,580 vehicles and put together 1,580 mobile teams. Health and social workers for the project’s participating regions were involved in public awareness activities, organization of transportation of people, and case management in health facilities as part of the interagency cooperation. During the first year of its implementation, the program covered over 115,000 elderly people with health examinations. By 2024, the program is expected to cover at least 25 percent of rural people aged 65 years and older.
This program is, undoubtedly, producing a positive impact on disease detection rates among older people. However, its impact on the elderly’s health is limited. First, it improves access to health care, which enables detection of diseases, but fails to address the issue with access to treatment of these diseases. Second, not only rural people encounter the problem of transport accessibility of health care, but urban elderly people too, particularly dwellers of small cities/towns who have to travel to big cities in order to be provided with diagnostic services and treatment with the use of up-to-date technology. Their need is still unmet.

2.3 Improving health services delivery through integration and innovations

2.3.1 Strengthening primary health care to support aging in place

The barriers to accessing primary health services in the area of residence lead to poor treatment of old patients with chronic and multiple diseases, high level of avoidable and unnecessary hospitalization, and high demand for emergency care. For many older adults, an accident or illness leading to hospitalization can set off a chain of events that makes it difficult for them to stay in their homes. Many hospitalizations are avoidable and telecare, home visits, and strengthened primary health care services and hospital-at-home services can help to prevent many unnecessary hospital admissions. Programs that offer in-person or telephone-based support after a hospitalization, such as reminders to take medication and links to community-based services, have been found to reduce hospital readmissions among older patients.

Primary care is an important focal point in organizing care across services for those living at home. Strengthening the role of primary care in care coordination for dependent and frail older people can help to improve an older person’s outcomes while also reducing burnout among healthcare workers. As experienced by other countries, closer coordination among providers of health care and strengthening the role of primary health care will require even more focused attention as the Russian Federation continues with efforts to improve health care delivery to effectively address its aging population and the associated increase in the incidence of chronic diseases and multimorbidity.

Understanding consumer preferences and providing flexible options for service and support are critical for person-centered care. Long-term care is provided in three broadly defined settings: home, community, and institutions. In home- and community-based settings, care is provided mostly by family members and other informal (i.e., unpaid) caregivers, supplemented by formal (i.e., paid) services and supports where they are available and affordable. In institutions, care is provided by formal caregivers.
According to research presented by Glinskaya and Feng in *Options for Aged Care in China*[^9], across OECD economies and elsewhere, evidence shows that the majority of older people with long-term care needs prefer home- or community-based settings, rather than in institutions[^10,11,12,13,14]. This preference is observed across cultures and countries. It is one key reason why 70% of long-term care users in OECD countries receive care in the home or community[^15], rising to 83% of people in need of long-term services and supports[^16] in the United States and other OECD economies the predominant long-term care providers are family members and other informal caregivers[^17,18,19].

Older people, especially those with lesser physical and cognitive impairments, live healthier and happier lives when they are able to remain in their own homes and in the local community[^20]. This is congruent with the fact that most older people value independence and autonomy[^21,22], which are more likely to be achieved in home- and community-based settings. In contrast, research shows that large institutions tend to create dependency rather than autonomy[^23,24]. In institutions, residents have limited or little involvement in decision making concerning their daily lives and care. Providing personalized (i.e., individualized) care to older people is difficult in an institutional setting. Moreover, an institution epitomizes the model of agency-directed care, where the arrangements of care and services are more for the convenience of the facility than for the client. Research has shown that compared to agency-directed care, where the arrangements of care and services are more for the convenience of the facility than for the client. Research has shown that compared to agency-directed care, where the arrangements of care and services are more for the convenience of the facility than for the client. Research has shown that compared to agency-directed care, where the arrangements of care and services are more for the convenience of the facility than for the client. Research has shown that compared to agency-directed care, where the arrangements of care and services are more for the convenience of the facility than for the client. Research has shown that compared to agency-directed care, where the arrangements of care and services are more for the convenience of the facility than for the client. Research has shown that compared to agency-directed care, where the arrangements of care and services are more for the convenience of the facility than for the client.

---

care, people receiving consumer-directed long-term care have a higher quality of life and are more satisfied with the care they receive.\textsuperscript{25}

Russia’s primary health care system has its roots in the Semashko model, which was built on the concept of large polyclinics staffed by a wide variety of specialists. At present, primary care is typically delivered within polyclinics by district physicians. In theory, the district physician is the first point of contact, and acts as gatekeeper for specialist appointments. At present, experts believe that the transition to a fully functional primary care model is incomplete. About two-thirds of clinical care in polyclinics is still provided by specialists, and true coordination in the development of treatment plans for the old patients does not take place. The health system loses significant funds at the “interface” between such providers due to their lack of focus on teamwork and overall performance. The variety of integration activities is still rather limited, and some of the organizational and economic integration mechanisms already proven abroad are still unknown in Russia. Additional issues include outdated primary care facilities and equipment, and a shortage of 25,000 primary care doctors, evident particularly in rural areas, despite recent increases in physician supply.

A shortage of human resources in PHC is the key barrier in establishing multidisciplinary teams and coordination of health care. When positions of medical doctors are filled only in part, the doctors are overloaded with their core job duties, and it is difficult to ensure their high involvement in the work of teams. The additional workload due to work on teams creates the risk of impaired access to health services for core patients. This problem is particularly severe for district doctors who, along with geriatricians, are expected to play a significant role in ensuring the integration of treatment processes, according to the existing care delivery procedures. Lack of experience and incentives – including economic ones – to support cooperation with other specialists in care delivery can impede the collaboration of individual specialists and entire work units, not only with their peers but with workers of the social service system as well.

On October 31, 2019, the State Council chaired by the President, with participation of all Governors of Russian regions, discussed key challenges of PHC development in Russia. It was recognized that current government efforts and funds allocated to the National Health Project are not enough to improve quality of PHC. As the result of the meeting, the Ministry of Finance (MoF) allocated additional 550 billion Rubles for 2020-2024 to strengthen PHC development in Russian regions under the sub-project, “Development of the system of primary health care delivery.”

Better integration of care centered around an effective primary care system played a central role in improving health outcomes in the OECD, as has been done in the Veterans Administration Patient-Aligned Care Team Model of Medical Homes in the United States. In Japan, an Integrated Community Care System (ICCS) has been a pillar of the government’s strategy to improve support for older populations. Organized at the municipal level, the ICCS provides medical care, long-term care, prevention programs, housing services, and other support in the community (Mizanur Rahman et al., 2018\textsuperscript{26}). In

Sweden, reforms introduced in 2018 have attempted to better integrate primary care into care planning processes with the objective of ensuring people with chronic and multiple conditions receive quality care at home as much as possible. To ease the transition between hospital and home, hospitals are required to notify the patient’s municipality and primary care clinic within one day of admission, to ensure that community services have enough time to prepare for any transition and care co-ordination needs.

**Box 2.1: Primary Care Medical Homes in the US: New Ways of Organizing Practice**

The concept of Primary Care Medical Homes (PCMH) includes new approaches to organizing practice to enhance its responsiveness to local patient needs. In various manifestations currently being tried, these include diverse instrumental elements such as same-day appointment, electronic visits, group visits, disease registries and management, greater patient engagement, care coordination, new collaborative relationships, team-based care, quality and safety initiatives, electronic prescribing, and medical records.

**Joint Principles of the PCMH:**

- **Personal Physician:** Each patient has an ongoing relationship with a personal physician trained to provide first contact and continuous and comprehensive care.
- **Physician Directed Medical Practice:** The personal physician leads a team of individuals at the practice level who collectively take responsibility for the ongoing care of patients.
- **Whole Person Orientation:** The personal physician is responsible for providing the entire patient’s healthcare needs and takes responsibility for arranging appropriate care with other qualified professionals.
- **Coordinated/Integrated care:** This occurs across all elements of the complex healthcare system – for example, subspecialty care, hospitals, home health agencies, nursing homes – and the patient’s community— family, public and private community-based services. Care is facilitated by registries, information technology, health information exchange, and other means.
- **Quality and Safety:** These hallmarks of PCMH are achieved by incorporating a care planning process, evidence-based medicine, accountability, performance measurement, participation, and decision making.
- **Enhanced Access:** This is available through systems such as open scheduling, expanded hours, and new options for communication between patients, their personal physician, and practice staff.
- **Payment:** The program appropriately recognizes and focuses on the added value provided to patients who have a patient-centered medical home beyond the traditional fee-for-service encounter.

**Increasing the number of primary health care physicians and geriatricians**

**Strengthening the role and coordinating function of the primary health care (PHC) physician is one of the most important preconditions for integration.** In Russia, the coordinating and gatekeeping function of PHC doctors has weakened recently as the result of a substantial shortage of district physicians and geriatricians.

In March 2016, MoH approved a special procedure/regulation to govern geriatric health care delivery. In spite of the work in recent years to build up the resources of the geriatric network, the development of
geriatric care varies by region in Russia, in terms of its capacity and the comprehensiveness of the geriatric care delivery design. According to the MoH, in 2019, there were 546 geriatricians in Russia. The availability of geriatricians per 10,000 population amounted to 0.17, which is markedly lower than in developed countries.26 However, some Russian regions have more geriatricians per 10,000 populations: for example, 0.82 in the Republic of Sakha (Yakutia), 0.61 in St-Petersburg. But in 13 of the 85 Russian regions, there were no geriatricians at all in 2019.

The current attempts by the government to cope with the shortage of primary care physicians and geriatricians should be complemented with a set of integrative activities, such as:

- PHC physicians’ training on their role as coordinator.
- Including the function of coordinator in PHC physicians’ job description.
- Developing regulations ensuring that a district physician not only refers patients to specialists but also recommends the most appropriate providers, reviews the results of a specialist visit and explains follow-up steps of the patient, and plans curative activities together with specialists.

Box 2.2: Measures to Increase the Number of Geriatricians in Israel

In 2003, research on geriatrics in Israel forecast that due to an aging population an additional 250 geriatricians would be needed by 2023 to meet population needs, from a baseline of 120-150.27 As part of its efforts to increase the number of geriatricians, Israel has offered skills programs targeted at professionals from a variety of disciplines such as medicine, nursing, social work, and rehabilitation, combined with incentives and scholarships.28 The courses are conducted by the Ministry of Social Affairs and Services, the MoH, the four Health Maintenance Organisations29, and JDC-Israel-Eshel. The MoH, the health plans, and hospitals offer comprehensive training for health professionals and over the years have extended the topics to include geriatrics and aging. The main types of health training are:

(i) Specialized training, as per the legal requirements for licensing specialists, for example, in an aspect of geriatrics.
(ii) Training offering certificates, as in psycho-geriatrics for physicians.
(iii) Academic training for a second degree in geriatric nursing.

Examples of financial incentives include the reforms introduced in 2011, which increased the number of positions in all hospitals throughout the country and provided financial incentives to encourage physician graduates to pursue their residencies in in-demand specialties.30

---

29 The National Health Insurance Law of 1995 requires that citizens sign up to one of four health maintenance organizations (HMOs) which are not-for-profit organizations and are funded primarily by an earmarked health tax
By 2016, the number of geriatricians in Israel had grown to more than 300 currently of working age, roughly on track with the forecast requirements from 2003. In addition, more than 1,394 nurses had completed a year’s course in the intensive care of geriatric patients. A further program to train specialist, geriatric nurses with all the authority that the designation entails, has added an extra 19 such nurses. In 2020, there are 330 practicing geriatricians, with a further 90 who are retired (some of whom maintain some activity).31

2.3.2 Chronic disease management program

Chronic disease management programs (CDMPs) have sprung up in many countries in response to a growth in the prevalence of chronic and multiple diseases. CDMPs comprise integrated activities aimed at ensuring comprehensive treatment over a long period of time. These include: formation of interdisciplinary teams of medical workers; provisions for the alignment of their actions; preparation of individual plans for management of patients and continuous monitoring of their progress; use of integrated procedures for healthcare delivery; involvement of patients in the treatment process; and use of economic incentives for joint work and attainment of ultimate results. Strictly speaking, these programs are a comprehensive integration tool, which includes all of the above listed approaches.

Evidence supports the use of multifaceted approaches to enhance the outcomes of those with chronic disease.32 In particular, studies have shown that nurse-delivered treatment based on a collaborative care approach was effective in the treatment of depression in patients who also had at least one physical health problem, such as arthritis, cancer, coronary heart disease or stroke.33 Similarly, for patient with heart failure, disease management programs reduced mortality and hospitalisations in patients with heart failure.34,35 This evidence is particularly encouraging for the Russian context – as identified in Section 1, Russia’s disease burden has a far larger weight towards stroke and heart disease than other comparator countries. Therefore, chronic disease management programs could make a tangible impact on the health of Russia’s older adults.

An example of comprehensive actions in patient management is provided by stroke care programs in the Netherlands (Vat et al., 2016). These programs aim at improving the quality of life for patients who had stroke, and reducing the likelihood of disease recurrence. The Netherlands is implementing 75 such programs. Each program enrolls general medical practices, hospitals, rehabilitation centers, nursing care centers, and independent visiting nurse groups. An interdisciplinary group typically includes seven doctors of different specializations. Each group manages 495 stroke patients. The program is coordinated by a general practitioner or sometimes another specialist. The coordinator is responsible for establishing interaction with patients and for the treatment process. It is important that doctors participating in the

32 Amelung et al., 2017, Handbook Integrated Care
33 Ekers et al., 2013: Nurse-delivered collaborative care for depression and long-term physical conditions: a systematic review and meta-analysis
34 Göhler et al., 2006: A systematic meta-analysis of the efficacy and heterogeneity of disease management programs in congestive heart failure
35 Roccaforte et al., 2005: Effectiveness of comprehensive disease management programmes in improving clinical outcomes in heart failure patients. A meta-analysis
groups are not relieved of their routine treatment work. It is estimated that they spend an average of nine hours per week on the work in the program. Almost all the groups operate based on contracts. If a hospital doctor is hired, a contract is signed with the hospital concerned. All of the program participants have to comply not only with general clinical recommendations but also with the recommendations developed specifically for CDMPs and accepted by all the participants. It means that a certain variation of clinical recommendations is possible provided they are approved and subsequently complied with.

**Another CDMP version is multiple disease management programs.** More than a hundred of such programs were underway in Western Europe in 2015 (Rijken et al., 2016). The keystone of their implementation is ongoing rather than sporadic follow-up of patients, with a special role played by healthcare coordinators. This function is most often performed by general practitioners. The use of advanced nurses as coordinators of these programs has been increasing. Case managers are appointed to follow up patients with particularly complex multiple problems, and the need for them is growing. Case managers are involved in 40 percent of European programs. All the programs include individual patient management plans and training. Interdisciplinarity cooperation is ensured based on shared electronic health records and periodical meetings of program participants. A special emphasis is laid on the dynamic nature of actions in patient management groups. Physicians and nurses do not wait for the patient to come to see them but are themselves looking for contact with the patient, using electronic tools and remote patient monitoring tools.

**CDMPs make an emphasis on patients involvement in disease management.** The major instrument is a formal agreement with a patient. This sets the requirement for patients to comply with an individual plan of treatment and physicians’ prescriptions, see them within a stated interval, and follow the established pathway of patients movement in a multi-level delivery system. Sometimes economic incentives are used. In France, for example, patients with serious chronic diseases are exempt from copayment, provided they follow a clinical protocol developed by a treating physician (Ettelt, 2009).

**The performance of multiple disease management programs has been in the focus of a large number of studies.** A literature review on the subject conducted by E. Nolte (2017) showed that 65 percent of the research revealed positive contributions of the programs to the achievement of higher clinical performance, 67 percent provided for increased patients’ satisfaction with the state of healthcare, but only 17 percent reported cost savings. A significant positive result has been reported in connection with the measures aimed at establishing interdisciplinary groups, clinical activity coordination, and more frequent contacts between specialists as well as the implementation of shared information systems to ensure the coordination.

**Relevance of CDMPs for improving health service delivery for the elderly in Russia**

A typical feature of the Russian health system is the availability of a system of “dynamic case follow-up,” which contains many elements of western CDMPs. The system was established back in Soviet times as part of the Semashko model, giving priority to active monitoring of patients with chronic diseases. But improving this work is an urgent task for the Russian health system as the methods now being used with patients and the content of clinical and organizational activities have to be changed.
The key regulation on this issue is the Administrative Order of the MoH, “On the organization of dynamic case follow-up,” (No.1344н dated 21.12.2012), which sets out a patient management procedure. But not all activities contained therein are being implemented in practice. In 2018, the Rosgosstrakh-Meditsina health insurance company conducted a survey of 7,043 patients with acute coronary syndrome (ACS) and acute cerebrovascular accident (ACVA) (Round Table Panel, 2018). The results of the survey show that: (i) nearly half of patients with a high risk of complications – primarily, those with arterial hypertension – had not been followed up by doctors before the onset of a “disastrous” condition; (ii) after hospitalization, over one-third of patients for ACS and ACVA were not included in the notified case-list, to say nothing of providing supportive therapy; (iii) half of the patients did not receive the required specialist consultations and rehabilitation treatment; the continuity of treatment was disrupted after hospitalization; and (iv) some of the district doctors do not know anything at all about such cases in their district. Such a level of case follow-up cannot be considered sufficient.

A comparison between international CDMPs and the activities set out in Administrative Order No.1344н reveals the following differences:

- CDMPs make a point of continuous follow-up, but the Administrative Order focuses on sporadic follow-ups.
- A different level of responsibility. The Administrative Order provides for additional consultations and procedures, but after conducting them a specialist can forget about the patient. For example, in case of ischemic heart disease, two cardiologist consultations per year are prescribed. Once those consultations are conducted, the cardiologist’s management of the patient is over. He/she is not responsible for what happens next. But under CDMP, specialist doctors are included in the corresponding groups where they work and are responsible for the results along with other doctors.
- The Administrative Order does not contain any treatment performance criteria. All the treatment efficacy criteria it describes are process criteria rather than outcome criteria. They are articulated in terms of clinical actions by physicians, which is clearly not enough for assessing their work with the group of patients.
- The Administrative Order does not describe the organizational models of chronic patient management: how to organize this process, which doctor performs the coordinating functions, what is the composition of interdisciplinary groups, what functions can be delegated to the nursing staff, etc.
- Under the Administrative Order, the patient does not have to commit to comply with the doctor’s prescriptions. There are there are no agreements with patients regarding incentives and possible penalties.
- There is no mention of telephone and electronic interaction, or remote monitoring in the Administrative Order.
- Interaction with a hospital is reduced to a recommendation under the Administrative Order; if a district doctor or a specialist from the polyclinic cannot help the patient, the latter should be hospitalized.
A disease management program for diabetes, hypertension, and heart failure was developed over a one-year period in 2014-15 in Kazakhstan with support from the World Bank-funded Health Sector Technology Transfer and Institutional Reform Project. Seven polyclinics in Pavlodar and Petropavlovsk were the designated pilot sites. The core components included: development of a flowsheet for each of the three conditions, based on prototypes from British Colombia, Canada; creation of an electronic registry; creation of a process for data entry and conducting patient recalls; and introduction of patient segmentation where clinics asked the patients with worst control to return to clinic more frequently. Participants also had training on how to facilitate patient self-management activities. Clinical protocols which were written in lengthy text were converted to simple one-page algorithms with arrows and boxes indicating the sequence of steps to follow.

To learn these new skills, participating clinics met face-to-face during four meetings, where they discussed implementation challenges and solutions and shared their data with each other. Participating teams were able to achieve significant improvements in several process indicators, and the proportion of patients with hypertension controlled increased from 24 percent to 56 percent.\(^{36}\)

### Change in care quality outcome indicators, disease management program, Kazakhstan, 2015

---

2.3.3 Improving access to medication

Besides access to health services, another issue that concerns the elderly is access to pharmaceuticals. According to RLMS-HSE data, spending on pharmaceuticals accounts for over 80 percent of households’ expenses on medical treatment in Russia. Out-of-pocket (OOP) payments for drugs pose the biggest threat to medication adherence. OOP payments in Russia constitute a much larger part of spending than they do in all other countries observed by the OECD—see Figure 2.4. Evidence shows that OOP payments, no matter how small, reduce adherence to medication regimes (Sidorenko and Zaidi 2013). Efforts to improve medication adherence are particularly important for the management of hypertension and high cholesterol. In an aging population, cognitive decline and polypharmacy – having to take four or more medications – usually lead to poor medication adherence.

Figure 2.4: Expenditure on retail medicines by type of financing (2017 or latest year)

(Source: OECD Health Statistics 2019.

Pharmaceuticals used for hospital and emergency care are covered by the Health Benefit Package, but most pharmaceuticals for outpatient care are paid for by patients. Existing drug benefit packages for outpatient treatment cover only certain eligible categories of citizens: the disabled, persons with outstanding merits for the nation (national award winners/heroes), and patients with certain diseases. Not all prescribed pharmaceuticals are made available. According to the Quality of and Access to of Services in Education, Health Care, Social Services and Employment Assistance (QAS) undertaken by Rosstat in 2017, only 18.8 percent of Russia’s elderly respondents reported that they were eligible for free or subsidized drugs; most of them have the cost of drugs covered from the bundle of social services (Table 2.1). People eligible to have drug supply benefits for outpatient treatment accounted for 12.2 percent of the elderly under 65, 23.2 percent of those between 65 and 74, and 33.7 percent of those aged 75+. According to the study results, among Russia’s elderly people without permanent disability, only 8.3 percent have drug supply coverage, and half of them are persons with certain diseases.

---

38 Under the federal legislation (Federal Laws No.178-FZ, No.77-FZ, No.38-FZ, No.323-FZ, and Resolution of the Government of the Russian Federation No.890), the following diagnoses make patients eligible for subsidized medicines: tuberculosis, HIV,
Figure 2.5: Increase in households’ per capita spending on treatment in real terms relative to 2008, %

Table 2.1: Percentage of older population eligible for fully or partially subsidized drug supply, %

<table>
<thead>
<tr>
<th></th>
<th>Eligible for a drug supply benefit</th>
<th>Including as part of the bundle of social services</th>
<th>Including as a patient with a chronic disease</th>
<th>For other reasons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population over working age</td>
<td>18.8</td>
<td>10.9</td>
<td>6.1</td>
<td>1.8</td>
</tr>
<tr>
<td>Older population without disability</td>
<td>8.3</td>
<td>1.8</td>
<td>4.6</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Source: QAS-2017 (Rosstat).

The results of the quality survey confirmed that reduced accessibility of medicines is one of the most acute and widespread problems for the elderly in Russia. The study participants, even those who had just entered the elderly cohort, reported that they take a lot of medicines prescribed by their doctors. The high cost of medication (1,000 roubles or more for each) does not always fit well into the elderly person’s malignant neoplasms of lymphoid, hematopoietic and related tissues, hemophilia, mucoviscidosis (cystic fibrosis), pituitary dwarfism, Gaucher disease, multiple sclerosis, organ (tissue) transplantation, cerebral paralysis, hematological diseases, bronchial asthma, rheumatic and hemorrhagic diseases, rheumatism, diabetes, Parkinson disease, glaucoma and cataract, schizophrenia and epilepsy, and acute myocardial infarction (for the first six months of treatment).
budget. One of the strategies to cope with the circumstances is obtaining disability status. In that way, the elderly try to acquire a formal status that would entitle them to a higher pension or allow them to get some of their medicines at a subsidized price. But the elderly who are eligible for subsidized provision of medicines are not happy with the supply. For various reasons, it is not guaranteed that they will get the necessary medicine.

Polypharmacy – the simultaneous prescription of multiple, sometimes excessive, medicines – is another reason for the high costs elderly people incur for their pharmaceuticals. An elderly person suffering from a variety of chronic diseases gets pharmaceutical prescriptions from several specialists at once. Unless the total number of administered pharmaceuticals for a patient is under control, the treatment may not only inflict economic damage, but also prove detrimental to the patient’s health, leading to hospitalization and loss of capacity. Polypharmacy can be a symptom of fragmented care, where multiple different care workers who treat a patient are not keeping effective communication, leading to unnecessary or overlapping prescription. Physiological changes in the patient can also trigger adverse reactions to drugs, and these are more likely to occur in older patients with multimorbidities. A health worker who participated in the survey admitted that such a problem exists, but thought that the present-day health care system is not adequately resourced to counteract it. For this reason, older people may decide on their own to quit using prescribed pharmaceuticals—but if such a decision is taken without consulting the attending physician, it may harm the patient.

Some people over 75 have to give up taking some of prescribed medicines because of their inconvenient dosage formulation. Problems with the mouth cavity and difficulties with swallowing can make taking pills inconvenient and dangerous for some patients. Not knowing how to resolve the problem, their relatives decide to stop administering medicines.

Person-centred care which includes geriatric assessments ought to capture the medications that an older person is taking, so that prescription can be made with full available data. Ideally, this information would be available on a health information system to avoid having to ask the patient to give their history, which might cause added distress and may also be less reliable. A review of a patient’s prescriptions can then also remove unnecessary or duplicative medications, to improve patient safety. WHO has prepared guidelines on how to prescribe appropriately and reduce medication errors:\(^\text{39}\)

- Obtain a complete medication history;
- Consider whether the medications may affect capacity;
- Avoid prescribing before a diagnosis is made except in severe acute pain;
- Review medications regularly and before prescribing a new medication;
- Know the actions, adverse effects, drug interactions, monitoring requirements and toxicity of prescribed medications;
- Try to use one medication to treat two or more conditions;
- Create a pill card for the patient; and
- Educate the patient and caregiver about each medication.

\(^{39}\) Handbook: Guidance on person-centred assessment and pathways in primary care, WHO and ICOPE
If in doubt about whether a medication can be safely stopped, refer to an appropriate specialist.

Unable to adhere to doctors’ prescriptions, undergo an examination, or buy a medicine, the elderly do not see any point in seeking medical care at all. Given reduced access to health services and medications, self-treatment turns into a popular strategy for senior-age persons who want to remain healthy. But this strategy results in belated detection and treatment of diseases, and consequently, more expensive medical treatment for older people. It is important to underline that this dangerous health strategy is quite widespread – according to the sample surveys, it is practiced by up to 20 percent of older people.

Sustainable Development Goal 3.8 emphasizes the need to expand access to medicines and health products, and this is a significant focus of WHO. The WHO identifies a list of “essential medicines”, selected based on disease prevalence, evidence of clinical efficacy and safety, and comparative costs and cost-effectiveness. Access to medicines on this list ought to be a top priority, and in 2017 WHO published Towards Access 2030, a strategic framework to “increase access to essential, high-quality, safe, effective and affordable medical products”. A study in Xinjiang, China examined the effects of an outpatient copayment scheme which supported patients with hypertension to purchase medicines. Compared with the control group, the group enrolled in the scheme had significantly better drug treatment of hypertension, and better self-reported health outcomes. An economic evaluation of free medication after myocardial infarction found that full provision of medicines resulted in greater survival than the status quo at a cost of $12,350/QALY.43

2.3.4 Role of telemedicine in improving health service delivery to the elderly

Implementation of telemedicine in Russia for the elderly lags behind other developed countries. Though new virtual technologies have been entering the market in recent years, they have been unable to significantly contribute to the improvement of the health of the elderly. Russia’s telemedicine market was worth RUB 1.5 billion in 2019, and in the first quarter of 2020, with the pandemic starting, it increased by 72 percent. The total volume of venture investment in telemedicine companies in the Russian Federation during 2017-2020 exceeded RUB 2 billion.45

The starting point for the development of telemedicine in Russia may arguably be 1 January 2018, when key amendments to the federal legislation took effect. This allowed provision of remote medical care, as well as to exchange patient data during healthcare delivery using special information systems with an adequate data protection level, and to issue electronic prescriptions. But Russia places restrictions on

---

40 https://www.euro.who.int/en/health-topics/Health-systems/health-technologies-and-medicines/policy-areas/essential-medicines
42 Yin, H et al. (2020). Effect of an outpatient copayment scheme on health outcomes of hypertensive adults in a community-managed population in Xinjiang, China.
doctor-patient telemedicine, requiring an in-person appointment in order to make the diagnosis and determine the treatment strategy. A telemedicine consultation is only allowed to conduct preventive activities, gather case history and evaluate the results of prior prescriptions, and decide on the next in-person visit. These restrictions may reduce the positive effect of telemedicine in terms of the accessibility of medical care for the older population. A shift to remote medical consultations avoids the need for post-diagnosis visits, but does not help if new chronic diseases emerge.

In 2018-2019, telemedicine consultations were conducted by private healthcare providers based on direct payments from patients, or under a voluntary health insurance (VHI) policy, which significantly limited service coverage of the older population, because in Russia older adults use private healthcare providers or VHI policies much less frequently than working age persons. In fact, according to the data from The Doctor Next Door, in January-May 2019, persons aged 50 and more accounted only for 19 percent of all applications for remote medical consultations to this provider, while 60 percent of patients were aged between 27 and 47 years.

Telemedicine consultations offered by private providers do not significantly contribute to meeting the demand of older people either. According to I. Shaderkin and his coauthors, out of 16 telemedicine consultation providers (as they position themselves) that operated in Russia by 2020, only three had comprehensive platforms with all the necessary resources – personnel and technology – to carry out fully-fledged medical consultations in conformity with the Russian legislation: The Doctor Next Door, SberHealth (formerly DocBoc), and SmartMed (formerly Medsy). The other providers were either online consultation services, helping the patient to select the required health services without providing them, or acted as aggregators—information resources facilitating contacts with private clinics for subsequent in-person visits.

Beginning in 2020, pilot projects were launched to plan for telemedicine consultations to be paid for from the funds of mandatory health insurance (MHI). Such initiatives were accelerated due to COVID-19 pandemic, but their objectives go beyond the framework of ensuring health care to the population during the pandemic and include increasing the accessibility and quality of medical care to chronic patients. Telemedicine should provide an alternative for patients trying to address their health problems by themselves via the internet, as well as to provide a solution to health care accessibility problems experienced by residents of remote regions. The technological and methodological foundation for such initiatives was provided by the federal project, “Establishing a Unified Digital Healthcare Loop Based on

48 For instance, according to the data of The Russia Longitudinal Monitoring Survey - Higher School of Economics (RLMS-HSE), in 2017, private healthcare providers provided services to 15.5% of able-bodied outpatients and only 8.8% of patients over able-bodied age, and for patients aged 80 and more – mere 5.7%. In 2017, a VHI policy was held by 4.2% of able-bodied population, and less than 1% of persons over able-bodied age.
the Unified State Information System in the Healthcare Sector (USSHs).” The implementation of the aforementioned pilot projects helps forecast an increase in the telemedicine consultation coverage of Russia’s older population as the key recipient of free health services in this country.

**Box 2.4: Telemedicine projects initiated at Federal level**

At the height of the pandemic in July 2020, when patients’ access to healthcare facilities was restricted, a federal project was launched by VEB.RF and The Doctor Next Door telemedicine service, which aims at providing this country’s population with free health services from primary care doctors, pediatricians, and general practitioners, as well as from key specialty physicians. In 2020, remote consultations provided by the service were included in the mandatory health insurance (MHI) programs of six Russian constituent territories: Kaluga and Sakhalin Oblasts, Republic of Tatarstan; Nizhniy Novgorod, Ulyanovsk, and Ivanovo Oblasts. It is planned to expand the project’s geography. Telemedicine consultations are provided to those insured under MHI after signing up to the State Services web portal and the provider’s website. One can also make an appointment for a telemedicine consultation via regional web portals.

In 2020, 11 Russian regions got connected to the SberHealth program aimed at improving the monitoring of chronic patients’ condition and COVID-19 patients. The provider suggests that the region prepare a package of services from the list below:

- Arranging for telemedicine consultations by primary care doctors and pediatricians, as well as other specialty physicians who either work in the region concerned or cooperate with SberHealth (provider’s doctors can get involved in region’s population consulting if the region’s doctors are unable to ensure assistance under the project).
- Keeping health diaries on the provider’s web portal and providing online access to consulting physicians for prompt response to a change in the chronic patients’ condition.

The healthcare provider also conducts doctors’ training in remote management of patients. Uniquely, the SberHealth program offers a special function for the elderly. Older patients who may find it difficult to keep an electronic health diary are called each day and verbally communicate their health data to voice-recognition software.

The pilot projects aimed at providing telemedicine conferences free of charge potentially open up access for older age to health services. However, the positive effect has thus far been limited because they cover the population of only several remote regions in this country and, importantly, it is not clear whether such projects – save for the SberHealth program – make provision for use of services by people with limited functional capability.

The currently available telemedicine providers do not fully meet the needs of the elderly:

- Prior to 2020, they were represented by commercial products which typically were unaffordable for older age patients.

53 Vladimir, Ivanovo, Novgorod, Rostov, and Astrakhan Oblasts; the Republics of Bashkortostan, Mordovia, and Udmurtia; Perm Krai, Kemerovo Oblast, and the Republic of Buryatia.
• Quality is often low.
• Lack of elderly-specific adjustments to care offerings to suit technological capability of older adults—very few providers of telemedicine consultations offer solutions for patients with such needs.

A definite step towards increasing the coverage of Russia’s older population with telemedicine consultations can be taken through including them in regional MHI programs. The absence of fee for such services increases telemedicine accessibility to the elderly to some extent. However, the above programs need a special expert review to look into other barriers and problems that may be faced by the elderly during their implementation, such as availability of internet connection with the necessary technical characteristics, problems with learning software functionalities, and problems related to communicating with health workers online. Section 5 of this report discusses these challenges in more detail. Based on a review, the programs can be fine-tuned to bring them to conformity with the specific needs of the elderly.

Box 2.5: Regional initiatives to increase the accessibility of health services for the population using information technologies

In addition to federal programs aimed at promoting free telemedicine consultations, there are regional initiatives to increase the accessibility of health services for the population using information technologies:

• The Astrakhan Oblast Active Longevity Program provides for the use of telemedicine to increase the accessibility of oncologic assistance to the elderly.
• The development of telemedicine to safeguard the health of the elderly, though without specifying technology applications, is mentioned in similar programs of the Republic of Mordovia and Primorsky Krai.
• It is proposed to use telemedicine for establishing long-term care in Magadan Oblast.
• The Sverdlovsk Oblast authorities are planning to use the potential of telemedicine to conduct consultations with regional geriatric hospital specialists.

On 23 March 2020, the Center for Telemedicine Consultations of the Moscow Healthcare Department began operation. The Center monitors patients with mild COVID-19—those with a low fever and without respiratory symptoms. Patients with a confirmed diagnosis via an in-person appointment can access the Center’s services. The specialists, mostly primary care doctors, ask patients about their symptoms, enter the data into the patient’s electronic medical record, update previously made prescriptions, and can refer the patient to ambulance service or hospital if his/her condition deteriorates. Consultations are available both over video connection and telephone. The program ensures that during the pandemic Russian capital’s older adults have access to health services if infected with COVID-19.

In addition, a project is underway in Sverdlovsk Oblast to improve the accessibility of telemedicine consultations for the population in the region. To address the problem of internet access for the residents of the region, anti-vandal telemedicine terminals are being installed at regional offices of Russian Post. Besides providing for communication with the doctor, the terminal enables the patient to print out the record of the consultation (Figure 2.6). To facilitate telemedicine consultations, plans are being made to arrange for delivery of tablet computers by postal workers to remote area residents.
The above regional initiatives suggest that authority to make arrangements for special telemedicine consultations for the elderly has been delegated to the regions. This is part of the active longevity regional policy, which implies that decisions on implementation and success of the initiatives depend on the budgets of the regions, and acknowledges that access to telemedicine consultations for the older population may vary across different regions.

Given Russia’s low population density and remotely located healthcare providers, the implementation of telemedicine can have a positive effect on the accessibility of health care, primarily for the older population facing problems with access to health care. The implementation of new digital technologies should be accompanied by an assessment of the likely adverse implications and development of government policy measures aimed at containing such implications.

Telemedicine has made a positive contribution to public health during the COVID-19 pandemic and has been used for a variety of purposes. By deploying programs of remote medical consultations, patients with chronic diseases can receive help from home without visiting medical facilities, which minimizes the spread of infection in health facilities. The experience of the city of Moscow during the pandemic showed that the use of relatively simple remote technologies can help in advising the patients treated at home and for conducting remote diagnostics. Moscow has established a specialized telemedicine center that attends exclusively to patients with coronavirus. Video and audio communication with patients allow the doctor to analyze the condition of patients, answer their questions, adjust treatment, and make recommendations. The center employs more than 200 experts who have undergone additional training.

to work with patients who have COVID-19. The capacity of the platform allows for up to 4,000 consultations per day.

**New opportunities**

Telemedicine and remote access to care could make services more available to the elderly, changing the way services are provided to the elderly by prioritizing in-home care/visits, and reducing unnecessary visits to institutional facilities. Emerging technologies, particularly those used to foster communication and engagement, provide opportunities to learn and monitor the safety and ensure the security of an older person. Aging in place can be further enhanced by creating age-friendly environments that enable mobility and allow older people to engage in basic activities. The development of telemedicine is associated with improving the geographical accessibility of health care and the comfort of its use—for example from home. Establishing regular remote telemedicine monitoring of a patient allows prompt detection of diseases or aggravation of a patient’s condition, and timely delivery of the necessary care.

Telemedicine has the potential to increase the efficacy and reduce the cost of care provided to chronic patients with multiple diagnoses, which offers significant benefits to the elderly, who are often multimorbid. Remote consultations and remote monitoring are two such ways to improve healthcare for the elderly at the primary care setting. Telemedicine technologies can facilitate the establishment of chronic disease management and self-care, allow timely identification of health impairments, and arrange a meeting with the doctor. For those with reduced mobility, telemedicine provides more convenient care that can be received at home, with fewer in-person visits to the healthcare provider. This supports self-sufficiency and “in-situ aging.” Telemedicine consultations have proved particularly sought after during the COVID-19 pandemic, helping shield the elderly from exposure while maintaining routine care.

A brief by Innovating Care for People with Multiple Chronic Conditions in Europe (ICARE4EU) project analysed the use of eHealth in treating patients with multimorbidities, and analysed the potential benefits that can flow from the tools.

**Table 2.2: Framework of eHealth solutions for multimorbidity care and envisaged benefits**

<table>
<thead>
<tr>
<th>Tools</th>
<th>Envisaged benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Management</td>
<td>• Computerized systems for care management, health advice and reminders</td>
</tr>
<tr>
<td></td>
<td>• Patients: improved health, wellbeing and quality of life; self-empowerment;</td>
</tr>
<tr>
<td></td>
<td>• Health care system: reduced inappropriate access to services; reduced workload</td>
</tr>
<tr>
<td></td>
<td>• reduction of inappropriate hospitalizations and length of stay.</td>
</tr>
</tbody>
</table>

55 Using network-connected medical devices that measure patient indicators and transfer his/her health data online to the attending physician, and using health condition materials, which the patient can obtain independently and transfer to the doctor (photos of skin or retina areas suspected of being impaired by one or another disease).


59 Barbabella, F et al. 2016. How can eHealth improve care for people with multimorbidity in Europe?
<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Healthcare</strong></td>
<td></td>
</tr>
</tbody>
</table>
| mHealth and assistive technologies supporting daily activities in the home | Informal carers: decreased burden and improved psychological wellbeing; improved care management; improved reconciliation with other life spheres (e.g. work, family, social activities).  
Healthcare system: reduction of inappropriate hospitalizations and length of stay; improved efficiency. |
| ICT tools enabling integration of informal and formal care | Patients: improved health, wellbeing and quality of life; improved access to health care services; continuity of care; tailored care; lower costs for face-to-face consultations (travel and time).  
Healthcare system: continuous monitoring and collection of health data; early warning and proactive interventions; reduction of inappropriate hospitalizations and length of stay; improved efficiency. |
| ICT tools enabling direct psychological, emotional or social support to the informal carer | Patients: improved patient–provider communication; improved access to health care services; continuity of care; tailored care; lower costs for face-to-face consultations (travel and time).  
Healthcare system: efficiency in workload management; immediate response. |
| Remote Consultation, Monitoring and Care       | Patients: continuity of care; tailored and integrated care; access to own medical history and health data.  
Healthcare system: efficiency in care coordination and integration; efficiency in data management; more appropriate diagnosis and treatments; availability of patient’s medical history. |
| ICT tools enabling communication between patients, carers and health professionals | Patients: continuity of care; tailored and integrated care.  
Healthcare system: efficiency in care coordination and integration. |
| ePrescription systems                         | Patients: tailored care.  
Healthcare system: appropriateness of care; efficiency in clinical decision-making. |
| **Health Management**                         |                                                                                                                                                                                                            |
| Electronic health records                    | Patients: continuity of care; tailored and integrated care; access to own medical history and health data.  
Healthcare system: efficiency in care coordination and integration; efficiency in data management; more appropriate diagnosis and treatments; availability of patient’s medical history. |
| Personal health records                      | Patients: continuity of care; tailored and integrated care.  
Healthcare system: efficiency in care coordination and integration. |
| ICT tools enabling communication between health professionals | Patients: tailored care.  
Healthcare system: appropriateness of care; efficiency in clinical decision-making. |
| E-referral systems                           | Patients: tailored care.  
Healthcare system: appropriateness of care; continuous monitoring and collection of health data; identification of risk profiles and tailored intervention strategies; reduced inappropriate access to services. |
| **Health Data Analytics**                    |                                                                                                                                                                                                            |
| Decision support systems                     |  
Healthcare system: appropriateness of care; efficiency in clinical decision-making. |
| Risk stratification systems                  | Patients: tailored care.  
Healthcare system: appropriateness of care; continuous monitoring and collection of health data; identification of risk profiles and tailored intervention strategies; reduced inappropriate access to services. |
Risks of using telemedicine for delivering services to the elderly

Along with the opportunities, the development of telemedicine poses risks to the elderly. The digital divide threatens to create increased inequality in the availability of health care, as older people face far greater challenges with accessing digital technology, including obtaining equipment for remote consultations and data transfer, learning how to use equipment, and accessing high-speed internet connection.

There may be an impact on quality of services as well. Though studies are limited on this impact, many countries using telemedicine impose restrictions on remote consultations depending on appointment type—primary visits or secondary post-diagnosis visits, and some countries impose restrictions on the qualifications of the physician authorized to conduct such consultation. Studies show that some patients are not comfortable with remote patient-doctor communication, and this may reduce the level of satisfaction with health care. Since telemedicine hardware and software are seldom tested for use by people with a reduced functional status, disparities in ease of access may be exacerbated.

Additionally, the elderly often encounter additional specific problems when using telemedicine. These can relate to cognitive or visual impairments, a lack of elder-specific design of hardware and software, or hesitation or reluctance to accept technological innovations.

Box 2.6: Telemedicine in primary healthcare

Telemedicine creates opportunities to provide higher quality care for the elderly that is more readily accessible and more convenient. Remote consultations and remote monitoring are two such ways to improve healthcare for the elderly at the primary care setting.

Remote consultations

Even before COVID-19, virtual consultations were growing in popularity as an alternative to face-to-face appointments. The UK’s five-year framework for GP contract reform in 2019 aimed to strengthen digital primary care, targeting that all practices should offer online consultations by April 2020, and video consultations by April 2021 at the latest. Israel’s 2018 national program, Digital Health as an Engine of Growth pledged about $250m

---

63 https://www.bmj.com/content/371/bmj.m3945.
investment to support telemedicine and digital health solutions in both a research setting and in the Israeli market, aiming to establish the Israeli health system as a world leader in digital health.\textsuperscript{65}  

There are many technology platforms which support virtual appointments. In the UK, Babylon Health is one of the most valuable digital health companies, having raised upwards of $550m dollars.\textsuperscript{66} Babylon offers services to both private and public healthcare providers.\textsuperscript{67} Patients can answer pre-screening questions, connect to a doctor via audio or video link, upload notes and photos ahead of the consultation, view clinical records, and have prescriptions delivered. Babylon apps include assistive features such as screen reading to help older people feel confident, and a website for those less comfortable using a smartphone.

Other technological developments allow for remote examinations and diagnoses. Tyto Care, an Israeli start-up, provides a smart device that is operated at home by the patient or carer, allowing a doctor to remotely examine and diagnose the patient. Tyto Care and telehealth provider Avera eCARE partnered to provide support within assisted living communities using the Tyto Care device. The device allows staff at an assisted living community to facilitate a medical examination rather than transferring a patient to a clinical setting. Eighty-four percent of online visits did not require an in-person follow-up, and 93 percent of urgent care video encounters resulted in treatment in place, while only 5 percent of residents were transferred to emergency care, compared with 25 percent being transferred before implementation. Visiting nurses were able to see four times the number of patients per day, helping to alleviate staff shortages.\textsuperscript{68, 69}

**Remote monitoring**

Remote monitoring can provide clinicians with more continuous health data and hence a more complete picture of a patient’s condition. It can also provide an additional level of safety for patients by altering emergency services in case of adverse events or if vital signs are abnormal.

\textsuperscript{65} https://www.lexology.com/library/detail.aspx?g=4dcf2ceb-79e4-4811-be44-a521f6de44ab.  
\textsuperscript{66} https://www.beauhurst.com/blog/top-healthtech-companies-uk/?#:~:text=1.,Babylon&text=One%20of%20the%20most%20valuable,of%20easily%20accessible%20healthcare%20services.  
\textsuperscript{67} https://www.babylonhealth.com/product.  
\textsuperscript{69} https://www.tytocare.com/professionals/tytocare-for-senior-care/.  

38
Various technological solutions enable remote monitoring: smart watches and wristbands can monitor pulse, ECG, blood oxygen, and activity levels. As shown in the image above, telemedicine platforms such as Babylon offer compatibility with health data collected in this way. Other systems can monitor a wider range of vitals without requiring wearable technology: one study provided sensors – one to record clinical data, and a passive motion sensor and/or chair/bed sensor – in the homes of elderly patients with chronic disease. The data collected was transmitted for clinical analysis, leading to referrals for 20 of the 36 participants. Low oxygen and high blood pressure were the most common reasons, but activity and bed occupancy data were also used to identify when patients were feeling unwell.70

At the technological frontier is Xandar Kardian’s radar-based monitoring device. Designed for home installation, it operates an automatic fall detection system that detects falls with 98 percent accuracy within 3 meters, and is able to send notifications to nurses or carers. Patients can be designated high-fall risk, and notifications can be sent when they start to get up, helping to prevent falls. It can also measure breathing and heart rate without the need for a wearable device, capturing 100 data points per second, and integrating that data into the same monitoring platform.71 Wearable devices can also perform fall detection functions; recent models of the Apple Watch have a fall detection option which will contact local emergency services and emergency contacts after a minute of no-movement following a detected fall.72

2.4 Improving hospital services for the elderly

2.4.1 Specialized protocol for patients with frailty

Elderly patients may have particular needs or sensitivities which need to be considered when receiving care. Some elderly patients may require specialist attention or tailored services. Frailty is one concept used to identify special requirements among elderly patients. Frailty is defined by the British Geriatrics Society as “a distinctive health state related to the aging process in which multiple body systems gradually lose their in-built reserves.”73 About 10 percent of people aged over 65 have frailty, rising to between 25-50 percent of those aged over 85. Frailty puts patients at increased risk of significant change to physical or mental health after even minor events.

Frailty can be a barrier to an elderly person receiving medical services in inpatient settings: patients with frailty require special consideration when receiving care. Health facilities are not always accessible environments. A person with mobility difficulties may have to walk long distances for necessary diagnostic services, medical procedures, and even personal hygiene procedures. Hospitals may also lack necessary equipment, facilities, or personnel to make their services accessible to elderly. If suitable support is not given to an elderly patient, accessibility of care may turn into a serious issue for the patient or may result in his refusal to undergo necessary treatment.

In addition to the physical environment, hospital processes may also be inaccessible or unsuitable to elderly and frail patients. A hospital admission process could require unnecessary travel around the

71 https://xkcorp.com/.
hospital, or might lead to fragmented care where patients are passed through multiple professionals. Treatment by non-specialist doctors operating in the context of general medicine may also lead to suboptimal health outcomes as well as confusion or frustration.

**Acute Frailty Network**

The Acute Frailty Network (AFN) is a group of clinicians and experts focused on adoption and improvement of acute frailty services in the UK National Health Service. The group has worked with a large number of hospitals and primary care centers, mostly in the UK, and also in Europe, Australia and New Zealand. The primary assessment by AFN when analyzing a hospital or primary health care center focuses on how frailty is detected and measured. Often definitions and measurements were site specific, and therefore molded to the context and needs of the healthcare provider rather than the patient. Development of a patient-centered process for identifying frailty helps clinicians meet the needs of patients, and prevents patients from being put on a standardized pathway. Using a standardized scale ensures consistent treatment outcomes for the patient. The Clinical Frailty Scale (CFS) is a 1 to 9 point scale used to score the degree of frailty in a patient that increases the risk of adverse outcomes; it can be used to guide treatment. The scale is designed to facilitate a quick assessment in less than a minute. It is intended as a decision support tool, to be used alongside other inputs as part of a holistic assessment.

---

74 Information from AFN website and interview with AFN leads conducted on 3rd June 2021: https://www.acutefrailtynetwork.org.uk/Clinical-Frailty-Scale.
Table 2.2 below indicates how patient outcomes and treatment are related to a patient’s CFS grade. For patients scoring 7 and above, the recommendation is that a referral to a specific geriatric medicine unit is made, where a Comprehensive Geriatric Assessment (CGA) will be carried out and specialized care can be delivered. Specialists in treating people living with frailty are best placed to treat these patients, and are able to make better decisions about admitting and discharging patients.

Table 2.2: Outcomes in acute care associated with frailty

---

75 A Comprehensive Geriatric Assessment is accepted as the gold standard for caring for frail older people in hospital https://academic.oup.com/ageing/article/47/1/149/4682984.

76 https://www.acutefrailtynetwork.org.uk/Clinical-Frailty-Scale
The Royal Surrey application

The Royal Surrey County Hospital (RSCH) is a leading general hospital and specialist center for cancer services and treatment, based in Guildford, UK. The RCSH serves a population of 320,000 for emergency and general hospital services, and 1.3 million people for cancer services. In 2017, AFN were involved in transforming services for older people as part of a wider restructure of the hospital.77

Four work streams were created:

- Creating a front door frailty team, including identification of frailty.
- Reconfiguring an 18-bed General Medical ward into an Older People’s Short Stay Unit (OPPS).
- Applying a quality improvement and measurement mindset to the existing 60-bed Older People’s Unit (OPU).
- Applying a quality improvement and measurement mindset to the existing inpatient Older People’s Advice and Liaison (iOPAL) service with the addition of a full-time doctor.

The work streams targeted three key objectives:

1. Older patients showing signs of frailty would be seen by a new specialist team when they arrive at RSCH. The Acute Frailty Team, which includes a Consultant Geriatrician and a specialist Acute Frailty Nurse, are now based in the Trust’s Emergency Department (ED). They help the ED team identify people living with frailty and provide early CGA. They can then triage patients into the right system of care if there is a decision to admit, either an Older People’s Unit (OPU) or Older People’s Short Stay Unit (OPSS).

2. The development of standardized means for identification, routes for referral, with a CGA document to reduce variation of assessment. As an outcome of the project, clinicians now use standardized tools for identification – the Clinical Frailty Scale – and assess all patients showing signs of frailty, such as confusion, falls, and mobility issues, within one hour of their arrival.

3. Individual care plans to be put in place for each patient, with the support of a multidisciplinary team, to ensure they receive the treatment and support they need either as an in-patient or at home. Multidisciplinary teamwork is now the norm, and the Acute Frailty Team manages 100 percent more patients than it did with the traditional OPAL model. Patients volumes have shot up, with key interventions that have resulted in an improvement in outcomes. Early intervention has resulted in early discharge home, rapid transfer to OPSS, OPU, the Emergency Assessment Unit, or another appropriate ward. The team were initially available from Monday to Friday with plans to expand to offer a seven-day service.
**Results achieved**

A sustainability dashboard of process, outcome, and balancing measures was created for each component of the new pathway. Indicators including length of stay, throughput, number of older people as medical outliers, and 30-day readmissions were identified as important in the monitoring of improvements. The dashboard became the key medium in team meetings for monitoring and spreading change, and helping to illustrate and disseminate the results achieved:

- Thirty percent reduction in the length of stay for patients over 75 years, sustained over a year.
- Reduced medical outliers in surgery and reduced older people being managed in outlying surgical wards by over 75 percent.
- Savings between £0.37m and £1.08m per year.

### 2.4.2 Organizing monitoring of patients at home

Absence of follow-up after hospital discharge can lead to serious deterioration of the elderly health. To address this problem, in September 2020 the Russian Nation’s Health League and Presidential Grants Foundation of the A.N. Bakulev Vascular Surgery Center started the Health Cloud project, which is to be completed in October 2021. It provides for conducting free health consultations for patients monitored in hospitals and outpatient facilities in the Central, North Caucasian, and Volga Federal Districts. Consultations can be provided to patients with cardiovascular diseases such as cardiac rhythm disorders and ischemic heart disease, quite relevant for older people among whom the incidence rate associated with such diagnoses is high. To ensure increased coverage with telemedicine services, the project provides for using a mobile point – a vehicle carrying the equipment for conducting telemedicine conferences in remote regions. Based on telemedicine consultation results, the patients can be invited to an in-person consultation at a federal medical center or referred for hospitalization.

**Box 2.7: Virtual Ward and Hospital at Home**

"Virtual Wards" and "Hospital at Home" belong to a strategy to reduce hospital admissions and beds occupied by patients with frailty in UK hospitals by transferring them for monitoring in a home or community settings. Patients living with frailty or housebound patients remain registered with the hospital in a “Virtual Ward” after being discharged (or after being diagnosed in person in the hospital) and are monitored remotely.

The strategy is relatively new model of care, however, one impact of COVID has been to accelerate progress towards these sorts of remote care models.

**The Whittington Hospital, London**

The Whittington Hospital in North London is one of the UK hospitals to offer a Virtual Ward service for housebound patients. It runs from 8am – 8pm every day and has a skill-mixed team including senior practitioners who are qualified in advanced physical assessment and non-medical prescribing. The team can take patients from both A&E (to prevent admission) and from the wards (to reduce length of stay). Patient’s care is transferred to

---


the Ambulatory Emergency Care Consultant, who is updated at least daily about the patient’s condition. The service is particularly important at the Whittington Hospital as their patients have high levels of frailty. Its aims are:

- Avoiding/Reducing unplanned hospital admission and Emergency Department (ED) attendances.
- Facilitating discharges.
- Reducing inpatient length of stay.
- Providing high quality care within a community setting.
- To optimise patient care, by involving an integrated multi-professional team.

The VW service has recently expanded to take over the operation of the University College London “Hospital at Home” service. In 2018, the VW team provide over 2500 patient contacts a year, and over the prior 12 months worked with nearly 900 individual patients. As expected, this is an older patient cohort, with an average age of 77 years, and with 62 percent of the patients seen over the age of 80 years. The majority of patients have a short length of stay with the service (average 3.37 days) and can be visited by different members of the professional team. Readmission rate was 1 percent directly from the service, and overall ED reattendance within 7 days of using the service is 2 percent (compared to 5 percent for all ages and 17 percent for over-75s attending ED). The program also contributes to greater continuity of care for elderly patients, who are kept under observation by the same team before and after discharge. The service has been rated as CQC “outstanding”.

During COVID the program became particularly useful, both because of the need to minimize hospital bed occupancy by treating elderly people remotely where possible, and the need to shield elderly people and avoid the risk of exposure to COVID from in-person hospital treatment. Remote treatment such as pulse oximetry and oxygen provision were common tools used in remote treatment of patients.

**Box 2.8: Telehealth at the University of Ottawa Heart Institute**

Telehealth at the University of Ottawa Heart Institute comprises three programs: Telemedicine, Interactive Voice Response, and Telehome Monitoring.

**Telemedicine**

The Heart Institute’s Telemedicine Program enables physicians to see patients in remote sites in consultation without having to physically travel. The telemedicine program uses the Ontario Telemedicine Network, which provides two-way, encrypted videoconferencing technology at most hospitals and community health centers in the province. Patients attend a local examination site that has an examination camera, a digital stethoscope, and a nurse allowing a full set of assessments to be made remotely.

The Heart Institute also offers non-physician consultations for patients at remote sites, including sessions with physiotherapists, smoking cessation experts, and prevention specialists. Patients in Barry’s Bay, Winchester, Almonte, Cornwall, and Bancroft can participate in a telemedicine-linked rehabilitation program, where they can exercise in their home community along with participants at the Heart Institute.

---

80 More than 90% of patients have a PRISMA-7 score of 3 or more and 80% have a Clinical Frailty Score of 5 or more.
Interactive Voice Response

The Heart Institute’s Interactive Voice Response (IVR) system uses automated calling to monitor selected patients discharged from the Heart Institute. IVR provides a safety net and ensures compliance with best practices for post-intervention medication and self-care. Diabetic patients receive an additional set of follow-up questions, with answers forwarded to a diabetes specialist. All eligible patients are automatically enrolled in the system upon discharge from the Heart Institute. The referring physician is kept informed of the data collected by the automated system and alerted to any concerns that arise.

Examples of the use of IVR include:

- Cardiac surgery: All patients discharged from the Heart Institute after cardiac surgery receive calls on Day 3 and Day 10 after discharge. The purpose of the IVR system for these patients is to screen for symptoms and provide a safety net during the period between discharge and when the patient sees their primary healthcare provider.
- Acute coronary syndrome (ACS) and heart attack: All patients discharged from the Heart Institute after an intervention for ACS or a heart attack receive six IVR calls a year to ensure that they are maintaining a best practice medication regimen for their condition.
- Heart failure: Patients with mild-to-moderate heart failure receive IVR calls every two weeks for three months after discharge, to guide self-care management at home and prevent readmission to the hospital.

Patients enrolled in IVR are not expected to wait by the phone for their calls; the system generates up to six automatic calls over two days for each scheduled call; the caller ID readout will say, “Heart Check.” If the patient cannot be reached by the IVR system after two days, they will receive a follow-up call from a nurse in the telehealth program.

Telehome Monitoring

The Telehome Monitoring Program (THM) is a nurse-run, intensive, post-discharge, home health program designed to improve patient outcomes and reduce hospital readmissions. It has reduced readmission of heart failure patients by 54 percent, saving up to $20k in health care costs for every patient diverted from an emergency room visit or hospital stay.

Most patients enrolled in the telehome monitoring program have advanced heart failure that may need more intensive follow up than that provided by IVR. Patients receive home monitoring equipment and training in how to use them: a scale, an automated blood pressure cuff, a home monitor that transmits vital signs and other data to a central station manned by cardiac nurses, and an optional pocket ECG. Patients transmit vital signs once per day, and diets and medications can be adjusted as needed. Patients stay in THM for one to four months after discharge, depending on the severity of their disease. Patients can be transferred to IVR following THM if required.

81 https://www.ottawaheart.ca/healthcare-professionals/regional-national-programs/telehome-monitoring
3. Social care delivery

3.1 Demand

In regard to social care, there is a shortage in three types of services: (i) social and psychological support; (ii) nurses for bedridden patients; and (iii) rehabilitation and treatment services. Some reasons for the unmet demand for social services include lack of information on social service centers; transaction costs of receiving social assistance requires the collection of a large number of documents and results from medical tests; and spatial barrier – lack of special transport, remote location of social institutions.

Demand for social services is not fully met. Typically, people under 75 years of age are still capable of self-maintenance and do not need another help. Above 75 years of age, health problems and the need for care increase. Older people prefer getting help from their family and relatives, and they apply for the help of a social worker if they have no relatives or when relatives live far away or work. The respondents of the survey conducted by the World Bank, IFRC and HSE spoke about serious problems associated with the inconsistent availability of family care and the lack of other forms of social services. At present, social workers are not obliged, and do not have the time, to provide required services, and they acknowledge that they cannot always identify those in need of care. In addition, the social service system does not have sufficient resources to provide such assistance.

In the absence of adequate publicly-financed coverage, the burden of care falls disproportionately on informal caregivers, giving rise to significant economic and social costs. In 2017, the share of people above the working age in need of home-based medical and personal hygiene procedures sought such care from:

- Informal caregivers (relatives and friends) - 66.5 percent.
- Formal providers (social workers, physicians, and nurses) - 33.5 percent.
Informal care responsibilities curtail family members’ (especially women’s) ability to participate actively in the labor market. Besides the economic costs, informal care responsibility incurs social costs associated with the psychosocial impact of providing care to sick, disabled family members. The reliance on informal care exacerbates socioeconomic inequalities amongst those in need. Poorer, less-educated people with disabilities are more likely to rely on informal care.

For long-term care, assistance provided by relatives is a substantial resource; their involvement helps to reduce public spending on home care and increase the satisfaction of the elderly person. The problem is that the government does not provide regular support to relatives. Government support is limited to paying small benefits and does not include training and non-cash benefits.

3.2 Barriers

Most of the elderly prefer to access social services from public sector providers. The advantages of having public social workers are that they are responsible and prepared, and the social protection organization is monitored by the government. According to elderly people, it is easier to exercise control/supervision over public social workers; their personnel turnover is lower, so that the same social worker will give care to the person for a longer time. Their disadvantages are that they are overloaded with clients, and they have low salary.

The major barriers for turning to a private provider are the low income of elderly people, on the one hand, and the potentially high fee rates of commercial caregiving services, on the other hand. Another
barrier is the fear that private service providers may prove dishonest. Paid services are often associated with high quality, but in some cases, greater trust in public social protection makes relatives pay the social workers directly rather than turn to for-profit companies.

Only half of the elderly who need social service get it from social service organizations. The elderly and health care workers point to lack of supply of social services of all types, and primarily nursing services. Social service managers recognize only a shortage of beds in inpatient service facilities. The main barriers to receiving social services are (i) the time-consuming paperwork necessary to obtain the service; (ii) the cost; (iii) the inconvenient location of social service institutions; and (d) the population’s lack of awareness that social service centers exist.

One of the most serious problems with social care is the limited availability of services for older people with limited mobility who need long-term care. It is important to allow elderly people with limited mobility to be in a familiar environment where they live without hospitalization. It is also important to ensure adequate psychological and financial support to caregivers who take care of elderly people at home. The study raised the important issue of training for caregivers – relatives and social workers – for seriously ill elderly people.

3.1 Improving social care delivery for the elderly

Both the National Strategy of Action for the Benefit of Senior-Generation Citizens in the Russian Federation for the Period up to 2025 and the Older Generation Federal Project provide directions for reforming the existing system of social services and developing an up-to-date system of long-term care. The current system of long-term care was created on the basis of the existing system of social services and needs to improve the access to and quality of care services for people with limited self-care ability. The ongoing pilot project aimed at establishing a long-term care system for the elderly was launched in 2018 and is implemented jointly by the Ministry of Labor and Social Protection and the Ministry of Health (MoH) of the Russian Federation. The Enjoying Ageing Charity Foundation operates as its Project Office. In 2018, the Long-Term Care Pilot Project covered the following 6 regions: the Volgograd, Pskov, Kostroma, Ryazan, Tula and Novgorod Oblasts where several municipalities were selected to test the newly introduced system at their selected social care facilities. In 2019, the project was expanded by adding other six regions—the Republics of Mordovia and Tatarstan, Kamchatka and Stavropol Krays, and Kemerovo and Kirov Oblasts. In 2020, the number regions piloting the long-term care system increased to 18, and in 2021, the project is being implemented in 24 regions. It is expected that by March 1, 2022, the reformed long-term care system will be fully introduced in all the regions of the Russian Federation.

The approved model for the long-term care system distinguishes three groups of beneficiaries, those in need of “permanent,” “regular,” and “periodical” assistance. Under this model, each beneficiary of nursing care is eligible for free-of-charge basic package of social benefits financed by the federal budget. The basic package of social benefits specifies the maximum number of nursing hours for the most severely affected group in need of permanent nursing care—four hours per day or 28 hours per week. Services above this minimum level may be provided on terms of partial or full payment. Thus, in comparison with
the existing model, the long-term care model improves the accessibility and affordability of nursing services.

**Unmet demand for social services could be addressed through shifting to a criterion-based principle.** This means based on criteria for identifying eligible populations, for example, people older than 75 or 80 years, people living alone, or people with disabilities. Unmet demand could also be addressed through a combined application-based/criterion-based approach to provision of social services; identifying people in need of social care on the basis of health and functional limitations; and making the social service network more inclusive to accommodate people who have practically no contacts with social services.

**One of the most serious problems is limited access to services for low-mobility senior-age people who need permanent care.** Accordingly, the social protection system should strive to put in place and use facilities to deliver care to low-mobility senior-age people in alternative settings without admitting them to inpatient facilities, to ensure that they can stay in a familiar environment and lead their usual way of life. Among other things, it is necessary to ensure the availability of the services of professional nurse attendants who are adequately skilled to provide high-quality care to such people.

**Since family care continues to remain one of the most sought-after and acceptable forms of caregiving to the elderly, measures should be taken to ensure adequate financial reward to the relatives giving such care.** The vocational training to be provided to the people looking after very sick elderly persons – relatives and social workers. Short-term courses should be set up to provide training in nursing care skills. To improve the life quality of the older population and relatives looking after incapacitated elderly citizens, psychological and social support should be provided both to low-mobility elderly people – particularly the lonely ones – and the relatives looking after them. That may require adding more psychologist positions to the payroll of health and social institutions.

**Box 3.1: Solutions to support and extend family care workforce**

**Respite care to provide relief for family carers**

Since 2011, the Xihu district in the city of Hangzhou, Zhejiang Province, has developed respite care as an attempt to provide temporary relief to family caregivers. Free elder services could be provided upon application for between 5 and 30 days, for 8 hours per day. Family members who had taken care of an elder for over a year were eligible for temporary respite services. The program operates on a small scale only in Xihu; about 60 households apply for the service each year with RMB 2m allocated for financing by the government.

Tianjin has established day care centers which can provide temporary nursing services where family carers need to travel for a few days. The government aims to establish more than two adult day care centers in each district of Tianjin. In Guangzhou, Guangdong Province, community elder care resources are integrated in a network of home-based comprehensive service centers, supported by an investment of RMB 139 million in 132 residential areas of the city in 2012. Special funds have been provided for the purchasing of maid and other personal services.

**Counselling and training for family carers**

A range of support interventions have been found to provide help to the burden of being a carer, some of which include:

- Psychosocial interventions – self-help and support groups, training, and counselling.
- Therapeutic interventions – psychotherapy and cognitive behavior therapy.
- Information and support – provision of information to carers, as well as opportunities to share personal feelings, overcome social isolation.
- Educational interventions – structured educational presentation of information.
- Technology-based interventions – computer and telephone-based systems to provide information and support.

One meta-analysis found that the most effective interventions to support the psychological health of carers should be both educational – of issues such as dementia and of the carer’s role – and therapeutic. Support groups were found to be more effective than individual therapy. Technology-based interventions may be more cost-effective.\(^{85}\)

**Cash benefits**

Cash benefits for carers and those receiving care are offered widely: 13 of 27 OECD countries pay a carer’s allowance, and 16 of 27 pay an allowance to those receiving care.\(^{86}\) Poland, for example, offers cash benefits to those who need care, though not to carers themselves. The most common of these is the care supplement, a monthly cash grant worth PLN 207 (US$60, approx.) given to all aged 75 and over who are entitled to a pension.\(^{87}\) The benefit is financed by the social insurance scheme. For those who do not have social insurance, the nursing benefit is available, worth PLN 153 ($40), and funded as part of the family benefit system by local authorities. If the caregiver of the dependent person resigns from employment to take on the role, there is an extra allowance of PLN 250 ($70) per month, available if the dependent person does not receive a pension.

Tax relief is another form of financial assistance that some countries offer to support family caregivers.\(^{88}\) In Canada, caregivers may be eligible to financial support through the federal tax system. Non-refundable tax measures that offer assistance to unpaid caregivers include the Caregiver Tax Credit, the Eligible Dependent Tax Credit, the Infirm Dependent Tax Credit, the Spousal or Common-Law Partner Tax Credit, the transfer of the unused amount of the Disability Tax Credit, and the Medical Expenses Tax Credit (METC). Under the METC, caregivers can claim, on behalf of a dependent relative, up to US$10,000 in medical and disability expenses. The Infirm Dependent Tax Credit provides approximately US$630/year in tax reduction to those who care for disabled family members with severe impairments. Alternatively, the Caregiver Tax Credit provides co-resident carers with a similar amount of money if the care receiver’s income is low. In addition to the federal tax credits, comparable caregiver tax credits are available in each of Canada’s 13 provinces and territories. The provinces of Québec and Manitoba also offer refundable tax credits to eligible caregivers.

**Employment benefits**

Many countries also offer a range of employment benefits to carers to help combine paid work with care responsibilities:

---


\(^{87}\) Options for Better Quality and More Accessible Long-term Care Services for the Elderly in Poland, World Bank.

• Leave from work: under certain conditions, carers can access extra leave. Some countries also offer paid care leave. Belgium offers the longest paid care leave of the OECD countries in the study, up to 12 months. In Japan, carers can take up to 93 days of paid leave with 40 percent of their salary paid through employment insurance if their employer does not compensate them during their leave. In Sweden, Norway, and Denmark the government reimburses 80-100 percent of workers’ wages.
• Flexible working hours: there is evidence that increasing flexibility lowered the chance that carers reduce their work hours. However, these arrangements are typically more common for childcare than for caring for elderly people. Part time work arrangements are another option, but these are also more common in maternal care: in the UK, 18 percent of establishments report part-time work arrangements for family care reasons, compared with 76 percent with part-time work arrangements for maternal care.

Innovative assistive technologies

Innovative assistive health technologies such as remote monitoring and assistive robots are promising means for enhancing the functional abilities of older people, for improving their quality of life as well as of their caregivers, for increasing safety, independence and a sense of control, and for enabling ageing in place. The use of these technologies should be based on the needs and preferences of older people or their caregivers, and needs appropriate training for end-users.

Box 3.2: Examples of innovative assistive technologies

Socially assistive robot PARO.\(^89\) PARO is an advanced interactive robot developed by AIST, a leading Japanese industrial automation pioneer. It allows the documented benefits of animal therapy to be administered to patients in environments such as hospitals and extended care facilities where live animals present treatment or logistical difficulties.

- PARO has been found to reduce patient stress and their caregivers
- PARO stimulates interaction between patients and caregivers
- PARO has been shown to have a Psychological effect on patients, improving thier relaxation and motivation
- PARO improves the socialiazation of patients with each other and with caregivers.

Hybrid Assistive Limb (HAL) lumbar type\(^90\). This gives caregivers the robotic muscles they need to lift and move patients from bed to chair to bath:

3.2 Private sector engagement in social service delivery

---

\(^{89}\) http://www.parorobots.com

\(^{90}\) https://www.cyberdyne.jp/english/products/Lumbar_CareSupport.html
Traditionally, providers of health and social services in Russia are state-owned organizations. This is the result of the traditionally leading role of the state in providing citizens with these types of services. Federal Law No. 442-FZ (2013), “Basics of Social Services for Citizens of the Russian Federation,” equated the rights of non-for-profit organizations and for-profit organizations providing social services to those of the public agencies or budget holders in terms of accessing budget allocations. The law acknowledged non-governmental service providers as an integral part of the Russian Federation’s social service system. The private providers could receive reimbursement from the budget for the social services provided within the framework of the agreement with state agencies, if they included in the regional register of social service providers.

However, the interest of private providers in delivery of social services within the framework of public programs was not so high. Despite the increase in the number of non-state providers in the regional registries of social service providers (Figure 3.2), by August 2018, only 18.5% of organizations supplying social services in the Russian Federation were private. Being included in the regional registry of social service providers does not automatically mean that an organization receives support or order from the state.

**Figure 3.2. Number of private providers included in the regional registers of social service providers.**

![Graph showing the number of private providers included in the regional registers of social service providers from 2015 to 2018.](image)

Source: HSE

According to the results of the research of the Institute of Social Analysis and Forecasting of the Russian Academy of National Economy and Public Administration, barriers that demotivating private providers to
enter into agreements with the public social protection authorities for social service provision include (Grishina, Tsatsura, 2019, Grishchina, Tsatsura, 2020):

- low tariffs for services provided with high requirements for the content and quality of services;
- complexity of reporting on services;
- uncertainty of the fact of reimbursement by state agencies for services provided (cases of non-reimbursement for services or changes in amounts are not unique);
- requirement that the provider should have free funds, the spending of which will be compensated by the state authorities only at the end of the contract period;
- exclusion of private providers from the information flows coming from state agencies (lack of connection to public systems of electronic document management),
- unpreparedness of government authorities to work with non-state suppliers, including methodological support;
- misunderstanding of the objective of attracting private providers by local government agencies, considering them as "outsiders", distrust on the part of state employees.

Increasing the role of private providers now is a priority for the strengthening the system of social services delivery. The Federal Project "Senior Generation", included in the National Project "Demography", outlines the objective of increasing the share of private providers of social services in the total number of social services providers from 11.9% in 2019 to 20.1% in 2024 and 37.1% in 2030. Adopted in July 2020, the Federal Law on State (Municipal) Social Order for the provision of public (municipal) services in the social sphere may reduce the barriers to the entry of private providers into the market. In particular, signing the contract for the performance of the state (municipal) order may allow to move from retrospective financing to the prospective one. But the most significant problem that is the discrepancy in the size of tariffs and requirements for services to be provided, will not be automatically solved with the adoption of the new law.

The next set of laws and regulations sought to reduce administrative barriers for non-profit-organizations (NPO) to access public funds allocated to social services. The legislation intended to provide the same funding to cover operating expenses to non-governmental providers as government ones. The amendments to the Federal Law on NPOs introduced additional mechanisms for regulating the activities of NPOs providing social services and helping them access public funds allocated to social service provision. Notably, Resolution No. 1137 allowed relevant ministries and departments to determine which

---


92 Federal law of 13.07.2020 N 189-Fz "On the state (municipal) social order for the provision of public (municipal) services in the social sphere."
NPOs are service providers of the services they supervise. The Ministry of Justice’s exclusive right to confirm social services providers’ status had been a substantial administrative barrier to expanding the participation of NPOs in the social services market.

The Set of Measures for Ensuring Gradual Access of NPOs Operating in the Social Sphere to Budgetary Funds Allocated for the Provision of Social Services, 2016-2020 (the Set of Measures) played an essential role in providing more access to regional budget resources to these organizations. As part of their implementation of the Set of Measures, regional executive bodies have approved and are implementing general and sector-specific plans to ensure the phased access of NPOs to budgetary resources financing social services. All but a handful of regions report annually their progress and a standardized set of indicators used by the Ministry of Economic Development to rank their performance in supporting NPOs and social entrepreneurship.

A fall in quality of social services, when private providers, focused on profit maximization, enters the market, is one major risk that can be mitigated through market regulation and by holding all providers accountable to deliver on public interest objectives. Profit-seeking companies are likely to have stronger incentives than the public sector to work towards cost reductions which can have adverse impact on quality of services, as the owners keep the surplus that is generated from the cost-savings in a private company. A fall in quality of services is one major concern when moving from public to private provision of social services: ensuring accountability is a key tool to prevent this. As Blomqvist and Winblad write, supervision structures can in theory be “replaced by accountability measures related to the function of markets, such as consumer sovereignty, competition, and contracts.” However, often market accountability measures are not well suited to the market for social services, because quality is hard to observe and the ability of consumers to choose other services can be weak. 93 Evidence from the Sweden, show that for-profit ownership of nursing homes is linked with lower quality of services than non-profit ownership. Non-profit nursing homes have been shown to have higher staffing levels, lower staff turnover and better trained staff than for-profit counterparts. 94

International experience can provide guidance for Russia about how best to hold private providers accountable. Until the 1990s, nursing home care was almost entirely publicly provided in Sweden, but following a change in the law in 1992, municipalities were able to contract out services to private companies, leading to a rise to 20% of beds in nursing homes privately provided in 2017. Typically, in these cases, municipalities continue to own the facilities but their operation is put to a competitive tender, with bids selected based on principles of competitive neutrality. Providers compete on quality, with the winning bid based on numerous quality criteria given full funding to provide services. More recently, some municipalities have explored a system with a fixed price, and when this price is met bids are selected based on quality. Contracts normally span 3-6 years, at which point the tender starts again.

Policy recommendations to ensure quality of care remains high under private provision include:

93 Blomqvist, P & Ulrika Winblad. 2020. Contracting out welfare services: how are private contractors held accountable?
• Ensure a competition, by assessing market structure and examining by looking at number and size of providers by region and assess willingness of private providers to establish units in different market segments (rural areas, poorer areas etc.). Ensure that all regions are receiving services (whether public or private), even those that are rural and/or inaccessible. Continue to examine competitive environment as it might change over time, and it is in the public interest to maintain competition in the market.

• Assess capacity of the government to monitor performance of all provider and particularly private contractors, and ability of government to enforce predetermined quality requirements, including what type of quality indicators that providers need to report on.

• Ensure measures used to assess quality of services are capturing structural (e.g. staffing levels), process (e.g. adherence to clinical care guidelines) and outcomes (e.g. clinical outcomes of patients) indicators that allow for the government to know if the provider is performing according to contract. To monitor the performance of the providers, triangulate data from different data sources e.g. through user/relative feedback (regular user surveys), professional associations, grievance redress mechanisms (GRM) (hotline to report poor quality of care), third party observations at the unit, and through regular self-reported data from the providers.
4. Integration of health and social services

Providing high-quality and effective health and social care to the elderly requires integration and cooperation between health and social workers. Chronic illness, comorbidity, and physical limitations due to age necessitate that there must be cooperation among doctors, rehabilitation services, and non-medical specialists to supplement medical services with rehabilitative and caregiving services in delivering health care to older people. Interviews with medical and social workers reveal that regional health and social services systems are at the initial stage of constructing an integrated system for providing services for the elderly. Interventions do not go beyond the occasional contacts between health and social workers and attempts of establishing multidisciplinary teams. Those teams were put together by geriatricians in some Russian regions, but such specialists are very few and are not yet able to make a significant impact on the quality of the health services provided to the elderly in the region.

The effective cooperation of health workers and other specialists requires interagency coordination and the adoption of administrative regulations at various levels of service delivery. The Procedure for Delivering Geriatric Health Care approved by the MoH in March 2016 requires the collaboration of geriatricians, psychologists, speech therapists, and physical therapists when prescribing treatment. It is the first step toward integrating health and social care for the elderly in Russia. The joint Administrative Order of the Ministry of Labor and Social Protection and the MoH (2018) recommended that the regional executive authorities in charge of social and health care should establish and maintain interagency collaboration to deliver social services to citizens who have lost their ability to care for themselves, including senior-age persons.

The concept for a long-term care system was developed with inputs from the Old Age in Pleasure charity foundation and is being implemented under an ongoing pilot project (Ministry of Labor, 2019). According to this concept, individuals with self-care deficit are to be provided with integrated services by medical and social workers, as well as support in negotiating the care delivery system. The study has revealed that health and social workers may lack understanding of the need for multidisciplinary and interagency teamwork to provide health care to the elderly. It is possible that not all personnel are appropriately informed about the principles and objectives of such teamwork.

The scarcity of health care human resources—geriatricians and doctors of other specialties—is recognized by health care and social care leaders as the main barrier to joint work by agencies and to establishing multifunctional teams. At present, a significant hurdle for interagency collaboration in service provision to the elderly is a lack of geriatricians and underdevelopment of geriatric care, although existing policy documents assign responsibility for many aspects of health and social care integration to the geriatric care units. According to MoH data, there were 322 geriatricians in Russia in 2018 (ЦНИИОИЗ, 2019), which is only 17.3 percent of the number of geriatricians that would be required for the country’s elderly population. In 2018, one-third of the Russian regions (27 out of 85) had no geriatricians at all.

One of the major gaps in care delivery arrangements in Russia is the lack of a single authority to coordinate interaction among agencies and evaluate the results of their joint work. The pilot project initiated by the federal government aimed at establishing a long-term care system envisages setting up
Coordinating centers in the pilot regions, but these practices have not yet been introduced beyond the regions participating in the pilot project.

In recent years, certain positive processes have emerged, including the development of a unified health information system and a multi-tier health care system. But the variety of integration activities is still rather limited, and some of the organizational and economic integration mechanisms with a proven track record in other countries are still unknown in Russia. The detailed analysis of the constraints on the supply side to the implementation of an integrated service delivery model in Russia was presented in a *Policy Note on Integrated Health Care in the Russian Federation.*

To enable integrated models for managing elderly patients with chronic and multiple diseases, interagency cooperation and the adoption of special administrative regulations at various levels of service delivery are needed. Similarly, it is critical to improve the qualifications of primary health care doctors and social workers to work in multidisciplinary teams, establish integrated pathways for service delivery and integrated health information systems to intensify information exchange between providers, communication mechanisms to enable provider-to-provider communication and empower patients for more effective engagement, and to provide financial incentives through new provider payment methods. The fragmentation of health care services poses a major challenge for many older people, many of whom will need support from a variety of different medical – and social care – services. Improving the coordination of care for older patients across the care pathway has been a major goal for modern health systems. In some cases, countries have taken steps to improve the overall governance of health and social care, including merging separate ministries as in Singapore, or establishing agencies for care coordination as in Poland at local level (Box 4.1). In others, steps to improve the integration of services have focused on how different aspects of health and social care delivery can work better together. Figure 4.1 illustrates Singapore’s example of integrative care and the oversight in practice.

---

Figure 4.1: Governance for aging, health, and care in Singapore

The Ministry of Health is responsible for governance over the entirety of the health and long-term care (LTC) systems, including setting policy direction, projection of national-level service demand, health and LTC financing, regulatory frameworks, standards, oversight, and coordination of related bodies.

**Ageing Planning Office**

- **Secretariat of the Ministerial Committee on Ageing**
- **Planning and implementation of strategies to address needs of Singapore’s aging population**
- **Implementing national programs focused on keeping seniors healthy, active, and engaged, and providing good aged care.**

**Agency for Integrated Care**

- **National care integrator for health and social care systems**
- **Coordination of patient referrals to intermediate and LTC services**
- **Capacity and capability building of the primary care LTC sector**

**Regional Health Systems**

- **Platform for collaboration among service providers in a geographic region**
- **Skills transfer from acute to intermediate and LTC sector**
- **Strategies and programs to address needs of regional population**

**Ministry of Health Holdings**

- **Common information technology platform across the care continuum—National Electronic Health Records**
- **Common employment of junior doctors across care continuum**
- **Corporate human resources development**

*Source: Singapore’s Long-term Care System: Adapting to Population Aging, Asian Development Bank*
Box 4.1: The comprehensive community-based model of coordinated care for people over the age of 65 in Grudziądz (Poland)

The comprehensive model of coordinated care for persons above 65 in Grudziądz includes 4 main components:

1. Establishment of the Senior Citizens’ Office – a unit dealing with planning, coordinating, monitoring and supporting data gathering, analytical work and implementation of project for the elderly people’s in Grudziądz. The main tasks of the office include the following:
   a. contacting point – information office for the population above 65;
   b. planning local activities related to the senior care, based on regular data collection and analysis in the area of elderly’s care needs in Grudziądz;
   c. preparing care programs for seniors in Grudziądz, securing their implementation in accordance with an earlier established plan and timetable;
   d. monitoring of programs implementation in terms of quality and outcomes;
   e. improving communication between institutions, service providers, and supporting communications with patients.

2. Establishing the function of an elderly care coordinator – i.e. within the primary health care facilities, in cooperation with other facilities providing local and regional care for elderly.

3. Regular assessment of the health, well-being and independence status of elderly people, for the purpose of determining the scope and type of necessary care/assistance and provision of care plans accordingly to the assessed needs.

4. Introduction of mechanisms of information transfer between health care and social assistance institutions about the state of health, needs and available services for elderly people.

Benefits of integrating health and social services

Analysis of interventions to promote the integration of health and social care have found tangible benefit from these health system changes. In Sweden in the 1990s, in order to better integrate the health services provided by the county councils and the social services of the municipalities and increase cooperation between health and social workers, responsibility for care for the elderly was transferred from the 21 county councils to the 290 municipalities. The change helped incentivise providing patients with the most cost-effective care possible: the number of hospital beds in Sweden was reduced by 45% during the 1990s, while most other European countries achieved a reduction by 10-20%, with more patients being treated in the home and in community settings.\(^96\) In Torbay, England, the Torbay Care Trust was established as a joint health and social care board with one pooled budget, introducing financial incentives across health and social care. Proactive discharge planning and transitional care allowed the model to achieve performance improvements, such as reductions in average length of hospital stay and hospital readmissions.\(^97\) A wider meta-analysis of the costs and effects of integrated care found that

---


integrated care was associated with a decrease in costs and an increase in patient outcomes in studies over 12 months (but not significant in studies lasting less than 12 months). ⁹⁸

**Patients, informal care-givers, health care professionals, health care organizations and health care systems can all accrue benefits from integration of care.** Table 4.1 below presents the benefits from patient-centered care in treating multimorbid patients, of which integration of care is a key component (along with greater personalization of treatment and inclusion of informal carers). ⁹⁹ These benefits can follow from the following steps: reshaping care to be more personalized to the needs of each patient, involving informal carers as both co-clients and co-care providers, and integrating across relevant sectors including health and social care.

**Table 4.1: Potential benefits of patient-centered care in treating multimorbid patients**

<table>
<thead>
<tr>
<th>Group</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients</td>
<td>• Increased satisfaction with care</td>
</tr>
<tr>
<td></td>
<td>• Increased well-being</td>
</tr>
<tr>
<td></td>
<td>• Increased treatment adherence</td>
</tr>
<tr>
<td></td>
<td>• Better self-management</td>
</tr>
<tr>
<td></td>
<td>• Increased trust</td>
</tr>
<tr>
<td></td>
<td>• May improve clinical outcomes</td>
</tr>
<tr>
<td></td>
<td>• Reduced hospital readmissions and complications</td>
</tr>
<tr>
<td></td>
<td>• Higher self-rated mental health</td>
</tr>
<tr>
<td></td>
<td>• Less decisional regret</td>
</tr>
<tr>
<td></td>
<td>• Improved functional outcomes identified as important by the patient (e.g. ability to get dressed without help)</td>
</tr>
<tr>
<td></td>
<td>• Better relationship with care professionals</td>
</tr>
<tr>
<td>Informal care-givers</td>
<td>• Increased involvement in decision-making concerning care and treatment</td>
</tr>
<tr>
<td></td>
<td>• Clear care tasks, which are formulated in dialogue with care professionals</td>
</tr>
<tr>
<td></td>
<td>• Less insecurity due to the single care professional as contact person</td>
</tr>
<tr>
<td></td>
<td>• Increased satisfaction with care</td>
</tr>
<tr>
<td>Health care professionals</td>
<td>• Improved job satisfaction</td>
</tr>
<tr>
<td></td>
<td>• Opportunities to learn new skills, such as working in a multidisciplinary team</td>
</tr>
<tr>
<td></td>
<td>• Improved patient treatment adherence through the use of an individualized care plan</td>
</tr>
<tr>
<td>Health care organizations</td>
<td>• Reduced unnecessary use of care</td>
</tr>
<tr>
<td></td>
<td>• Through collaboration, reduced risk of duplication of investment and services</td>
</tr>
<tr>
<td>Health care systems</td>
<td>• Through better management and coordination of care, costs can be reduced due to the prevention of hospitalizations, reduced lengths of stay and better self-management support</td>
</tr>
</tbody>
</table>

This paper will discuss three of the most appropriate principles to effective integration of health care:

⁹⁸ Rocks, S et al. 2020. *Cost and effects of integrated care: a systematic literature review and meta-analysis*

⁹⁹ Heide, I et al. 2016. *How to strengthen patient-centredness in caring for people with multimorbidity in Europe?*
1. Establishment of multidisciplinary teams;
2. Development of integrated pathways for service delivery;
3. Intensification of information exchange between health and social care providers.

There are many international examples of the old-patient centered integrated health and social models. Badalona Serveis Assistencials (BSA) in Spain is one of the examples that applies main principles of integrated care approach.

**Box 4.2: Integrated health and social care for the elderly in Spain**

Badalona Serveis Assistencials (BSA) has been providing healthcare and social support services with a patient-centred approach through the Care Model for Patients with Complex Chronic Conditions (MAMCC) program. BSA serves a population of 236,000 citizens living in a suburban area of Barcelona. The MAMCC puts the person at the centre, integrating healthcare and social services and providing 24-7-365 emergency support.

The target candidates for inclusion in the MAMCC program are frail, elderly citizens often with several chronic disorders. They usually live at home and fail to show their needs for care and support to avoid the risk of exclusion due to illness or disability of any kind. The BSA services also coach informal (family members, friends, neighbors) and formal (professionals) caregivers who provide assistance to the patient on a regular basis. MAMCC’s core skills lie in the management of multi-morbidity and cognitive impairments. The main aims of the program are to promote independent living by offering support to prevent institutionalization and avoidable hospitalization.

**Service delivery**

The program is composed of various medical services – Case Management Nurse (CMN), Medical Attention at Home (AtDom), Hospital at Home (HaH), Nursing Homes Attention (NH AtDom) and Palliative Attention (PADES) – which are integrated with social care services – Telecare, cleaning services, meals at home, home care services, GPS localizer and home rehabilitation. The uniqueness of the programme lies in the integration of healthcare and social support, which has proved cost-effective and allows the provision of innovative services that promote independent living and proactive care.

**Leadership & governance**

BSA is a non-profit integrated care organization under the umbrella of the Badalona City Council. It is made up of five different entities: (i) the Hospital Municipal de Badalona, (ii) Homecare Integrated Services, (iii) the Socio Health Centre El Carme, (iv) Seven Primary Care Centres, and (v) the Centre for Sexual and Reproductive Health. Both governance and organizational change are facilitated due to the fact that BSA is an integrated organization.

**Workforce**

The strong leadership of the BSA professionals has fostered the preparation of the workforce for adoption of the care model. The new professional roles of domiciliary attention physician and case management nurse have been introduced.

**Technologies & medical products**

100 SELFIE (Sustainable intEgrated chronic care modeLs for multi-morbidity: delivery, Financing, and performance) project funded by EU.
Information and Communication Technologies (ICT) have played a key role in supporting the novel services. The BSA program has generated synergies between existing ICT infrastructures at regional and healthcare sector levels with innovative on-site developments supported by different programmes. Tele-monitoring services have been only carried out at pilot level.

### 4.1 Establishment of multidisciplinary teams

Health care specialists and managers in Russia are aware of the need for multidisciplinary teams to provide care to the elderly, but multidisciplinary teambuilding is frequently limited to workers from one agency only. Such teams are primarily set up to deliver services to the elderly by the joint efforts of general practitioners, specialist doctors, and nursing staff. Medical workers also try to create some kind of cooperation or teamwork with relatives of the elderly who have limitations in everyday life. They recognize that it improves the patient’s emotional state and facilitates achieving better treatment outcomes and adherence to prescribed treatment. And it is also important for the doctor to see that he/she is not alone in fighting for the patient, particularly if it is a low-mobility patient with cognitive disorders.

Interviews with health and social care managers show that efforts to set up multidisciplinary and interagency teams are under way in both types of agencies, but the Russian health system and the Russian social service system are only beginning to work toward integration between health facilities and social care institutions that deliver services to the elderly. It appears that medical workers are more familiar with the concept of integration as a principle for health care delivery, so it can be assumed that the health system’s attempts at integration have been somewhat successful and introduced more diverse forms of care.
Although leaders of different levels of the health system and social care system do understand the need for teamwork to deliver services to the elderly and try to some extent to meet this need through their agencies and departments, the advantages of such work are not obvious for rank-and-file workers. During interviews, doctors, nursing staff, and social workers reported that they occasionally needed and sought assistance from the other agency in delivering services to the elderly, but had never been involved in this teamwork in a purposeful way, and do not feel any need for it.

Social workers sought help from health workers when:

- The patient’s general state worsened; they helped the person to call a doctor.
- The client is bedridden. Such cases show that social workers are not adequately trained in helping clients with serious health problems.

Health workers contacted social workers when:

- There was a communication problem.
- The patient was unable to adhere to the prescribed treatment. In the absence of relatives who could help the elderly, the social worker turns into a kind of guardian for the old patient with disabilities, helping the person to receive necessary health services and monitoring the patient’s adherence to the prescriptions in outpatient settings.

**International evidence indicates that team-based care models is an effective PHC service delivery platform that offers integrated, responsive, continuous, and community-oriented care.** Team-based models offer additional human resources, a more robust mix of skills, and a stronger mandate to provide a universal, comprehensive package of PHC services to an empaneled population. Under this model, a dedicated multidisciplinary team of health service providers – headquartered at a PHC hub facility but reaching out actively into the community – works collaboratively to serve a clearly defined catchment population. These local teams feed into larger clusters that form a more expansive network of services while maintaining a team orientation. Specialized services may be located at different nodes in the network rather than all in one large center. Regional/urban hospitals and specialists assist and support the local PHC health team by supplementing the scope of clinical services and offering continuing education and professional development.

**Multidisciplinary care teams for empaneled populations have been endorsed as the preferred PHC service delivery platform by the WB, OECD, and WHO.** Team-based models offer several advantages over individual providers or less integrated networks. First, the multidisciplinary nature of the team allows for efficient and appropriate division of labor, with different provider types deploying their complementary skills and competencies to meet the full and increasingly complex health and wellness needs of individuals and families. Second, the team offers a supportive and accountable structure for management and supervision. Team members offer each other coaching, encouragement, mentorship, and discipline, while the team as a whole can be held responsible for the health outcomes and satisfaction

---


102 Ibid.
of the empaneled population. Third, through empanelment to a dedicated care team, individuals and families can build long-term, trusting relationships with their health providers, with continuity of care further enhanced through complete and accessible health records. Additionally, team-based organization may offer some structural efficiencies, for example lower overhead, built-in critical mass for quality assurance and improvement, and lower administrative costs.

A literature review on interprofessional collaborative practice identified 20 relevant studies, cumulatively pointing to improvements in chronic disease care, better medication adherence, reduced hospitalizations, and cost savings. Systematic reviews have found that the US-based Patient-Centered Medical Home (PCMH) – a multidisciplinary team-based model emphasizing patient-centered, coordinated, and comprehensive care – improves patient experience, care processes, and clinical outcomes for chronic disease. The deployment of primary care teams within several centers in Canada, based on the PCMH, has been linked in several studies to less frequent visits to emergency departments and reductions in avoidable hospitalization.

**Figure 4.2: Multi-disciplinary teams at the heart of integrated service delivery.**

![Multi-disciplinary teams diagram]

*Source: NorthWest London Integrated Care Pilot.*
4.2 Development of integrated pathways for service delivery

In Russia, the pathways exist but they mainly aim at determining the requirements for health care resources. Given the international experience, it is important to consolidate the integration component of pathways with a focus on ensuring comprehensiveness and continuity of care. A 2016 survey on integrated care in the EU asked 20 member states questions addressing aspects of present challenges and recent strategies used to assess integration of care.\textsuperscript{103} In their responses, the most discussed areas of integration were:

- Co-ordination between primary and specialist care (secondary and tertiary care) (11 countries)
- Co-ordination between health care and social care (10 countries)

Other dimensions of integrated care mentioned were:

- Co-ordination between ambulatory and inpatient health care
- Co-ordination between providers of different forms of specialist care
- Co-ordination between somatic and mental health care
- Co-ordination among private and public health care providers

The creation of integrated care pathways is a strategy to achieve such co-ordination, and ensure continuity of care provided to patients. To that end, the WHO has prepared a handbook, \textit{Guidance on person-centered assessment and pathways in primary care} to present care pathways, to assist personnel to manage priority health conditions associated with declines in intrinsic capacity.\textsuperscript{104} The pathways start with a screening test that can be carried out by health and social care workers in the community. The Clinical Frailty Scale example presented in Section 2.4 is an example of a screening test.

The aim of integrated pathways is to ensure that requirements are identified early so that appropriate care and treatment can be allocated. They provide a simple and low cost approach for health and social care workers in the community at the primary care level to identify older people with losses in capacities and provide appropriate care. If promptly diagnosed and managed, care-dependency can be avoided, and older adults can maintain a greater degree of independence for longer. Figure 4.3 provides an example illustration of the ICOPE’s screening tool.\textsuperscript{105} If a patient doesn’t cannot stand up five times within 14 seconds during the chair test, they are put on the locomotor capacity pathway. A further mobility assessment is carried out to specify the pathway, and treatment by medical specialists can be recommended to help manage pain and chronic conditions, and home-based care can be tailored, such as by providing an assistive device to aid mobility, or fall prevention adaptations.

\textsuperscript{103} Integrated care – challenges and strategies in 20 EU countries: Results from a survey on integrated care in EU member states, August 2016
\textsuperscript{104} \url{https://apps.who.int/iris/handle/10665/326843}.
\textsuperscript{105} Ibid.
WHO advises on care pathways to manage the broad categories of health problems – cognitive decline, mobility, malnutrition, visual impairment, hearing loss, depressive symptoms – as well as how to provide social care and support for an older person, and support for the caregiver. Figure 4.3 presents the different situations and needs of older people that are best served by integrated pathways that connect the health and social care that an individual receives. In the above cases, patient outcomes will be improved by receiving a combination of health and social care services. If healthcare workers are aware of these specialized needs and are supported by the integrated pathways presented by WHO, they will be able to refer patients and a point of contact in healthcare can be used to deliver a wide range of important services.
Box 4.3: The Esther Project: integrated care in Sweden

The Esther Project was a piece of work in Sweden by a team of physicians, nurses and other healthcare providers that started in the late 1990s. It was triggered by the experience of Esther, an 88-year-old woman developed breathing difficulties and received extremely fragmented care, having to re-explain her symptoms and history to 36 different professionals over a 5.5 hour period.

The aim of the Esther Project was to improve patient flow and coordination of care for elderly patients within a six-municipality region in Sweden. During the three-year duration period the project was able to achieve the following improvements:

- Hospital admissions fell from approximately 9,300 to 7,300 in three years
- Hospital days for heart failure patients decreased from approximately 3,500 to 2,500.
- Waiting times for referral appointments with neurologists decreased from 85 days to 14 days
- Waiting times for referral appointments with gastroenterologists fell from 48 days to 14 days

The "Esther" Project grew from a need that many health systems share: to improve the way patients flow through the system of care by strengthening coordination and communication among providers. This project has formed the basis of several similar initiatives in different parts of Sweden, e.g. in “West Skaraborg”:

West Skaraborg community care has been organized along principles of continuity and integration and works very effectively across six municipalities with a catchment area of about 96 000 inhabitants. Health care includes eleven health centres (four private) and "Skaraborg Hospital in Lidköping. The county funded health care interventions and the municipally funded interventions were integrated. Interventions are delivered on a model centred around provision in the patient’s home. Patients are first assessed on their health status and needs. Then, a local team consisting of a geriatrician and two specialist nurses is assigned to patients with complex needs for

---

106 Integrated care – challenges and strategies in 20 EU countries: Results from a survey on integrated care in EU member states. (August 2016)

107 https://www.caremanagementmatters.co.uk/feature/esther-project-an-integrated-approach/
medical care and where care requires collaboration between the municipal home care, primary care and hospital care.

The doctor’s role is coordination to improve medical and pharmaceutical treatment and thereby giving increased security for the individual and to provide better assessments of the individual home environment in collaboration with the municipal home health care and the home health care nurses. The teams are characterised with a trusting culture, with close communication and flexible support among both nurses in home care, rehab personnel. The team is also complemented with a palliative team, which provides a link between the various health care providers. The care in these settings is characterised by being be proactive and not reactive. Continuity is judged to be high or very high.

### 4.3 Information systems to support integration

The **Russian Federation has made substantial progress in adopting e-Health.** In the last several years, national services have been introduced, such as “My Health” personal account portal that was launched on the public service’s portal. In most Russian regions, medical information systems have already been introduced that support the process of health care delivery, including arranging electronic appointments with a doctor, ePrescription, telemedicine, centralized laboratory systems, and centralized digital archives of images, among others. The Federal Project “Creating a single digital architecture in healthcare based on Unified State Health Information System” (abbreviated from Russian as EGISZ) is the key driving force of progress based on a systematic development framework. At the same time currently used IT systems in Russia do not ensure adequate care information exchange between health and social care systems, do not allow tracking patient information between health and social care providers and implementation of integrated individual care plans.

**International experience suggests that data integration is a cornerstone of every systematic attempt to achieve patient centered integrated care, enable provider-to-provider communication and empower patients for stronger engagement.** Data integration has the potential to provide multiple stakeholders with critical, timely, and detailed information for short- and long-term decision-making, documentation, and it supports attempts to achieve structural and functional health and social care coordination and integration.

---

**Box 4.4: e-Governance in Estonia**

---

In 2018 the Estonian government, supported by the European Commission, began a comprehensive policy reform aimed at creating a more integrated and person-centered provision of social, medical, and vocational support services to people with disabilities and elderly with high support needs. One key element of the reform package is a linked administrative dataset to help better understand complex care pathways and inform deeper analysis of the effectiveness of care provision. The reform is being carried out by the Ministry of Social Affairs, which is responsible for health, social welfare, and labor functions.

Estonia has strong foundations for digital reform: all citizens have an electronic ID to use across all sectors, 99 percent of services are online, except for marriage, divorce and purchasing real estate. Trust in e-solutions is high. Every person has an e-Health platform where they can access medical history, prescriptions, referrals, test results, and other health data.

Estonia has made significant progress on integration and communication between government departments. Life event services is an approach that will automatically notify a person of government services related to a key event. For example, when a child is born, EESTI.EE – the online portal shown below that collects government information and e-services – sends information including parental benefits, kindergarten enrolment, and doctor allocation. Other examples of life events include starting school, buying a car, retirement, and unemployment.

There are various degrees of data integration in the system. For example, the central health information system enables access to all health information within the sector; local municipalities can access disability and workability information; and the unemployment insurance fund can access health information for disability and workability assessments. The goal of the linked administrative database is to supersede individual data-sharing arrangements and provide a holistic data architecture with data such as: start and end date of services, number of contacts within the period, frequency of services, links with employment and unemployment phases, contextual data (education level, disability, health outcomes, individual income).
The database can support (i) administrative functions at the case level, improving pathways and service delivery, and (ii) analysis of policy outcomes at the aggregate level through research work and creation of live dashboards.

The diagram above shows an archetype used to illustrate use of the system by an older person with the goal of maintaining independent living for as long as possible.
5. Social inclusion

Decline in functional capacity makes the elderly, particularly those over the age of 75, one of the vulnerable groups and raises the issue of enhancing social inclusion. COVID-19 aggravates social exclusion of older persons as a result of measures that restrict movement and contact, such as stay-at-home orders, quarantines, and lockdowns. The risks are magnified if such measures remain in place for protracted periods and do not allow for occasional in-person social interactions or other mitigating measures. Many older persons, particularly those living alone, rely on home and community services and support. Ensuring the continuity of these services is critical. COVID-19 is escalating entrenched ageism, including age-based discrimination and stigmatization of older persons. The internet and other digital technologies have become a window to the world during the lockdown, enabling people to connect with family, friends, and the community. However, many older people have limited access to digital technologies and lack necessary skills to fully exploit them. This digital divide can also impede access to essential information regarding the pandemic and related health and socio-economic measures. Older people may also be unable to access services, such as telemedicine, online shopping, and banking during periods of lockdown and physical distancing. The voices, perspectives, and expertise of older persons in identifying problems and solutions are not sufficiently incorporated into policymaking, especially on subjects where older persons are affected by the decisions under consideration. It is important to engage with the elderly to ensure their active participation in improving service delivery targeted to them, and making informed decisions about their health and well-being.

5.1 Loneliness

Russia’s older people believe that a good mood and social relations make it possible to prevent health problems and cope with the diseases one has. Drastic deterioration in health is perceived as almost a disaster. First of all, it is associated with uselessness, and it frightens people with the prospect of dependence on others and the high costs of treatment and care. It is difficult to face the fear of loneliness and ill health, and it is even more difficult to put up with the impossibility of having your own future health under full control. For this reason, older respondents often report that in old age, their condition depends on their lifestyle rather than on their actual age and health status; an active person can always find something to do and care about, and is not discouraged.

Loneliness, social isolation, and social exclusion are important risk factors of ill health among older people in the absence of family networks or insufficient support for families. This affects all aspects of health and wellbeing, from mental health and dementia to the risk of emergency admissions to the hospital due to avoidable conditions such as severe dehydration or malnutrition. Tackling this issue calls for strong intersectoral and gender approaches that tackle the impact of gender and other social determinants of health. For instance, in all countries older women are more at risk of social isolation than older men. Most interventions combine public action with volunteering, activating the own potential of older people and their families or communities.

The following actions should be taken:
• Promote the civil engagement of older people and strengthen the role of volunteering.
• Foster intergenerational relations through positive media reporting and public image campaigns.
• Increase access to innovative models of support for older people to combat social isolation, including tele-links to social service providers and access to and training in the use of technology, to foster intergenerational exchange and bridge geographical distances within families.

Box 5.1: Singapore People’s Association Active Aging program

The People’s Association (PA) is a Singaporean statutory board reporting to the Ministry of Culture, Community and Youth. It was established on 1 July 1960 to promote racial harmony and social cohesion. Active Aging activities consist of two main programs:

**Senior Citizens’ Executive Committees**
The Senior Citizens’ Executive Committees (SCECs) is the largest seniors’ network in Singapore. Through this network, the SCEC plans and organizes a wide array of activities and courses to enrich the life experiences of senior citizens. These include sports and dance activities designed to help participants stay fit and healthy, and skills-based courses in languages, cooking, and computer technology. It aims to engage and empower seniors to lead active, healthy, and meaningful lives in the community.

Siglap SCEC, a neighborhood where senior citizens constitute about 30 percent of total population (10 percent national average), advertises new activities and information on its website. During COVID-19, virtual events were organized including plant growing courses, online shopping, and email tutorials. Pre-COVID-19 events included free haircuts and exercise classes.

**PA Wellness Programme**
The PA Wellness Programme aims to get seniors to take charge of their own health by participating in the myriad of programs and activities in the Community Club (CC), Residents’ Committee (RC), and Neighbourhood Committee (NC) so that more seniors can continue to enjoy a high quality of life for as long as possible.

The PA Wellness Programme offers those aged 50 and above opportunities to take part in activities to help them remain mentally, physically, and socially active. Activities include:

• Health screening for seniors know their health status.
• Physical activities to stay fit and healthy.
• Participating in CC, RC, and NC programs to stay socially engaged.

5.2 Health promotion

To preserve their health the elderly person in Russia relies primarily on communication, good mood, and life purpose. This attitude may have resulted from the underdeveloped culture of focused health promotion that is typical of Russia’s older population, as well as from the low accessibility of health care services to maintain their health. Often elderly people exhibit low motivation to do physical exercises and
lead a healthy lifestyle, and they lack knowledge about a healthy diet. They need help from government and society to preserve their health.

- Low-income individuals and rural residents need greater availability of health and leisure infrastructure such as health resorts and tours.
- Single elderly people need sports groups and collective workout classes. Such classes improve people’s health through direct effect on their body and opportunity to mix with the others.
- Develop special health support programs for the elderly living in rural areas and for low-income seniors. Provide them with higher priority for receiving health resort treatment and invitations to free entertainment programs.
- Enhance older people’s engagement in healthy lifestyle practices by disseminating special information to them about healthy habits and by improving their access to sporting activities for their age group.
- Involve senior-age persons in volunteer activities to disseminate information about healthy lifestyles. On the one hand, this type of work improves performance – peer-to-peer information exchange ensures a high level of trust in the information source – and, on the other hand, it contributes to the social activity of senior-age citizens.
- Provide economic incentives for elderly people to remain active. These may include discounts for using public transport, cinemas, or the services of hairdressers and manicure salons.
- Work with federal food chains to develop healthy food programs for the elderly that will provide a selection of inexpensive and healthy foodstuffs with the label, “Healthy eating for the elderly,” with details that an elderly person can easily read regarding the admissible quantity of the product that can be consumed, particularly by people with certain chronic diseases—diabetes, cardiovascular diseases, osteoporosis, etc.
- Provide advice about physical activity in all health and social care settings for older people, specifically targeting sedentary people, with a focus on promoting moderate intensity physical activity, particularly walking, and providing ongoing support.
- Support local governments to create motivating environments and infrastructure for physical activity, particularly active transport for all ages.

5.3 Empowering and engaging the elderly in decision making

Empower patients by increasing health literacy and promoting self-management

Empower patients by increasing health literacy and promoting self-management

In the context of rising noncommunicable diseases (NCDs) and an aging population, increased health literacy112 is fundamental to improving health outcomes and for public health more generally. Strengthening health literacy need not be limited to one-to-one contact with providers. In Europe, integrated care projects using telemedicine platforms have incorporated educational games and information about healthy lifestyles (Puglia) (European Union, 2017). At a population level, examples

112 Health literacy is the ability to understand and act upon health information so that people have greater motivation and ability to control their own health.
include the National Literacy and Health Program in Canada that has promoted awareness of the links between health literacy and health, and the Million Hearts Campaign in the US that set the goal of preventing 1 million heart attacks and strokes by 2017 (World Bank, 2016). Table 5.1 presents key actions that empower patients, including seniors.

Table 5.1: Core actions and implementation strategies for empowering and engaging the patients.

<table>
<thead>
<tr>
<th>Core action areas</th>
<th>Implementation strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empower patients</td>
<td>- Health education and information.</td>
</tr>
<tr>
<td></td>
<td>- Promote patient self-management of health through training for providers and patient education.</td>
</tr>
<tr>
<td>Engage patients in decision making</td>
<td>- Patient involvement in developing care plans and solutions.</td>
</tr>
<tr>
<td></td>
<td>- Patient involvement in policymaking and design of integrated care solutions.</td>
</tr>
</tbody>
</table>

By promoting patient self-management, health systems can empower patients to reduce unnecessary use of services, make more informed decision relating to their contact with the health system, and adopt behaviors that better enable them to manage their conditions. Instituting a culture of self-management requires a culture shift among providers and patient education. Training to strengthen providers’ ability to communicate well and inform patients needs to become part of medical school curricula. Providers should also be equipped with decision aids to answer questions from patients. Good models already exist that can be used to cultivate self-management practices on the provider side. On the patients’ side, peer-led self-management courses have proved effective across a wide variety of settings in Australia, Barbados, Chile, Denmark, England, Japan, Peru, South Korea and the US (World Bank, 2016). Increasingly, health systems have successfully resorted to web-based applications also available on devices and/or telemonitoring to support patients with self-management; these include Torbay, Veneto, Puglia, and Olomouc (European Union, 2017). Patient self-management works best when it is integrated into primary and secondary health care systems and reinforced by providers.

Patients are empowered through access to their healthcare data and information about health care services. In Europe, access to data and their ability to empower patients was found to be a success factor in several pilots—Puglia, Olomouc, Scotland (European Union, 2017). As discussed below and exemplified from the project in Puglia, data privacy is a critical incentive to use these services.

Recognizing that not all services are appropriate for all patients is also critical for patient empowerment. Stratification of patients (Lever 1) and identification of the “right” patient have been identified as critical elements to successful patient empowerment in projects in Europe (Basque Country, Norrbotten, Olomouc, Scotland) (European Union, 2017).

---

113 For example, Calgary-Cambridge framework for training physicians; Flinders Program for chronic care management.
Engage patients in decision making

Patients can be engaged in decision making at different levels within the health and social care systems. In Europe, patients have been integral to strategic planning for integrated care and the vision for improvement at the policy level (Scotland, Torbay), at the operational level by actively engaging in the developing care plans and solutions (North West London, Norrbotten, Olomouc, Scotland) and in the recruitment process (Puglia). Other examples include the involvement patients in providing feedback on service specifications and the development of products (Belgium, Northern Ireland) (European Union, 2017). What is common across all of the EU case studies is that engaging patients in decision making was integral to the design of these systems. In almost all cases, they proved to be key enablers of the reform.

In Croatia and Poland, all of the programs were committed to increasing patient empowerment and engagement, although it varied in practice. For instance, all of the programs were opened to involving patients and families in developing care plans and goals, but only the Mental Health Center and county-based palliative care programs saw it as integral to their program.

5.4 Prevention of elder maltreatment

A respectful attitude from other members of society is very important for senior-age people. Respondents of the survey conducted by the World Bank, IFRC and HSE referred to having received lack of respect from those who represent government at the local level, including the staff of social assistance offices and health workers. Older respondents think that such coarse treatment of the elderly is attributable to the fact that, on the one hand, the elderly are more demanding about the quality of the services provided, and, on the other hand, many older people cannot stand up for themselves and therefore feel helpless.

Elderly patients need more understanding and sympathy than middle-aged individuals. In the absence of such an attitude and in response to a doctor’s ill-conceived and careless statements, they quickly take offense. It can be assumed that this peculiarity of the elderly may result from (i) natural brain and nervous system impairments that develop with age; (ii) the relatively high prevalence of mental problems among the elderly in Russia due to the low availability/affordability of psychologists’ services; (iii) lack of social contacts and attention and their desire to make up for this shortage through communication with health workers; and (iv) objective difficulties with receiving health care assistance. The psychological problems, negative emotions, and bad mood strongly affect the condition of the elderly. Quite often, it is because of these factors rather than real health issues that the elderly visit a doctor: they seek “care” consisting in listening to their problems, showing sympathy, and providing necessary information, and this proves quite effective. The Virtual Dementia Tour, highlighted below in Box 5.2, is an example of information that can help seniors understand the changes they experience in cognitive ability.

114 This is also confirmed by the results of epidemiological examinations of the elderly (Gurina et al., 2011).
Box 5.2: Virtual Dementia Tour

Virtual Dementia Tour is a training tool run in the US by Second Wind Dreams, and in the UK by Training 2 CARE. Overall, it has been run in 20 countries in eight languages and has reached more than three million people. Through mobile equipment on buses and in-house capabilities, the Virtual Dementia Tour gives a person with a healthy brain the experience of what dementia might be like, helping them to understand what changes might be needed to their environment to improve the lives of people with dementia. The charities also facilitate other care training, disseminate other resources and information to support carers, as well as selling dementia-friendly products.

In the training participants have vision, touch and sound distorted to mimic the experience of living with dementia. Evaluation of post-training surveys found that the experience is effective and well received, and prompted empathetic responses among participants.

5.5 Accessibility of modern information technologies and telemedicine to the elderly

The Government of the Russian Federation has been taking important steps to improve access to telemedicine and virtual technologies. First, such services were included in MHI programs in a number of regions, and consequently low income population groups can afford them. Second, opportunities are being studied to provide access to the internet for citizens who do not have the technology at home.

---

https://www.secondwind.org/.
Third, the active longevity program currently underway aims at establishing digital literacy courses for the elderly. Nevertheless, it is important to understand to what extent the measures aimed at improving the access to telemedicine and digital technologies for the elderly help overcome all the barriers hampering their use of telemedicine, and to what extent the older population is willing to receive telemedicine consultations.

**According to a survey conducted by VCIOM (Russian Public Opinion Research Center) in May 2020, a slightly smaller share of elderly people among those who heard of such consultations felt that they could turn to a doctor via the internet than for middle-aged and young people**—see Figure 5.1. The survey was conducted in the height of the pandemic, when access to in-person consultations was limited for all age groups and the older age persons were urged to stay home.

**Figure 5.1: Would you apply for online medical consultation in some future instead of an in-person visit, or would rather not? (percentage of those aware of the option to consult a doctor online)**

![Figure 5.1](source)

**Source:** Data of VCIOM survey published on the research center’s website. 

A year earlier, in April 2019, a qualitative sociological survey on elderly needs conducted in the Russian regions by HSE, IFRC, and the World Bank brought mixed results. On the one hand, the focus groups validated the initiative of online medical consultation. Respondents stressed that they lacked information about their health, and had limited opportunities to communicate with doctors during outpatient treatment, including chemotherapy of cancer patients, or after discharge from hospital. During focus groups and interviews there were numerous discussions of the problem of access to healthcare facilities for limited mobility elderly people and residents of remote areas that telemedicine consultations can help to solve. On the other hand, elderly patients and doctors voiced fears concerning the ability of older people to understand the physician in order to communicate all necessary information to the doctor during online consultations. Moreover, respondents felt that doctors would struggle to provide empathy and moral support during a remote consultation. The overall tone that prevailed during discussions was that of cautious interest.

---


119 In Oryol Oblast, and Republics of Karelia and North Ossetia – Alania.
To obtain more accurate qualitative assessments of the readiness of the older population in Russia for large-scale implementation of telemedicine consultations and identify the potential users of the technology, an analysis of sample survey data on the use of information technologies by the population was carried out. The analysis helped perform two tasks:

1. To measure the accessibility of information technologies for various groups of older population.
2. To analyze the determinants of willingness to receive health services through a telemedicine consultation and to monitor one’s health using information technologies.

The empirical foundation for the analysis was provided by the data of the following sampling surveys:

- The Russia Longitudinal Monitoring Survey – Higher School of Economics (RLMS-HSE), been conducted annually since 1994. The sampling of one survey wave during different years has included between 3,200 and 6,500 households, and between 8,300 and 12,600 household members, including 1,700-3,000 elderly people.
- Comprehensive Monitoring of Living Conditions (CMLC), conducted by Rosstat (Federal State Statistics Service) in 2018, which covered 60,000 households comprising 130,600 household members, including 41,500 elderly people.
- Survey of Technological and Social Innovations conducted by GFK Rus under order from HSE Institute for Social Policy in 2017 (hereinafter the “ISP survey”). The ISP survey sample totaled 5,100 respondents, including 904 able-bodied persons aged over 50, and 691 elderly people.

All the three surveys represent the population of Russia by key socio-demographic characteristics. CMLC is also representative at the level of regions.

Accessibility of information technologies for the older population of Russia

The opportunity to perceive a positive effect of telemedicine development depends on the availability of internet access and the ability to learn new digital products. The sample survey data show that to date, the percentage of the elderly using the internet is significantly lower than among able-bodied people. According to the CMLC survey, by 2018 the internet had been used at least once at home or in an office by 89.9 percent of those below 55, but by only 36.5 percent of elderly people. The internet was regularly – used at least once a week – by 83.9 percent and 28.1 percent, respectively by those respondent demographics.

In Russia, the percentage of the elderly regularly using the internet significantly differs by social group and place of residence (Table 5.2). Elderly women take a bit more interest in technology than elderly men, possibly because it helps perform tasks that traditionally fall to women in the household—buying goods, completion of paperwork.
Table 5.2: Percentage of the elderly regularly using the internet (at least once a week) in different social groups,

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Use the internet at least once a week, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender:</td>
<td></td>
</tr>
<tr>
<td>- men</td>
<td>23.6</td>
</tr>
<tr>
<td>- women</td>
<td>30.0</td>
</tr>
<tr>
<td>Age:</td>
<td></td>
</tr>
<tr>
<td>- 55/60-69</td>
<td>39.4</td>
</tr>
<tr>
<td>- 70-79</td>
<td>10.8</td>
</tr>
<tr>
<td>- 80 +</td>
<td>2.0</td>
</tr>
<tr>
<td>Education:</td>
<td></td>
</tr>
<tr>
<td>- secondary general education and lower</td>
<td>10.2</td>
</tr>
<tr>
<td>- secondary vocational education</td>
<td>28.2</td>
</tr>
<tr>
<td>- higher education, including incomplete higher education</td>
<td>52.6</td>
</tr>
<tr>
<td>Employment status:</td>
<td></td>
</tr>
<tr>
<td>- working</td>
<td>61.4</td>
</tr>
<tr>
<td>- non-working</td>
<td>20.2</td>
</tr>
<tr>
<td>Settlement type:</td>
<td></td>
</tr>
<tr>
<td>- Moscow and St. Petersburg</td>
<td>37.1</td>
</tr>
<tr>
<td>- city with a population of 1 million people and more</td>
<td>30.4</td>
</tr>
<tr>
<td>- city with a population of 500,000-999,000 people</td>
<td>28.8</td>
</tr>
<tr>
<td>- city with a population of 100,000-499,000 people</td>
<td>30.7</td>
</tr>
<tr>
<td>- city with a population of 50,000-99,000 people</td>
<td>31.2</td>
</tr>
<tr>
<td>- city with a population of less than 50,000 people</td>
<td>27.8</td>
</tr>
<tr>
<td>- rural settlement</td>
<td>19.9</td>
</tr>
<tr>
<td>Income level (by quintile groups):</td>
<td></td>
</tr>
<tr>
<td>- 1 (the lowest level)</td>
<td>15.9</td>
</tr>
<tr>
<td>- 2</td>
<td>19.1</td>
</tr>
<tr>
<td>- 3</td>
<td>24.0</td>
</tr>
<tr>
<td>- 4</td>
<td>33.3</td>
</tr>
<tr>
<td>- 5 (the highest level)</td>
<td>52.6</td>
</tr>
</tbody>
</table>

Source: Authors’ CMLC-based calculations (2018).

There are significant differences regarding internet use when disaggregated by age groups, levels of education, and income. For those aged 55/60 to 69 years, the share of internet users reached almost 40 percent by 2018, for those aged 70+ it was almost four times lower (less than 10.8 percent), and for those aged 80+, the share of internet users was only 2 percent. Among the elderly with higher education, more than half were regularly using the internet, falling to 28 percent among those with secondary/vocational.
education, and to 10 percent among those with basic education. Income level directly influences the experience in using the internet in the elderly. In the top quintile for income, every second elderly person accessed the internet in 2018 on a regular basis, falling to 16 percent in the bottom quintile.

**There is also variation based on place of residence.** In 2018, the share of internet users was 37.1 percent in the capital, Moscow, and approximately 30 percent in other cities; the size of city had no significant effect on internet access. In rural areas, access fell to 20 percent. Therefore, there are three categories of internet use by the elderly in this country. The first, with the highest level of internet use, though still some way off the younger population, is typical of Moscow and St. Petersburg. The second, with a medium level of use is typical of all the other cities. The third, with a low (but not zero) level of internet use is typical of rural areas. The above distinctions should be considered by the regions for shaping telemedicine development programs in their territories.

**Regional differences are more pronounced compared to settlement differences.** Figure 5.2 shows that the elderly in some of the Russian constituent entities with a low level of territorial development have a high level of internet participation in the life of the elderly – more than a half of them use the internet – and in other regions, such as in Central Russia and Volga region, the share of web users among the elderly drops down to 10-15 percent.

**Figure 5.2: Share of persons over working age using the internet at least once a week, %**

Digital communication coverage reported for the elderly over recent years is not adequate enough to ensure that when telecommunication consultations are made available across all of the country’s regions, they will turn into a large-scale and accessible channel for healthcare delivery to the older population. The improvements can start with the younger group of the elderly where the percentage of people with experience in internet use is higher. However, as presented in Figure 5.3, swift growth in the percentage of users from the age group concerned in recent years, as well as the measures that are being
implemented at the federal state level to increase accessibility of the internet for population, give hope for quick progress within the next few years.

**Figure 5.3: Share of persons over working age using the internet during 12 months before the survey, %**

![Graph showing share of persons over working age using the internet during 12 months before the survey, %]

*Source: Authors’ calculations based on RLMS-HSE*

The RLMS-HSE data show a widening gap in internet use between Russia’s elderly population along age sub-group income, settlement, health status. For instance, the gap between the younger group and the older group by internet user percentage grew from 13% in 2010 to 44% in 2019 (Figure 5.4), and between the elderly perceiving their health as “good” or “very good” and “poor” or “very poor” from 12% to 32% (Figure 5.5). The differences between quintile groups 5 and 1 by income level have increased from 20% to 42% (Figure 5.6), and between capitals and rural settlements from 18% to 29% (Figure 5.7).
Involving the elderly in internet use can be increased by upgrading digital literacy courses. Even though many Russian regions have already included such training activities in their active longevity policy plans, in 2018, according to CMLC data, they were attended by only 0.1 percent of the elderly. The use of the internet by the elderly correlates with their employment status. In 2018, more than half of the employed older population are internet users, among those unemployed the share was 20 percent, as presented earlier in Table 5.2. Mass-scale computer literacy programs can be made more effective if targeted toward the unemployed elderly.

In conclusion, given sizable though decreasing social differences in internet use, implementing telemedicine without additional social programs to ensure the availability of internet access, necessary equipment, and support for the older population may place at a disadvantage the country’s elderly with differing social statuses.
Willingness to use telemedicine consultations by the elderly

The results of the technological and social innovations survey showed that Russia’s elderly (50+ years) report high demand for technological development specifically in medicine (Figure 5.8).

Figure 5.8: Share of population of 50+ years with a positive attitude to the implementation of advanced technologies in different areas of life

![Graph showing share of population with positive attitude to advanced technologies in various sectors]

Source: Authors’ calculations based on the ISP survey (2017).

However, the elderly in Russia are much more cautious with respect to online consultations. While nearly a third of people aged 50+ years prefer receiving online state services and commercial travel services, and performing financial transactions via internet, a much smaller group is willing to prefer an online medical consultation by a primary care doctor or specialty physician to in-person communication even if the quality is higher at 18.4 percent and 15.6 percent, respectively, as presented below in Figure 5.9. There are differences when applying for the services of a primary care doctor or specialty physician. In spite of the assumption that harder-to-find services of specialty physicians will be more sought after when offered online than those of primary care doctors, telemedicine consultations by specialty physicians enjoy less confidence among the elderly than more routinized contacts primary with care doctors, which may be related to the issuance of references and prescriptions.
Figure 5.9: Share of population of 50+ years ready to prefer receiving services online to in-person communication, even if the quality of remote consulting is higher, %

Compared to young and middle-aged persons, the older population is predictably less willing to use online healthcare consultations, and among the elderly, the willingness significantly decreases with older age—see Figure 5.9 below. The low popularity of online health consultations among population may be in part accounted for by lack of information about telemedicine among a majority of the population, and the fact that citizens or their friends lacked experience in using such consultations. The development of markets for such services and their integration into MHI programs, which symbolically attests to the safety and adequate quality of the services, as well as reduced accessibility of in-person consultations during the pandemic, should have apparently resulted in an increase in the percentage of population willing to turn to telemedicine services, including the older population. But the results of the above survey of the Russian Public Opinion Research Center show that the percentage of those willing to use telemedicine is hardly more than 30-40 percent in the senior age group. Indeed, to date, Russia’s population trusts the quality of online consultation much less frequently than the quality of other, more formalized services.
Only a small share of the elderly had experience in using similar functionality mobile applications to monitor their health indicators. In addition to videoconferencing, telemedicine platforms, such as the SberHealth program being replicated in Russian regions, require that patients enter their health data into information systems. Among young and middle-aged persons (under 50) the share of those using mobile applications with different frequency was 31.8 percent and 21.2 percent, respectively. In age groups of those over 50 years old, usage sharply dropped down to 12.4 percent and lower, as presented in Figure 5.11. Those aged 70 and more hardly used such applications at all.

Source: Authors’ calculations based on the ISP survey (2017).
The results of regression analysis show that the strongest factor of preference for online consultations is the place of residence. For Moscow residents with experience in using the Unified Medical Information Analysis System (UMIAS) and state services web portal to receive medical assistance, the chance of using the virtual consultation was two times higher than for rural residents (Table 5.2). Living in small cities with a population between 100,000 and 500,000 people significantly increases a positive attitude to telemedicine, though to a smaller degree. Unlike the residents of large cities, small city residents who do not have access to information about innovative products, including information of adverse nature, may be more interested in technical innovations for health care delivery and have higher demand for any consultations by specialists from large cities.

The next highest-impact factor is the person’s confidence in his/her ability to learn new technologies. Noteworthy, the impact of this factor is higher than that of age. If, at ages between 50 and 69, every year of life reduces the probability of preference for remote consultations by 4.2 percent – that is, by 42 percent every 10 years – then a significant change in the position regarding one’s ability to learn technologies, from “I am absolutely incapable of learning” to “I may or may not learn,” or from neutral attitude to “I’ll definitely learn,” increases the chances of accepting telemedicine by about 60 percent.

Unlike the attitude to remote consultations, interest in mobile applications increases significantly with transition to the higher educated group, as well as with improvement of income level from the basic level, when the individual can afford buying only clothing and footwear, to a level when household appliances become more affordable. A passion for mobile applications can be the consequence of a general healthy lifestyle attitude, which is more typical of the better educated and more well-off population. In addition, the use of mobile applications can be linked to the possibility to buy a more expensive device helping to use such applications.

The success of implementing the technology in the practices of the Russian healthcare sector will depend on the quality of the population’s awareness of the new technology, level of digital literacy among the older population, effectiveness of computer literacy programs for the elderly, and the friendliness of the user interface for telemedicine platform software. It has been established that the most important factors of demand for telemedicine consultations are the place of residence and access to information about the technology, in addition to a positive assessment of the ability to assimilate telemedicine by the elderly themselves. The data show that the target group for telemedicine implementation can comprise the elderly without any significant cognitive impairments, who have just joined the older age group but experience problems with receiving the necessary health services. These are usually residents of remote regions, or patients in need of consultation by a more sought-after specialist. Telemedicine consultations for older age groups are possible if there is a legal representative ready to assist in their connection, likely a relative or social worker. Telemedicine functions such as ensuring access to hard-to-find types of health care therefore need to be incorporated into the information campaign accompanying technology implementation.

The fact that perceiving technical innovations as an item to be consumed by the upper classes reduces the willingness to undergo an online medical consultation, may testify to the presence of a wealth barrier to telemedicine development. Due to a really low ability to pay or a mindset to save money and transfer one’s resources to the children and grandchildren, older people may decline telemedicine,
considering it “too expensive for an elderly person.” The need to buy the equipment may therefore result in refusal of the elderly with low and medium income to use telemedicine consultations. To successfully implement telemedicine consultations, free access to the equipment – PCs and tablet PCs – required for the connection should be ensured for the elderly population. This can be achieved through providing access to the internet from public areas – special offices at rural medical stations, small population center policlinics, offices of Russian Post or Sberbank, My Documents centers – or through transfer of the equipment free of charge or its rental for a symbolic fee by territorial healthcare agencies or social protection agencies. The above-mentioned program implemented in Sverdlovsk Oblast could be used as a benchmark to address the problem. But program features, such as how to facilitate equipment availability and choosing public areas that are most convenient for its installation, can be adjusted according to the region’s specificity.
Recommendations

Customizing health and social care delivery to the needs and preferences of the elderly requires policies and strategies at the level of the health and social care systems of the country and Russian regions, as well as enhancing multisectoral collaboration to implement old-patient centered integrated care. Developing a strategic vision of old-patient centered care delivery with all national and regional stakeholders in health and social care as a first step towards improving the care for the elderly. Shifting care of elderly patients from institutional setting to home and community settings, making it responsive to the old people needs through strengthening primary health care and integration of health and social services could be considered as the main strategies. This vision could be disseminated by supporting local, regional and national initiatives directed at enhancing old-patient centered integrated care.

On health care delivery:

Promote health care coordination and integration across all elements of healthcare system – primary health care, hospitals, rehabilitation, nursing homes and palliative care – and the patient’s community, for example, family, public and private community-based services. Care coordination is facilitated by the elderly registration systems, strengthening the role of PHC physicians as coordinators of care delivery, development of integrated care pathways, enhancing health information exchange and other means.

Develop national and regional regulation on implementing chronic disease management programs to increase health outcomes of treatment of old patients with cardiovascular diseases, diabetes, cancer, mental disorders and multimorbidity. This regulation could include guidelines on setting-up chronic patients’ registration system with risk stratification, organization of multidisciplinary teams for patient management, functions and responsibilities of disease management program coordinator, development of individual treatment plans, monitoring and reporting on process and outcomes.

Consider the options for improving access to free medicines for outpatient treatment to reduce out-of-pocket costs of medications. Providing the old population with free drugs for the treatment of priority diseases that are the main causes of death in Russia, primarily cardiovascular diseases, will bring significant economic and social benefits from providing quality treatment to patients who are currently not receiving treatment or not receiving it in full. The government could start with conducting feasibility studies of outpatient medicines reimbursement models suggested by global experience to assess their cost-benefits and relevance to the Russian context.

Ensure the implementation of mechanisms to stimulate the rational use of drugs in order to expand the consumption of safe and cost-effective drugs by the elderly. Safe and cost-effective drugs must be properly prescribed, dispensed and consumed. Strategic approaches that can do this include applying clinical protocols and encouraging the prescription, dispensing and consumption of generics.

Improve hospital care delivery for the elderly through developing guidelines on building elderly-friendly environment, performing a standardized assessment of frailty on elderly patients and Comprehensive Geriatric Assessment of elderly patients identified as showing signs of frailty, simplifying the procedures for hospitalizing older patients and referring them for high-tech medical care, providing escorting to high-tech care centers or hospitals/other centers for older patients with referrals.
Stimulate the development of telemedicine solutions adjusted to the elderly needs. Telemedicine programs should treat the elderly as a special target group, and include options that increase the technology accessibility for the elderly to help overcoming the barriers associated with their lower functional status; provide the option for the elderly to report their health indicators by phone instead of entering them into the information system. Special social programs should be developed to address substantive social inequality in internet use by the elderly and to place the country’s elderly people of different social statuses into equitable conditions for receiving health and social services. These programs could provide personal equipment free of charge or for a small rent, as well as organizing the terminals in public places, including primary health care centers. Telemedicine functional profiles need to be integrated into care pathways to ensure the consistency of the chain of responsibility. Every telemedicine solution needs to be integrated into telemedicine enabled pathways that are agreed, approved, and adopted into the practice.

On social services delivery:

Ensure that people who have practically no contacts with social services are included in the social service system. The “application-based” principle of receiving social services should be complemented by the “identification-based” principle that should apply to senior-age people (aged 75+ or 80+) and solitary old people.

Develop measures to support informal caregivers of social care that may include: (i) adequate financial compensation to relatives attending to the elderly, (ii) creating opportunities for relatives looking after a bedridden person to have him/her admitted to a hospital in order to get a brief rest, (iii) organizing short-term courses to provide training to caregivers in the necessary care skills, and (iv) providing psychological and social support to both low-mobility elderly, particularly lonely seniors, and the relatives looking after them, possibly by adding psychologist positions in health and social institutions.

Further enhance private sector engagement in provision of social care through improving capacity of the government to monitor performance of private contractors, and ability of government to enforce predetermined quality requirements, developing uniform standards and mechanisms to monitor the performance of public and non-public providers of social services, improving reimbursement mechanisms for services provided, providing incentives for achieving better quality of care and ensuring measures used to assess quality of services are capturing outcomes (e.g. clinical outcomes of patients) as well as processes (e.g. time to be seen).

On integration of health and social care:

Enhance governance and coordination of integrated health and social care delivery through strengthen regulations on interdepartmental collaboration and identifying coordinating center and professionals responsible for coordination of health professionals and social workers.
Develop national multidisciplinary guidelines for the care of patients with specific combinations of prevalent chronic diseases to improve health outcomes in old patients with multiple chronic conditions and to provide decision support for care professionals.

Revise the undergraduate and graduate curricula for health professionals and social workers. More awareness of multimorbidity and mental disorders of the elderly is needed for all care professionals. Communication skills, an ability to share patient information and care knowledge across organizational boundaries, and ability to work in multidisciplinary teams will be core competencies of all future care professionals.

Develop and implementations the integrated care pathways and strengthen regulation for establishing multidisciplinary teams to enhance coordination of care and collaboration between care organizations and linking professionals in different care organizations. The care pathways the points of interaction between individual providers to ensure continuity of care at various stages of service delivery. Include process and outcome indicators to monitor quality of services and ensure compliance with algorithms and indicators in the quality control activities.

Building IT systems for integration. IT systems should follow the model of care organization, not on the contrary. The detailed planning and ongoing assessment of health and social care data integration is needed to ensure accurate and effective coordination of information. Sharing the electronic health records of patients among all care professionals involved in the care process, digital communication and telehealth will support the multiprofessional collaboration. Additional forms of information exchange should be developed, including feedback of specialists after consultation, provision of information on admissions and ambulance calls to PHC physicians, on-line consultations, control of recommendations implementation after hospital discharge by PHC physicians and social worker.

On social inclusion:

Encourage health promoting behaviors of the elderly around nutrition and physical activity through social groups and citizens associations, peer-to-peer information exchange, increasing availability of health and leisure infrastructure for low-income individuals and rural residents, providing advice about physical activity in all health and social care facilities to.

Provide economic incentives for elderly people to remain active, such as discounts for using public transport, cinemas, or for the services of hairdressers and manicure salons.

Increase access to innovative models of support for older people to combat social isolation, including tele-links to social service providers and access to and training in the use of technology, to foster intergenerational exchange and bridge geographical distances within families. Promote the civil engagement of older people and strengthen their role in volunteering.

Improve the evidence base for elder maltreatment and strengthen capacity for effective interventions. Raise awareness and target investments on preventing elder maltreatment and ensure that quality guidelines are in place for preventing elder maltreatment. Develop a communication strategy (set of recommendations for medical workers) for interacting with older patients, considering the psychological
features of older people, their abilities, and their needs to receive information about their health and expected treatment outcomes.

**Increase access to psychologists’ services and psychological assistance services for the elderly** (in health facilities and/or social service institutions). Undertake a public awareness campaign on available psychological assistance and raise awareness among the elderly about the availability of psychologist consultations.

**Empower and engage the elderly patients in the management of their treatment.** Promote patient self-management of health through training for providers and patient education. Ensure patient involvement in developing care plans and design of care solutions.