Do We Really Need Elderly-Friendly Integrated Care Portals? 
Mind Blocks to Their Adoption and Implementation

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ABSTRACT

Elderly-friendly integrated care portals are a relatively new phenomenon that could be a helpful addition to physical primary care, for example, by lowering costs and increasing access to healthcare. However, such platforms are primarily used by younger generations currently, resulting in a “digital divide” between younger and older generations. The objective of this research study is twofold - to identify and analyse: i) the perceived primary barriers that prevent the elderly from adopting and using these technologies, and ii) what can the providers do to support increasing adoption and implementation by the elderly population. It was observed that a lack of serious commitment across relevant sectors, inadequate resources, low managed information technology and financial coordination and care routes, opposing goals and objectives, and conflict within teams are all obstacles to successful adoption and subsequent implementation of integrated care portals.

KEYWORDS

Healthcare, Integrated Care Portals, Patient Experience, Social Care, Technology

INTRODUCTION

Why is it critical to consider an elderly person’s top priorities?

Senior citizens require additional attention and comfort to live a healthy, stress-free life. (Hickey et al., 1981) through their research advocated that due to a lack of knowledge about their changing behavioural patterns at home, the elderly are frequently abused by their family members. Many health institutions and budding developers see Elderly-Friendly Integrated care technology portals as a viable solution for meeting the rising need for enhanced elderly patient experience and positive clinical outcomes among multimorbid older individuals who require long-term care. Over the last decade, a variety of integrated care models and methods have been widely implemented and researched in a variety of settings, resulting in a multiplicity of interpretations and constructs. With a rapidly ageing population and an increasing burden of senior patients with chronic illnesses, India needs effective health systems with integrated care portals. Although there are some serious endeavours in India to integrate primary and hospital care, overall care delivery remains diversified and scattered,
for example, considering the medical electronic record sharing and availability, primary health care providers’ empowerment and elderly patient registries to handle chronic illnesses. More thorough and practical initiatives targeting specific disorders, majorly chronic ailments like hypertension, diabetes, depression, and dementia, are needed in primary care. This can be accomplished through elderly-friendly integrated care portals, which is a collaborative health-care strategy. This research suggests that key stakeholders involved must have a solid, experiential understanding of the high-risk elderly patient group to successfully implement an integrated care programme through technology portals.

Integrating healthcare for the elderly workforce in local community groups and hospitals is a process of comprehensive collaboration including providers, users, and caregivers (Lutze et al., 2015). It entails altering the methodology using which health and social care is planned and provided, with the end goal of improving patient experience, outcomes, and quality of care being provided. There is a compelling case for modifying the health and social care delivery paradigm to keep up with changing population demographics, requirements and models, which reflects the rise in multimorbidity and the complexity of care requirements (Ahmed et al., 2013).

Through active collaboration with nurses, physicians, chemists, specialized doctors and administrative managers across the system, the Elderly-Friendly Integrated Care Portals now strive to expand on this essential effort. (Hendrich et al., 2014) devised a framework that aims to bring together the greatest qualities of local health systems and to assist clinicians and management in expanding on the delivery of design models that have been built using an integrated framework. (Changizi & Kaveh 2017) agreed that actively listening to the voices of the elderly in local regions will also be an important building block in developing models of best practise that respond to those requirements in particular.

LITERATURE REVIEW

According to the reports published by WHO, over 400 million people around the world do not have appropriate access to basic health care. When this is coupled with an increased prevalence of chronic diseases and a higher life expectancy, ongoing, long-term comprehensive care and early interventions are necessary. (World Health Organization Framework on integrated, people-centred health services: report by the Secretariat 2016). A community health approach has long been acknowledged as the best way to maximise benefits and improve health-care system performance (Sakaguchi-Tang et al., 2017). According to some estimates, 80 percent of the world’s elderly will live in low- and middle-income countries by 2050. (Coughlin et al., 2018). In India, this trend is considerably more pronounced. In 2016, 12.4 percent of the population in this area was over 60 years old. By 2050, it is expected that the percentage would have risen to nearly 25%. (Around 1.3 billion people). (Salimi et al., 2014) advocated the fact that as average life expectancy rises because of improved health care and technological breakthroughs, the proportion and absolute number of the elderly (those over the age of 80) also increases, putting additional strain on the present, already existing health-care system. By 2050, it is expected that the percentage will have risen to 5% (258 million people). This increase will have major consequences for both the provision of suitable and long-term health care (Wildenbos et al., 2017). These significant changes in India’s population demographics should prompt policymakers to take early action to fulfil the unfulfilled requirements for suitable and long-term, continuous health-care for the elderly population.

Yue et al. (2022) conducted recent research and suggested that when a primary health care specialist or a medical professional is unable to meet a patient’s needs, integrated care is necessary, which requires integrated and coordinated support from several providers, including both informal and professional care. Reavley et al. (2022) stated that current organisation and policies would need to be redefined and overhauled, with significant ramifications for current funding and legislative regulations, specialist credentials, and administration, including governance. This is a significant obstacle which
needs to be overcome. Fulmer (2021) suggested through their research that it is more practical to start with a smaller group of people: elderly patients, community, and specialty healthcare professionals. Given the importance of patient counselling in initial primary care aimed to considerably enhance detection, prevention, diagnosis, awareness, and compliance, nursing and allied health care providers should be meticulously trained to provide such a service, alleviating the pressure on doctors. General health care workers who are not physicians, will be more involved, allowing patients to have a better awareness of their ailment and get more closely involved in their entire medical treatment plan. When we talk about tailored care, the patient’s close family plays a significant role, and family intervention and counselling should not be disregarded (Clarke et al., 2021). If other resources are available, they can be used; for example, an NGO social worker could be appointed to monitor the medical progress of the elderly patient and assist with their near families to improve patient outcomes.

Elderly-patients should have access to an authentic, real-time, commercial-free, online, comprehensive health information platform that is relevant to their local health goals. and, ideally, may be pushed by specialist doctors, in addition to educational resources (Taksler et al., 2021). A trustworthy integrated health-care information platform can also help senior citizen patients and their close families search out reliable information to better know their ailment and how to manage it. (Sarita et al., 2022) advocated that this is especially significant in India, where most elderly patients have trouble finding trustworthy, authentic sources of relevant data regarding their health-related challenges, subsequent diagnosis and treatment. As a result, a region wide, independent, integrated, real-time platform should be built to give fair and balanced information to patients and physicians. (Son et al., 2021). Education materials that are simplified for the elderly patients are required in the absence of online access. (Awad et al., 2021) highlighted that the content for all existing platforms can be generated independently by experts or area specialists, vetted by global or local professional bodies or diverse societies before release, and promoted by physicians who are responsible for directing patients to suitable medical internet sites for additional data and information.

**RESEARCH METHODOLOGY**

The pre-test study enlisted the participation of fifty people. Their responses were examined to make the necessary changes to the questionnaire survey. The reliability analysis was examined using Cronbach’s alpha. These coefficients will be used to assess the variables’ internal consistency. Cronbach’s score of $\alpha$ if more than 0.7, indicates good dependability. If the Cronbach’s score of $\alpha$ is between 0.5 and 0.7, the variable’s internal consistency is acceptable. Else, if the item has Cronbach’s $\alpha$ coefficient under 0.35 and Cronbach’s $\alpha$ if item deleted is higher than total Cronbach’s $\alpha$, then it should be deleted. The survey questionnaire was pre-tested for comprehension and clarity. Based on this pre-test, wording was changed in the questionnaire. The Cronbach’ $\alpha$ of the item deleted was higher than total Cronbach’s $\alpha$ of variable, after conducting the pre-test therefore one item of privacy and data security was deleted.

The research survey’s findings are based on responses from 860 adults aged 50 to 80 from around the country. Respondents to the online survey answered a variety of over 35 questions. The questionnaire survey was administered, evaluated and the data was collated. Those respondents who did not already have a laptop and internet access were given access to one.

**OBSERVATIONS**

1. Despite its extensive availability, many older people do not use the information resources in the form of Integrated Care Portals (ICP’s). Age, income, and education level all influence adoption and implementation.
2. According to our research, just around half of persons aged 50 to 80 have created an account on a secure internet access site, or an ICP, provided by their health care provider.
3. Even though those with saving incomes that were quite low and with less formal education often have greater health-related demands, older adults with higher formal education and higher saving incomes had higher rates of portal use.

4. People aged 65 and higher were far more likely to say they dislike using computers than those in their 50s and early 60s to converse about their health or that they are uneasy with technology in general.

5. In fact, 52 percent of the surveyed seniors who had not yet established any access to an ICP expressed reservations about disclosing health information online. Fifty percent stated they didn’t think such access to their medical records was necessary. About 40% of those surveyed just hadn’t looked around to setting up their accounts; they were mostly adults in their 50s and early 60s.

6. Many senior citizens highlighted that they were unhappy with internet contacts replacing phone calls or face-to-face conversations.

7. The majority, around 84 percent, of people who had set up an online ICP with their health provider had accessed their findings from blood tests or other testing.

8. When questioned about using the other portal features, however, the numbers plummeted dramatically. For example, 44% had refilled a prescription online, 38% had used a portal to make an appointment, and only 26% had gone online to seek assistance from their provider about a health condition.

9. 28 percent of those who still had not been able to create an account were highly afraid that online communication would result in more errors than conversing through call or in person. 19% were afraid that they wouldn’t know if an expert member of the office staff was answering their query, and 16 percent were concerned that to get a timely response to an online conversation would take too much time and follow up.

10. Those who had signed up for a portal, on the other hand, were virtually evenly split between those who claimed the phone was faster, those who said the portal was faster, and those who said they were the same.

11. When respondents were asked who else they have permitted to see their health information, another clue that elderly people may be losing out on the possible portal functionalities emerged. 45 percent of individuals with a portal account indicated they had given permission for someone else to access their information — largely spouses and partners, but also adult children and other family members, some of whom may be caregivers.

12. 22 percent of those who hadn’t approved another member claimed they didn’t know how to do so, and 34 percent stated they prefer to keep their personal information private. The remaining 44% indicated they have no one to assist them with their medical care.

13. The survey’s findings highlight the worries that the elderly may have about setting up, installing, and then using the ICP’s that are made available to them. Most of them are age, experience and education related mind blocks that prevent them using technology at its best.

14. Most of the elderly population refuse to use their ICP’s because they perceive no benefits and are just disengaged. The individual patient is not sufficiently rewarded either intellectually (by supplying enough data to be relevant) or monetarily by the ICP developing agencies encouraging them for a long-term adoption and implementation.

15. The most prevalent impediments to elderly friendly integrated care portal adoption were observed as a preference for face-to-face communication, a lack of urgent necessity for the portal, and a fear of computers, all of which are adjustable and intervenable.

THE ROAD AHEAD

Immediate necessary steps and adjustments in procedural implementation are required to tackle the expected medical needs of India’s workforce and to steer the demographic transition toward an
increasingly ageing society. This needs cooperative collaboration that works among scholars and policymakers, as well as institutions, companies, and communities, to find an efficient, effective and timely solution to India’s approaching demographic upheaval.

Promoting best hypothesis principles for integrated care through ongoing medical education for clinical experts, doctors, nurses, and other allied health professionals is crucial. The pharmaceutical sector can also reach out to patients and increase their education through a range of methods, such as education materials for the patients and general support for the healthcare information platforms. Joint venture or collaboration with elderly patient-led already existing community help groups is suggested for the new technology industry to help more people care for their health, particularly in areas with low resources.

Our hypotheses relationship between the expectation that elderly people will be able to improve their capacity for independent living and the intention to use online healthcare portals is supported by our findings. Specifically, our model hypothesizes that the intention to use online healthcare portals depends on whether elderly people anticipate that using them will improve their life support systems or not. If they experience a significant difference initially during their usage period, they would continue to learn to use them better.

We insist that there are mind blocks, and these are really in the mind more than reality as obstacles to the elderly population using the Elderly-Friendly Integrated Health Care Portals to their maximum advantage. Some emotional mentoring and counselling programs will support the elderly take the next step towards technology assisted portals. It is suggested that these programs be taken up at the community level locally for maximum effect both in terms of cost and effectiveness.

Patients’ usability demands should be taken up while designing the Integrated Care Portal to further maximise portal user friendliness for this ostensibly huge population, to increase adoption by the elderly. We suggest to also develop AI bots for secure and user-friendly authentication options that may better suit an older population, such as using biometrics during authentication, for example – a clear picture of an elderly’s face, an audio record of an elderly’s voice, or an image of an elderly’s fingerprint to avoid non-adoption due to login issues. Additional material should ideally contain medical history data, in addition to the present basic functionality and content of patient websites.

Elderly-friendly Integrated care portals need to have authentic privacy and security precautions in place to secure personal health information of its users. The developers of these Integrated Health Care portals must ensure that these are hosted on a separate, secure link and accessible via an encrypted, authentication procedure protected with a strong password to ensure that the confidential health information of the elderly is safeguarded from unsecured access.
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