Internship training at

SILVER GENIE Pvt. Ltd

"*Understanding Remote Monitoring in Geriatric Patients"*
by

Dr. Magandeep Kaur Thethi

PG/20/029

Under the guidance of

Prof. Divya Aggarwal

PGDM (Hospital and Health Management)2020-22

International Institute of Health Management Research NewDelhi

INTERNSHIP COMPLETION CERTIFICATE

The certificate is awarded to **Dr. Magandeep Kaur Thethi** in recognition of having successfully completed his/her internship in the department of Operations and has successfully completed his/her Project on ***"UnderstandingRemote Monitoring in Geriatric Patients"*** in Silvergenie Pvt. Ltd.

She has come across as a committed, sincere & diligent person who has a strong drive and zeal for learning .

We wish him/her all the best for future endeavors.

Training & Development
Divya Gurudeo
Place- Madhya Pradesh

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Dr. Magandeep Kaur Thethi** student of PGDM (Hospital & Health Management) from International Institute of Health Management Research; New Delhi has undergone internship training at **SILVERGENIE PVT. LTD**. from **15/03/2022 to 15/06/2022**

The Candidate has successfully carried out the study designated to him during internship training and his/her approach to the study has been sincere, scientific andanalytical.
The Internship is in fulfillment of the course requirements. I wish him all success in all her future endeavors.

Dr. Sumesh Kumar
Associate Dean, Academic and Student Affairs
IIHMR, New Delhi

Prof. Divya Aggarwal
Mentor
IIHMR, New Delhi

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Certificate of Approval

The following dissertation titled **Understanding Remote Monitoring in Geriatric Patients** at "**SILVERGENIE PVT. LTD**" is hereby approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of **PGDM (Hospital & Health Management)** for which it has been submitted. It is understood thatby this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

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Name SUDESH BHUSHAN GOGIA	Signature
ANANDHI RAMACHANDRAN	

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CERTIFICATE ON PLAGIARISM CHECK

Name of Student (in block letter)	Dr./Mr./Ms.: MAGANDEEP KAUR THETHI		
Enrollment/Roll No.	PG/20/029	Batch Year	2020 - 2022
Course Specialization (Choose one)	Hospital Management	Health Management	Healthcare IT ✓
Name of Guide/Supervisor	Dr./ Prof.: DIVYA AGGARWAL		
Title of the Dissertation/Summer Assignment	UNDERSTANDING REMOTE MONITORING IN GERIATRIC PATIENTS.		
Plagiarism detect software used	"TURNITIN"		
Similar contents acceptable (%)	Up to 15 Percent as per policy		
Total words and % of similar contents Identified	9%		
Date of validation (DD/MM/YYYY)	5/7/2022		

Guide/Supervisor
Name: Prof. Divya Aggarwal
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This is to certify that **Dr. Magandeep Kaur Thethi,** a graduate student of the **PGDM (Hospital & Health Management)** has worked under our guidance and supervision. He/ She is submitting this dissertation titled "Understanding Remote Monitoring in Geriatric Patients" at "SILVERGENIE PVT. LTD." in partial fulfillment of the requirements for the award of the **PGDM (Hospital & Health Management).**

This dissertation has the requisite standard and to the best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report or book.

Institute Mentor Name

Prof. Divya Aggarwal
Associate Dean
IIHMR, Delhi

Organization Mentor Name

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INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENTRESEARCH, NEW DELHI

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled "Understanding Remote Monitoring in Geriatric Patients" submitted by **Dr. Magandeep Kaur Thethi**enrollment No. **PG/20/029** under the supervision of **Prof. Divya Aggarwal** and **Dr. Anandhi Ramachandran** for award of PGDM (Hospital & Health Management) of the Institute carried out during period from **15/03/2022 to 15/06/2022**

embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other Institute or other similar institution of higher learning.

Signature -

FEEDBACK FORM

Name of the Student: Dr. Magandeep Kaur Thethi

Name of the Organization: SILVERGENIE Pvt. Ltd.

Area of Dissertation: "*Understanding Remote Monitoring In Geriatric Patients".*

Attendance: 95 %

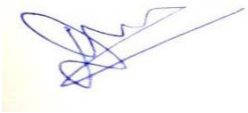
Objectives achieved: Completed 3 months training in SilverGenie Pvt. Ltd. as a part of Operations team where she was supposed to take care of the customers with NCDs and elder customers maintaining their health profile documents and PHR.

Deliverables: Participated in curative counseling, maintaining PHRs, preparing programme protocols and dissertation report- Understanding Remote monitoring in Geriatric Patients

Strengths: Good technical skills, committed towards work

Suggestions for Improvement: Should take up the leadership role

Suggestions for Institute (course curriculum, industry interaction, placement, alumni):



Signature of the Officer-in-Charge/ Organisation Mentor (Dissertation

TABLE OF CONTENTS

NAME OF THE ORGANIZATION- Silver Genie

OFFICIAL NAME – Silver Genie Pvt. Ltd.

SILVER GENIE is a Delhi NCR based technological start-up which is providing a unique solution to manage the wellness needs of the elderly.

Silver Genie Private Limited is a Private incorporated on 21 July 2020. It is classified as non-govt company and is registered at Registrar of Companies, Delhi. Its authorized share capital is Rs. 1,000,000 and its paid-up capital is Rs. 217,400. It is involved in Human health activities.

Directors of Silver genie Private Limited are Poulomi Bhattacharya and Siddhartha Bhattacharya.

Silver Genie Private Limited's Corporate Identification Number is (CIN) U85110DL2020PTC366567 and its registration number is 366567.Its Email address is bhattacharyas@aim.com and its registered address is F-1167 G/F C.R Park, New Delhi Delhi South Delhi DL 110019 IN

Silver Genie strive to improve health and provide care for customers to make their everyday life more comfortable and care-free everyday life.

They are there to bridge the gap between the healthcare needs of our elders and render service to empower independent life for them. They aim to be an end-to-end healthcare concierge and management partner. With their support, both the elders who live by themselves, and their loved ones who are away, can live with a peace of mind. They promise a Silver Genie experience that’s driven by compassion to improve the well-being of our

elders, competence in technology to bring convenience in what they do, continuity of a reliable physical presence, and consistency in times of need. From attending to medical emergencies to maintaining medical records, and procuring medicines to scheduling periodic health check-ups, their mission is to build a solid healthcare support system for every senior citizen.

They are building a comprehensive solution that aims to promote an empowered lifestyle for seniors, through a trusted and reliable healthcare management ecosystem.

Combining the latest in technology, best of resources, their rich network of clinical experts, and our unwavering work ethics, they have come up with a unique healthcare management product. Their solution focuses to be a one-stop destination for wellness of seniors.
From doctor's appointments, buying medicines, booking lab tests, to being a part of a vast community of similar-minded individuals, we strive to improve your health outcome

through our product. At the core of our product is a dedicated concierge, Genie, who will be your conduit of care and wellness.

MISSION

We want to empower the elderly to live a well-managed and independent life, especially if they live by themselves. Our aim is to help them navigate the healthcare system with ease. We will bridge the gap between you and your loved ones, by ensuring we support you.
We are your trusted healthcare concierge, at every step in your healthcare journey.

VISION

Our vision is to enable the elderly to manage their healthcare needs and empower them to live better. Combining technology, clinical expertise, human attention and compassion, all on one platform, we'll make it easier for them to stay healthy. We are committed to delivering exceptional healthcare management support to the senior citizens of our countrv.

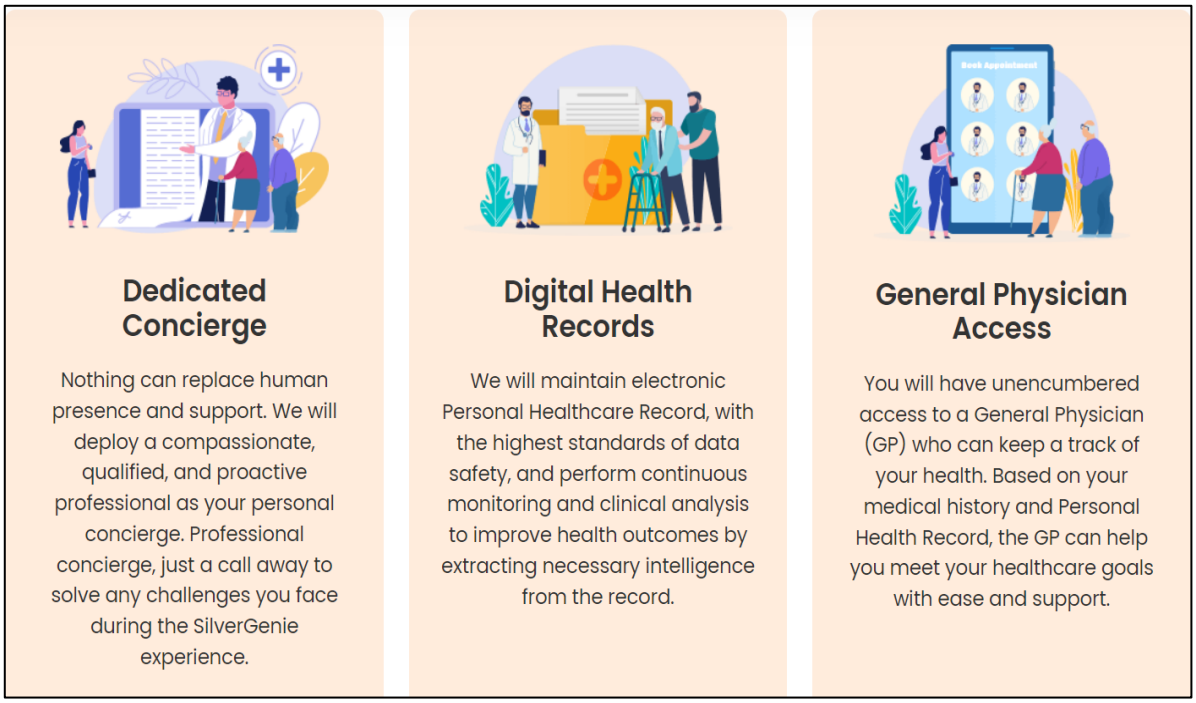
VALUES – They work on these three pillars

Service offerings –

They provide multiple services to their customers that are primarily older citizens but along with that there are other health verticals that the company has to offer which includes –

- Dedicated Concierge

- Digital health Records
- Access to General Physician
- Customized care packages for elderly and NCD enrolled customers
- Resources and education
- Subscription plan



INTRODUCTION

In view of the current demographic change in the aging population and its impact on changing the health system towards community care, this review focuses on monitoring technology for elderly patients. Remote patient monitoring, also referred to as remote physiologic monitoring, is the use of digital technologies to monitor and capture medical and other health data from patients and electronically transmit this information to healthcare providers for assessment and, when necessary, recommendations and instructions. It can also help keep people healthy, allow older and disabled individuals to live at home longer and avoid having to move into skilled nursing facilities. RPM can also serve to reduce the number of hospitalizations, readmissions, and lengths of stay in hospital—all of which help improve quality of life and contain costs. Remote patient monitoring was already gaining popularity before the COVID-19 health crisis but that crisis can be attributed, in part, to the during and after changes that propelled RPM into the spotlight as one of the most lucrative medical care management programs as well as providers increasingly embrace technology to support the health and wellness of their patients. When the pandemic hit, the value of providing remote patient monitoring services to patients who were expected to reduce travel and direct contact with others became even more apparent.

In review of the available commercial wearable monitoring technologies, their form factor, sensing methods and application for the purpose of monitoring elderly patients for ongoing care are discussed. Issues of usability, functionality, human interaction and social factors, and ethical considerations in the application of wearable monitoring and telehealth technologies for elderly patients are outlined. Some of the initiatives taken to address these issues are also discussed

and some suggestions are made. Finally, the review looks at the anticipated benefits of the application of wearable monitoring and telehealth technologies from an elderly patient, clinician or carer and healthcare system point of view. Expert opinion of what strategies need to be used to enhance the use and uptake of these technologies and what future directions are anticipated are expressed. In conclusion, available wearable monitoring technologies and its integration into telehealth systems are currently limited for application on elderly patients. There are many issues of standardization, design and ethical considerations that need to be addressed before advances can be made with these technologies so that these patients can be remotely monitored and provided with a better quality of care.

OBJECTIVE- The objective of this study is to discuss various means of remote patientmonitoring

METHODOLOGY

Research Design: Descriptive Study based on Literature

ReviewData Type: Secondary Data

Data Collection Method: Literature Survey

Data sources: PubMed, Springer, Wiley online library, ProQuest Database, J-GateDatabase, Science Direct, BMC, European Journal.

Study settings: Literature review from various research journals and publications.

Inclusion criteria – Studies conducted from 2012 – 2022, participants with 60 yearsand above, full text articles and English only articles.

Search terms – Senior citizens, older adults, geriatric, elderly, remote monitoring, Iot, wearable, pandemic, home monitoring, mhealth, gerontology.

PRISMA

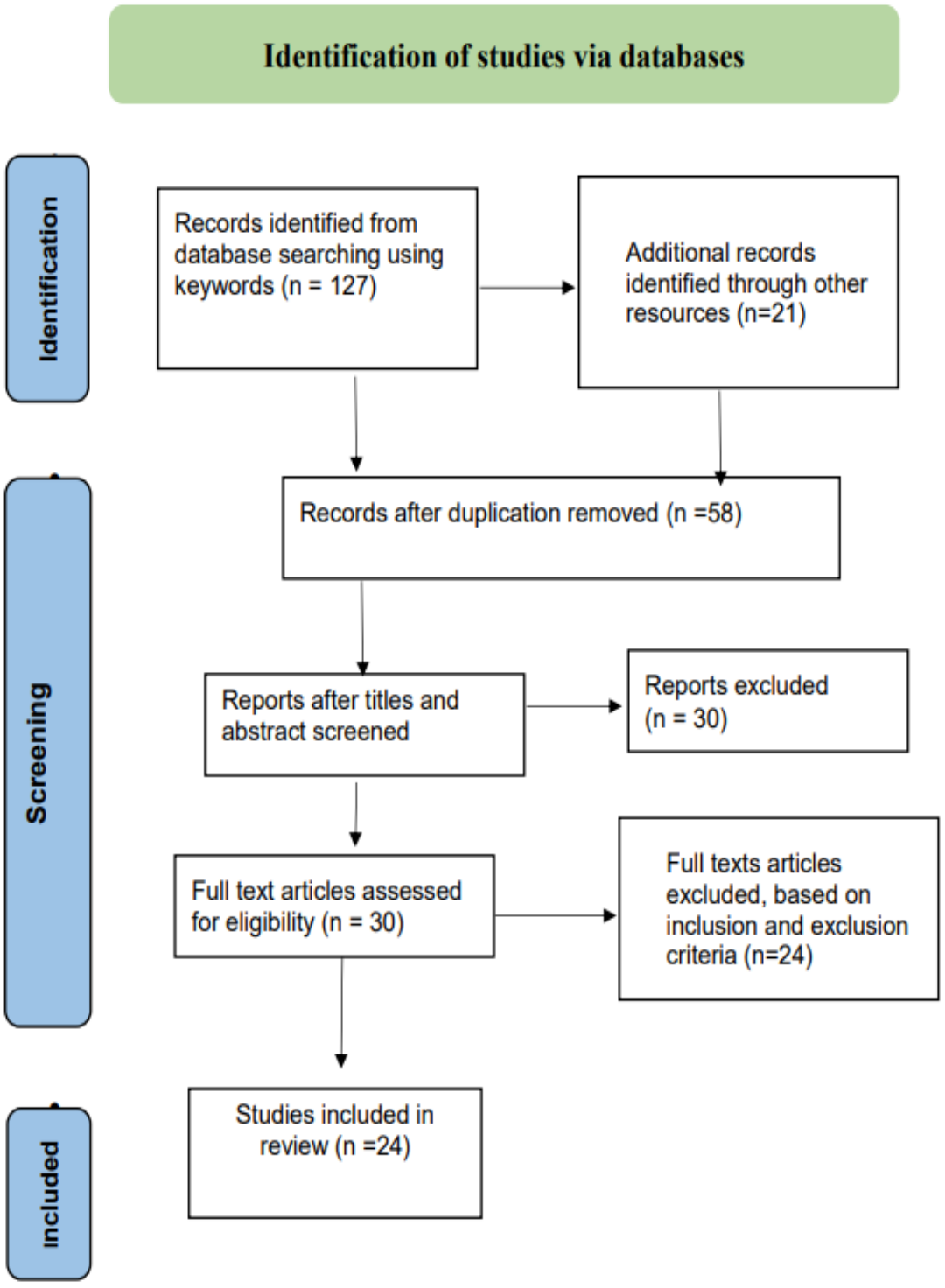
KEYWORDS

COVID-19, wearable devices, real-time monitoring, physiological monitoring, sensors, telehealth, Iot, elderly, older adults, senior citizens, geriatric, remote monitoring, gerontology

LITERATURE REVIEW

PRISMA DIAGRAM

Total of 127 articles were returned from PubMed database and 21 articles were returned from other databases. 90 records were removed after duplication and 58 went forscreening and 18 articles were excluded from screening and a total of 30 articles were assessed for full text articles based on inclusion criteria. Eventually, 24 articles are reviewed in this study


Identification of studies via databases
Identification
Records identified from database searching using keywords (n = 127)
Additional records identified through other resources (n=21)
Records after duplication removed (n =58)
Screening
Reports after titles and abstract screened
Reports excluded (n = 30)
Full text articles assessed for eligibility (n = 30)
Full texts articles excluded, based on inclusion and exclusion criteria (n=24)
Studies included in review (n =24)
Included

The first is about on-body sensors (wearables), their types and locations, as well as the usage of AI technology with e-health wearables in a variety of scenarios ranging from screening to contact tracing. In the second category, we explore the issues and solutions surrounding the use of these wearables on a worldwide scale. This systematic review done by Morre K et al.,gives a comprehensive overview of wearable devices for remote management and automated COVID-19 evaluation, taking into account the technology's dependability and acceptability.

In a study done by Farivar S et al.,wearable devices may be used by older persons for a variety of reasons, including monitoring clinically relevant health indicators, detecting falls, and tracking physical activity. Little is known about how this group interacts with wearable technology, and there is no qualitative synthesis to describe their long-term experiences.

In a study conducted by Talukdar ms et al.,they have shown that wearables promote healthy lifestyles, wearable health technology (WHTs) hold promises in enhancing the health and well-being of the ageing population. They can beused to gather health data from users and urge them to engage in physical activity.

Despite the potential benefits of WHTs, recent research has revealed that elderly persons have a low intention to continue using them.

As a result, Teixera e et al.,the goal of their article, they examined the most recent scientific data on the use of wearable devices (WDs) in monitoring physical activity and health-related outcomes, with a focus on older persons. This critical assessment intends to not only enlighten older customers, but also to assist researchers in study design when choosing physical activity and healthcare monitoring equipment for the elderly.

In a study done by Al Khafayaji et al., RPM technology focuses on the capacity to follow a person's physiological data in order to diagnose particular problems, which can help with Early Intervention Practices. This is accomplished by precisely processing and analyzing the sensory datacollected, as well as relaying the discovery of a condition to the right professional. Thefindings show that the suggested approach can help clinicians make better clinical decisions while also supporting Early Intervention Practices.

Yin m et al., proved that human behavior recognition and status monitoring are prominent topics in study right now, notably in medical monitoring, smart homes, and geriatric care. Miniature sensornetworks can be popularized and used in geriatric care.

Guo k et al., showed that non-contact human vital signs monitoring system based on millimeter wave radar has steadily been the target of study in response to the present demand for remote monitoring of older individuals living alone. The major focus of this article was on developing a detection method for obtaining human breathing and cardiac signals utilizing a frequency modulated continuous wave system

Gaspar ag et al., created design science research technique was employed in this study with the goal of building, implementing, and assessing a digital health service to supplement healthcarefor senior adults with balance issues and a risk of falling.

Ohashi si et al., conducted a research on technology was able to recognize how patients' behavior had changed in order to improve their health. Quantitative data for health assistance, such as respiratory rehabilitation in elderly COPD patients living at home, is difficult to come by.

Iqbal N et al., conducted a study on health monitoring system based on the suggested architecture for senior patients' health monitoring in the home, ambulance, and hospital setting was built as a case study. Based on biological sensors, the system identifies and warns authorities of deteriorating circumstances for speedier action. Body temperature, heart rate, blood glucose level, and patient body posture are all monitored using wearable biomedical sensors. To detect abnormalities in the health sensing data, threshold and machine learning-based techniques were applied. Round trip time, dependability, task drop rate, and latency performance indicators are used to assess the proposed architecture's performance. The suggested architecture for senior patient health monitoring can provide trustworthy solutions for crucial jobs in IoT contexts, according to performance findings.

The goal of this qualitative study done by Corman BH et al., was to document the patient's experience of living with a new home monitoring sensing system throughout the time leading up to joint replacement. Patients were questioned before and after surgery at two different times. Interviews focused on how people felt about living with technology, if it was acceptable, and how they felt about health technology. The installation of home-sensing equipment on the way to surgery, the home space and defining unobtrusiveness, and the critical function of social support networks emerged as three primary issues.

The purpose of the study done by Georghoi Tet al., is to assess the impact of CVW services on hospital activities. We created multivariate models to investigate the link between the adoption of CVW services and hospital activity outcomes: duration of COVID-19 related stays and subsequent COVID-19 readmissions within 28 days, using retrospective patient-level hospital admissions data.

This systematic review aimed to explore the use, accessibility, and feasibility of telemedicine in older adults with dementia, as well as examine the potential mental health impacts of these technologies, through reviewing evidence from studies conducted during COVID-19.

After monetary and regulatory restrictions were removed during the COVID-19 epidemic, telehealth delivery exploded, yet older persons were the ones who benefited the least. Little is known regarding physician experiences with telehealth implementation and the factors that encouraged or discouraged adoption among older adult patients during the COVID-19 epidemic. As a result, our goal was to learn about the experiences of frontline clinicians providing telemedicine care to older persons during the COVID-19 outbreak.

The studies in evaluation give some evidence of successful provision of preventative, curative, and rehabilitative telehealth services for older individuals, although they focus more on curative treatments and are largely focused in high-income nations. The advantages of telemedicine in geriatric care were recognized as convenience and cost.

Grant s et al., did a study on how sensors provide vital signs and activity measures that correlate directly or indirectly to recorded PASC symptoms are suitable. Such continuous, home-based data can offer care practitioners with contextualized information that can be used to classify symptom aggravation or alleviating variables.

The first comprehensive study done by Zhang S et al., and discussion of how socially assistive robots have especially aided this demographic, as well as the broader influence on health and acceptability of such robots throughout the epidemic, is presented in this research. Thepurpose of this study is to address research questions on which SARs were employed during the pandemic and for what specific activities, as well as what enabled and hindered SAR implementation throughout the epidemic.

To examine changes in morning BP during the COVID-19 outbreak in China, we extracted longitudinal data on home BP monitored via a smartphone-based application in 3724 elderly patients with hypertension from a clinical trial (60–80 years; 240 in Wuhan and 3484 in non-Wuhan areas) from a clinical trial (60–80 years; 240 in Wuhan and 3484 in non-Wuhan areas). The Generalized Anxiety Disorder-7 item scores were used to assess anxiety

Physical and psychological changes accompany aging. Inactivity is one of the most serious issues among the elderly, increasing the risk of sarcopenia and chronic illnesses. Physical exercise is a powerful tool for improving health outcomes. There has been a growth in the use of technology in recent years, with health technology tools (ICT) emerging as an intervention to boost physical activity and reduce related health conditions. The impact of health technology in increasing physical activity and improving cardiovascular parameters in older persons was assessed in this evaluation. By examining the major databases, studies utilizing a wide range of health technology tools to raise physical activity levels and measure the effect of that increase on cardiovascular parameters were included. This review comprised eleven papers that reported on the usage of a range of ICT technologies. Regardless of these distinctions, the effectiveness of health technology tool treatments in boosting physical activity and lowering cardiovascular markers has been proven.

Mohamed NA et al., conducted research on how tele-nursing makes a significant contribution to providing continuity of care for older individuals after they have been admitted to the hospital. The goal of this study was to see how effective telenursing services are in optimizing discharge planning and ensuring home care continuity throughout the COVID-19 pandemic

The purpose of this paper written by Mishra K et al.,is to look into how the pandemic

affected outpatient cardiology, specifically in terms of the use of telehealth, and whether the lessons learned from the adoption of telehealth in the context of COVID-19 can be applied to make telemedicine more widespread and routine in outpatient cardiology clinics.

In the papers discussed above to analyze the trend of using remote patient monitoring in older adults and also studied the various RPM technologies are used to obtain or gather data and insights.

Table depicting the use of remote monitoring in older adult

STUDY	**STUDY DESIGN**	**PLACE**	**n**	**TECHNOLOGY**	**OUTCOME**	**FINDING**
Channa A et al, 2021	Systematic literature review was carried out using the PRISMA guidelines	N/A	n=70	Telehealth monitoring system from head bands, write watches, pulse oximeter, ECG, BP monitors.	Wearables have grown during the COVID-19 pandemic and still growing wherever there are demands that need to be met.	Lack of technological awareness among older generations

Moore K et al, 2022	Systematic search in CINAHL, APA PsycINFO, PubMed, and Embase (2015-2020; English	Ireland, Finland, UK, Sweden, Norway	n=20	Wearable devices	Several key factors influence the acceptance and use of wearable devices by older adults.	Four key concepts were identified and outlined: motivation for device use, user characteristics, integration into daily life, and device features.
Theo Georghiou et al, 2022	Retrospective patient-level hospital admissions data	England		Remote pulse oximetry monitoring for COVID-19 patients		No evidence of a relationship
Elbaz S et al, 2021	systematic review	Asia, Europe,US	n=7	Telemedicine		Finding alternative ways to provide services to older adults with dementia through

						technology may continue to become more necessary as time goes on.
Goldberg EM et al. 2022	qualitative analysis, semi-structured interviews	US	n=48	Telehealth	Reducing patient travel burdens, and facilitating health outreach and education	Benefits of using telehealth to treat older adults included reducing deferred care and increasing timely care
Doraiswamy S et al, 2021	Secondary research	US	n=79	Telehealth		Telehealth offers futuristic promise for the provision of essential health care services for older people worldwide

Corman BH et al, 2022	Secondary research			home based RPM ensemble	Utilization of home-based sensing provides contextualized information	Continuous, home-based data detected symptom exacerbation or relieving factors
Nakayama A et al, 2020	Primary research	Japan	n=228		Remote CR program can be provided as a good alternative to the outpatient CR program.	30 days of discharge was lower in the remote CR group (n = 30) than in the non-CR group (n = 137)
Grant S et al, 2019	Qualitative study with thematic analysis	South west UK	n=13	home based RPM ensemble	Patients who agreed to the technology found living with it acceptable	Three main themes emerged: installation of home-sensing technology, the home space and defining unobtrusivene

						ss and pivotal role of social support networks
Zhang S et al. 2022	Data collection from hospital pre pandemic and incubation period	China	n=3724	home BP monitored *via* a smartphone-based application	Use of home monitoring device could measure the sd in BP in patients with anxiety	A total of 262 individuals (7.0%) reported an increased level of anxiety, and 3462 individuals (93.0%) did not
Luceró n-Lucas-Torres MI et al, 2022	Literature review of studies on ICT		n=16		Health technology tools show effectiveness in increasing physical activity in older adults and improving cardiovascular parameters	The lack of adherence of older adults to health technology

Noha Ahmed Mohamed et al, 2022	A quasi-experimental design		n=72		Ensure continuity of home care for older adults following discharge from the hospital during the COVID-19 pandemic	Self-efficacy of elderly patients in the intervention group is improved significantly more than the elderly patients in the control group

Table depicting the indicators that provide insight to cognitive measures that can be useful for remote monitoring in geriatrics

Trend Indicator / Study	Curative and preventive services	Knowledge and acceptability	Cost and Convenience	Real time monitoring	Accuracy
Farivar S et al, 2020			√		
Talukder MS et al, 2021	√		√		√
Teixeira E et al, 2021	√		√		
Yin M, 2021		√			√
Guo K et al, 2021				√	
8. Gaspar AG et al, 2022				√	
Ohashi C et al, 2022		√			
Elbaz S et al, 2021		√			
Goldberg EM et al, 2022			√		
Cerillo AG et al, 2021				√	
Grant S et al, 2019	√				

DISCUSSION

Population ageing is a global phenomenon: Virtually every country in the world is experiencing growth in the size and proportion of older persons in their population.

In review of the available wearable monitoring technologies, their form factor, sensing methods and application for the purpose of monitoring elderly patients for ongoing care are discussed. Ongoing trends on the issues of acceptability, knowledge, cost and accuracy in the application of wearable monitoring and telehealth technologies for elderly patients are outlined. Some of the initiatives taken to address these issues are also discussed. Finally, the review looks at the anticipated benefits of the application of wearable monitoring and telehealth technologies from an elderly patient, clinician or carer and healthcare system pointof view

Most of the studies that were reviewed incline towards popular use of telehealth and telemedicine. Telemedicine is the easiest type of remote monitoring as seen from the studies conducted on older adults but there needs to be be some motivation behind it whether the adult was able to do it by self or someone assisted them and created a setup for them to use.

The challenges extracted from the literature includes for using such technologies, it is assumed that patient compliance is highly required because elders are hesitant to use new technology.For cases that require patient counseling or where there is a need for "breaking bad news," telemedicine consultation is inappropriate. There is an absence of physical examination of patients. Elderly should be wellversed with technology and have to be tech savvy. Choosing amongst variety of appliances available.There was evidently the lack of legal architecture and interoperability issues. Over interpretation by the patient and it's a doubt if they could store long term data

CONCLUSION

It is obvious that contributions from a wide variety of areas, such as biology, electronics, computer science, and others, are essential in finding such solutions to avoid COVID-19. The viruses in recent pandemics appear to be of distinct sorts and unique, yet the patterns and symptoms are similar. This implies that the world may be confronted with another virus in the future. In the modern world, contagious respiratory infections are still a threat to our health, and we must be prepared to deal with them. To address these issues, remote real-time monitoring of a person's health can be utilized to detect relapses in diseases and so enable early intervention. As a result, the study reported in this paper focuses on the creation of a smart healthcare monitoring system capable of remotely monitoring elderly persons.

Because of the COVID-19 pandemic, discovering new ways to give technology-based services to older persons with dementia may become increasingly important as time goes on. It could be concluded from the study that remote monitoring of geriatric patients will increase with the advent of time but the challenges are going to be there with the advancing technology and the generation of older people. Their acceptance and adaptability with the wearable devices be it radar home monitoring system, head sensors, ring sensors or wrist sensors is definitely going to surge in near future.

As reviewed in the aforementioned literature and the studies that are conducted and are being conducted on internet of things and wearable have eminently tried to cover many aspects from the population point of view and the physician’s point of view keeping in mind the safe use of technology and data sharing. The studies conducted prior to the pandemic on wearables and home monitoring showed promise that in near future the rise in wearing of these health gadgets in the older population is a sure shot but with the

announcement of pandemic Covid 19, this was hastened and the need to monitor older patients remotely became the top concern. Hospital at-home models and home monitoring have the potential to change treatment and allow a significant proportion of hospitalized patients to receive care at home. However, in order to expedite learning and provide greater value to patients, doctors, and health care organizations, health systems will need to cooperate with technology businesses

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