Sachin Vishwasrao Ayarekar, Pramod Bajirao Pawar, Ramchandra Vasant Mahadik, Swati Desai, Anuradha Kiran Yesugade, Pallavi Devidas Chopade, Utilization of Information Technology in Public Health Management: Trends and Challenges.
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Utilization of Information Technology in Public Health Management: Trends and Challenges

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ABSTRACT

Putting Information Technology (IT) into Public Health Management (PHM) has changed the way healthcare is provided by creating new ways to deal with difficult problems. This essay looks at current issues and trends in the use of IT in PHM, focusing on how it can help improve patient results and service performance. Recent trends show a move toward digitizing health information and using Electronic Health information (EHRs), which make it easier for healthcare workers to share data and work together. Telemedicine and mobile health apps

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Healthcare Delivery	have also made it easier for more people to get medical care, especially in places that are hard to reach or don't have enough doctors. Even with these improvements, there are still problems with how IT is used in PHM. There are big problems with storing and exchanging health data because of worries about privacy and security. Strong hacking means and following data protection rules like the Health Insurance Portability and Accountability Act (HIPAA) are needed to protect the privacy and safety of patient information. The digital gap is another problem. This is when some groups of people can't use technology or can't get their hands on it. To close this gap, we need creative solutions like community-based projects and relationships with tech companies. Additionally, the fast pace of technological progress means that healthcare workers need to keep learning and training to make sure they have the right skills to use IT successfully in PHM.

1. INTRODUCTION

IT (information technology) is now an important part of current public health management. It has changed how healthcare services are provided, tracked, and reviewed. IT is used in public health to improve healthcare access, speed, and usefulness. It includes a wide range of tools and uses. IT is a very important part of public health systems around the world for making decisions, allocating resources, and keeping an eye on diseases. It does this through telemedicine, electronic health records (EHRs), mobile health (mHealth) apps, and data analytics. IT has become an important part of public health management for a number of reasons. The most important thing is to deal with the problems and rising complexity that healthcare systems around the world are facing. Public health agencies are under a lot of pressure to come up with new ways to improve health results and lower healthcare gaps because populations are growing, disease patterns are changing, and resources are limited. IT makes it possible to simplify processes, boost communication, and use data to make better decisions, which makes public health measures more efficient and effective [1]. Also, improvements in technology have made IT solutions easier to get and cheaper, so even places with limited resources can gain from digital innovations. IT-enabled healthcare services can now reach more people, especially in rural and impoverished areas where standard healthcare facilities may not be present. This is because more people have smartphones, internet access, and other digital devices. This opening up of technology to more people could close gaps in healthcare access and make health more fair by reaching groups that weren't getting enough care before [2].

More and more health data is becoming available, which is another reason why IT is being used in public health. Because health records are now digital and there are many health-related data sources, like smart tech and social media, there are huge amounts of data that can be used for public health study, monitoring, and making decisions. Public health departments can find trends, find cases, and predict future health threats more accurately and on time by using the power of big data analytics and machine learning [3]. IT has many perks for managing public health, but there are still some problems. Concerns about data protection and security, problems with connectivity, and the digital gap are some of the main problems that need to be fixed before IT

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can fully be used in public health. Furthermore, the fast pace of technological progress means that the people working in public health must constantly change and learn new skills in order to use IT tools and systems successfully [4]. We will look at how IT has changed the way healthcare is provided, how diseases are tracked, how data is managed, and how people in public health situations talk to each other. We will also talk about case studies that show how IT solutions have been used successfully in public health and give advice on how to deal with problems and get the most out of IT to improve public health results. By learning more about these issues, parties can work to make the most of IT to successfully deal with present and future public health problems.

2. TRENDS IN INFORMATION TECHNOLOGY UTILIZATION IN PUBLIC HEALTH

The utilization of information technology (IT) in public health management has witnessed significant evolution in recent years, driven by technological advancements and the growing recognition of the potential [5] of IT to improve healthcare delivery and outcomes. Several key trends have emerged in the field of IT utilization in public health, each contributing to enhanced efficiency, effectiveness, and accessibility of healthcare services. In this section, we will explore some of the prominent trends shaping the landscape of IT utilization in public health.

1. Adoption of Electronic Health Records (EHRs):

Electronic Health Records (EHRs) are an important part of current healthcare systems because they make it easier to store, share, and digitize health information about patients. EHRs are very important in public health situations because they help coordinate care, give people real-time access to patient data, and support efforts to control the health of whole populations. EHRs have made it easier for patients to get care from one doctor to another, cut down on medical mistakes, and better control chronic diseases [6].

2. Telemedicine and Telehealth Services:

Telemedicine and telehealth services have become strong ways to help people who live in rural areas or who don't have access to healthcare get it. Using telecoms technology, doctors can assess, treat, and keep an eye on patients from afar, which gets around regional problems and improves the quality of care. Telemedicine systems make it possible for virtual talks, online patient tracking, and the delivery of specialized care services. This makes it easier for people, especially those living in distant areas, to get medical care [7].

3. Mobile Health (mHealth) Apps:

The broad use of smartphones [8] and other mobile devices has made it possible for mobile health (mHealth) apps to be widely used in public health management. These apps include exercise and wellness apps, as well as tools for managing diseases and sites for online tracking. mHealth apps give people the tools they need to take charge of their health, keep track of their health data, and get to training materials and support services. mHealth apps also let public health agencies share health information, do health polls, and offer focused treatments, all of which help people change their health habits and avoid getting sick.

4. Data analytics and prediction modeling:

These are two very important tools for making use of the huge amounts of health data that come from electronic health records, smart

tech, [9] and other places. Public health agencies can get useful information from data, find trends, stop breakouts, and guess what health threats will happen in the future by using advanced analytics methods. Predictive modeling helps with making smart choices, allocating resources, and focusing on specific problems. This makes public health programs more efficient and effective.

5. Systems that exchange health information (HIE):

Health Information Exchange (HIE) tools make it easy for different healthcare systems and groups to share health information. Interoperability and data sharing are made possible by HIE systems. These help coordinate care, make it easier for healthcare workers to talk to each other, and improve the continuation of care. In public health settings, HIE systems make it possible for important health information to be shared between public health agencies, healthcare workers, and other interested parties. This makes it easier to keep an eye on diseases, respond to outbreaks, and control the health of a whole community [10].

These trends open up interesting chances to use IT to change the way public health is managed. By accepting these new ideas and incorporating them into current healthcare systems, public health agencies can improve the delivery of care, the monitoring of diseases, and eventually, the health and well-being of communities [11]. To fully utilize these trends, however, we need to handle several issues, such as the digital gap, worries about data privacy and security, and problems with sharing. In the next parts, we'll talk about these problems in more depth and offer ways to solve them so that IT can be used most effectively in public health management..

Table 1: Summary of related work

Method	Finding	Scope	Limitation	Application
Electronic Health Records (EHRs)	Increased adoption of EHRs improves data exchange and interoperability among healthcare providers.	EHRs are widely used in hospitals and clinics to store and manage patient health records.	EHR systems can be costly to implement and maintain, especially for smaller healthcare facilities.	EHRs facilitate the seamless exchange of patient information among healthcare providers, leading to improved care coordination and patient outcomes.
Telemedicine	Telemedicine expands access to healthcare services, especially in remote and underserved areas.	Telemedicine platforms allow healthcare providers to deliver services remotely, using telecommunications technology.	Telemedicine may face challenges related to licensing and regulatory requirements across different jurisdictions.	Telemedicine enables patients to consult with healthcare providers without the need for travel, reducing healthcare costs and improving access to care for patients in remote areas.
Mobile Health Applications (Apps)	Mobile health apps empower individuals to manage their health and wellness, offering convenient	Mobile health apps are available for various purposes, such as fitness tracking, medication	The effectiveness of mobile health apps may vary, and some apps may lack	Mobile health apps can help individuals track their health metrics, adhere to medication schedules, and access

	access to healthcare resources.	reminders, and telehealth consultations.	regulatory oversight or evidence-based practices.	educational resources, promoting proactive healthcare management and disease prevention.
Data Analytics	Data analytics tools help healthcare providers analyze large datasets to identify trends and patterns, aiding in decision-making and improving patient outcomes.	Data analytics is used in healthcare for various purposes, including population health management, clinical decision support, and predictive modeling.	Data analytics requires access to high-quality, comprehensive datasets, which may be challenging to obtain.	Data analytics can help healthcare providers identify high-risk patients, allocate resources effectively, and improve the quality of care through evidence-based practices.
Wearable Health Devices	Wearable health devices, such as fitness trackers and smartwatches, monitor health metrics and provide real-time feedback to users, promoting health and wellness.	Wearable health devices are becoming increasingly popular among consumers for tracking fitness, monitoring health metrics, and managing chronic conditions.	Wearable health devices may have limited accuracy and reliability compared to medical-grade devices.	Wearable health devices can help individuals monitor their physical activity, sleep patterns, and vital signs, providing valuable insights into their health status and facilitating early intervention for potential health issues.
Artificial Intelligence (AI)	AI technologies, such as machine learning and natural language processing, can analyze healthcare data to derive insights and support decision-making.	AI is used in healthcare for various applications, including image analysis, predictive analytics, and personalized medicine.	AI algorithms require large datasets for training, which may be challenging to obtain in healthcare due to privacy and data security concerns.	AI can help healthcare providers improve diagnosis accuracy, personalize treatment plans, and optimize healthcare operations, leading to better patient outcomes and cost savings.

3. IMPACT OF INFORMATION TECHNOLOGY ON PUBLIC HEALTH MANAGEMENT

The utilization of information technology (IT) in public health management has brought about significant impacts across various aspects of healthcare delivery, disease surveillance, data management, and communication. In this section, we will delve into the profound effects that IT has had on public health management, highlighting the positive outcomes and improvements realized through its adoption [12].

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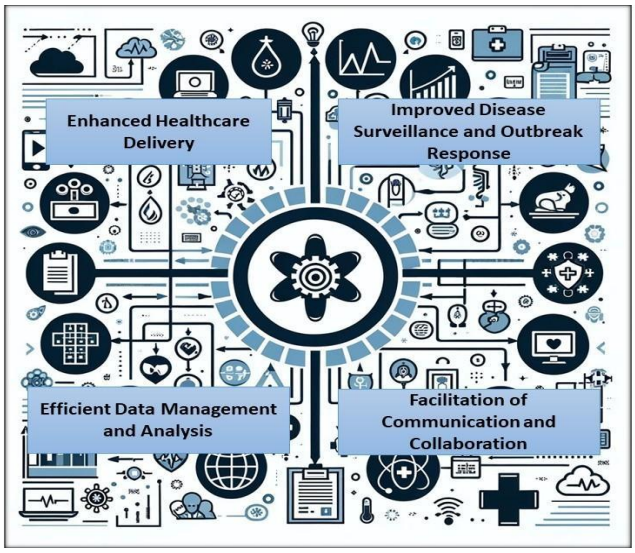

Figure1: Impact of Information Technology on Public Health Management

One of the main effects of [13] IT on public health management is that it makes healthcare better. Healthcare services have become easier to get, faster, and more focused on the customer since electronic health records (EHRs), telemedicine, and mobile health (mHealth) apps have become common. EHRs give doctors and nurses access to a lot of information about their patients, which helps them make better clinical choices and coordinate care better. As a result, telemedicine makes it easier for people to get medical care by allowing online appointments and expert recommendations, especially in areas that aren't well served. In [14] the same way, mHealth apps give people the power to take charge of their own health, get access to health information, and take part in preventive care, all of which improve health results and lower healthcare costs. IT has changed how public health managers keep an eye on diseases and deal with outbreaks. Public health agencies can find disease outbreaks earlier, track the spread of infectious diseases, and move quickly to stop and lessen the effects of outbreaks by using data analytics, prediction models, and health information exchange (HIE) tools. Healthcare providers and public health agencies can quickly respond to new health threats when they share data and work together in real time. This helps keep diseases under control and protects the public's health. IT solutions have made it much easier to handle and analyze data in public health management. After health records were digitized and computer data systems were put in place, public health agencies could better gather, store, and study huge amounts of health data. Advanced data analytics methods help find health trends, risk factors, and differences, which helps people make decisions and allocate resources based on facts. Interoperable data systems and health information exchange methods also make it easy for healthcare workers and public health agencies to share health information with each other. This makes it easier for everyone to work together and ensures that patients get the care they need [15].

Information technology has made it easier for people who have a stake in public health management to talk to each other and work together. Digital tools for communication, like email, videoconferencing, and teamwork platforms, let healthcare workers, public health agencies, lawmakers, and other parties talk and share information in real time. The [16] better coordinated public health efforts are, the easier it is for people to share information and best practices, and the stronger the relationships are between groups working on public health projects. Social media sites and online communities also offer ways to interact with the public, share health information, and encourage healthy habits. This gives groups the tools they need to take an active part in improving their health. The use of computers and the internet has greatly improved public health management, including the delivery of

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healthcare, the monitoring of diseases, the management of data, and communication. Public health departments can better deal with new and present health problems, improve health results, and promote the health and well-being of the community by using the power of IT solutions. But to get the most out of IT in public health management, we need to solve a number of problems, such as the digital gap, problems with sharing, and worries about data safety and security [17].

4. CHALLENGES IN UTILIZING INFORMATION TECHNOLOGY IN PUBLIC HEALTH

Using information technology (IT) in public health management has made a lot of progress, but it also comes with some problems that need to be fixed before it can fully reach its full potential. In this part, we'll talk about some of the biggest problems that come up when IT is used in public health and look at some possible solutions.

1. Data Privacy and Security Concerns:

The safety of private health information [18] is one of the biggest problems with using IT in public health. Since many people share health information electronically and health records are being digitized, worries about data privacy and security have become very important. Strong security means must be put in place by public health bodies to protect against data leaks, illegal access, and online dangers. To protect the privacy and accuracy of health information, it is also important to follow rules like the Health Insurance Portability and Accountability Act (HIPAA).

Figure 2: Illustrating the challenges in utilizing IT in public health and potential solutions

2. Interoperability Issues:

Interoperability challenges pose significant obstacles to the seamless exchange of health information among different IT systems and healthcare providers. Incompatibility between systems, varying data standards, and lack of standardized protocols hinder the sharing and integration of health data, leading to fragmentation and duplication of efforts. Public health agencies need to invest in interoperable IT solutions and establish data exchange standards to facilitate seamless communication and collaboration among stakeholders.

3. Digital Divide and Access Disparities:

The digital divide, characterized by disparities in access to technology and internet connectivity, exacerbates health inequities and limits the reach of IT-enabled healthcare services. Vulnerable populations, including low-income individuals, rural communities, and marginalized groups, may lack access to essential IT infrastructure and resources, hindering their ability to benefit from digital health interventions. Public health agencies must address these access disparities by implementing initiatives to improve digital literacy, expand broadband infrastructure, and

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provide access to affordable technology solutions in underserved areas.

4. Workforce Training and Capacity Building:

Effective utilization of IT in public health management requires a skilled workforce with expertise in health informatics, data analytics, and technology integration. However, there is often a shortage of trained professionals capable of designing, implementing, and maintaining IT systems in public health settings. Public health agencies need to invest in workforce training and capacity building initiatives to equip staff with the necessary knowledge and skills to leverage IT tools effectively. This includes providing ongoing professional development opportunities, fostering collaboration with academic institutions, and recruiting talent with expertise in IT and healthcare.

5. Regulatory and Legal Challenges:

Another problem with using IT in public health is figuring out how to work with the different rules and laws that apply. Certain privacy rules, like HIPAA, the General Data Protection Regulation (GDPR), and others, make it harder to gather, store, and share health data. When using IT solutions to improve public health, public health departments have to deal with complicated law systems and make sure they follow strict rules. This could mean making rules and guidelines for managing data, getting permission to share data, and being open about how data is used. To solve these problems, lawmakers, healthcare workers, IT experts, and other people with a stake in public health management need to work together. Public health agencies can use information technology to its fullest to improve healthcare delivery, disease surveillance, and the health and well-being of the population by coming up with ways to get around problems like data privacy concerns, interoperability issues, access disparities, the need for training for workers, and the complexity of regulations.

5. CASE STUDIES: SUCCESSFUL IMPLEMENTATION OF IT IN PUBLIC HEALTH

1. Electronic Health Records (EHRs) in a Public Health System:

- Case Study Description:

This case study looks at how electronic health records (EHRs) were successfully put into use in a big public health system that helps a wide range of people. Health information that was spread out, bad data handling, and limited access to patient records across healthcare sites were all problems for the public health system.

- Implementation Strategy:

The public health system put in place a full EHR system to digitize health records, make data collection more consistent, and make it easier for healthcare workers to work together. The electronic health record (EHR) system was changed to fit the specific needs of the public health system. It now helps with managing the health of a community, keeping an eye on diseases, and meeting reporting requirements.

- Outcomes:

The use of electronic health records (EHRs) made a big difference in how healthcare was provided and how well patients did. Healthcare workers could see information about patients in real time, which helped them make better professional choices and coordinate care better. The electronic health record system made it easier to keep track of important health factors, find groups that were at risk, and use focused measures to improve the health of the whole

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community. EHRs also improved disease monitoring by collecting standard data that allowed early discovery of breakouts and prompt public health reaction.

- Lessons Learned:

This case study shows how important it is to plan everything in detail, involve all stakeholders, and make sure that IT solutions are tailored to the needs of public health systems. This shows how important integrated EHR systems are for making healthcare better, keeping an eye on diseases better, and improving the health of the whole community.

2. Telemedicine Initiatives for Remote Healthcare Access:

- Case Study Description:

The case study "Telemedicine Initiatives for Remote Healthcare Access" looks at telemedicine programs that were put in place in a rural area where people didn't have easy access to healthcare services. Geographical hurdles, a lack of healthcare workers, and a lack of expert care services all caused problems for the town.

- Implementation Strategy:

Videoconferencing technology was used to connect patients with healthcare workers in other areas through telemedicine programs in the community. Primary care services, expert visits, and follow-up meetings could all be done through telemedicine, so people could get medical care without having to travel.

- Outcomes:

The video programs made it easier for people in the rural town to get medical care. Patients could talk to doctors and nurses from afar, which cut down on the time and money needed to drive to get care. The use of telemedicine meetings made it easier to diagnose and treat health problems quickly, which improved patients' health and made them happier. Telemedicine's specialty care services also filled in holes in healthcare access and raised the standard of care in the community as a whole.

- Lessons Learned:

This case study shows how telemedicine can help people in neglected areas get better access to health care despite their location. It talks about how important it is to use technology to make healthcare services more available and even out access to care. Also, the success of telemedicine programs shows how important it is to keep spending money on internet infrastructure, training for healthcare professionals, and payment policies to help telemedicine become more common over time.

3. Utilization of Mobile Health (mHealth) Apps for Disease Management:

- Case Study Description:

This study looks at how people with long-term health problems use mobile health (mHealth) apps to keep track of their illnesses. The people had problems with taking their medications as prescribed, taking care of their own health issues, and getting to tools for health education.

- Implementation Strategy:

A public health service made and used a set of mHealth apps to help with keeping people healthy and managing diseases. The apps had functions like reminding users to take their medications, keeping track of their symptoms, personalized health education material, and the ability to watch them from afar. The apps were designed to help people with certain health problems, like diabetes, high blood pressure,

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and asthma. They could be used on smartphones and other mobile devices.

- Outcomes:

People who used mHealth apps were better able to take care of their own chronic health problems and had better health results. Patients reported taking their medications as prescribed more often, controlling their symptoms better, and being more involved in their own care. Patients and healthcare workers could talk to each other more easily through the apps, which let doctors check on patients' health from afar and act quickly when needed. Also, the specialized health education material that the apps offered gave people the power to make smart choices about their health and start living a better life.

- Lessons Learned:

This case study shows how mHealth apps can help people with chronic conditions handle their conditions and change the way they behave when it comes to their health. This shows how important it is to build apps with users in mind, make sure they meet the needs of specific groups, and make sure they work with current healthcare processes. mHealth projects also depend on things like user involvement, usefulness, and accessibility. This means that app features need to be constantly evaluated and improved based on data analytics and user feedback.

The examples in this section show how IT solutions can completely change the way public health is managed. Public health agencies can improve healthcare delivery, disease monitoring, and community health by using telemedicine, mobile health apps, electronic health records, and other IT tools. To use IT to its fullest potential in public health, however, problems with data protection, sharing, access, staff capacity, and following the rules must be solved. These problems can be solved by public health agencies following best practices and learning from projects that worked well. This way, they can get the most out of IT to improve public health.

6. FUTURE DIRECTIONS AND RECOMMENDATIONS

It is important to figure out what the future holds and make suggestions for how to make the use of information technology (IT) in public health management even better. Public health agencies can get the most out of IT to improve healthcare service, disease monitoring, and the health of the whole community by dealing with new problems and using creative solutions. This part will talk about ways to speed up the use of IT in public health and get around problems that make it hard to put into practice.

1. Strategies for Overcoming Challenges:

a. Data Privacy and Security: Public health agencies should prioritize data privacy and security by implementing robust encryption, access controls, and audit trails to protect sensitive health information. Regular security audits and compliance assessments can help identify vulnerabilities and mitigate risks of data breaches.

b. Interoperability: Efforts should be made to standardize data formats, terminology, and communication protocols to improve interoperability among IT systems. Collaborative initiatives, such as health information exchange networks and data sharing agreements, can facilitate seamless data exchange among healthcare providers and public health agencies.

c. Digital Divide: To address disparities in access to technology and internet connectivity,

public health agencies should invest in initiatives to improve digital literacy, expand broadband infrastructure, and provide access to affordable technology solutions, particularly in underserved areas.

d. Workforce Training: Training programs should be developed to equip public health professionals with the necessary knowledge and skills to effectively utilize IT tools and systems. Continuous professional development opportunities, hands-on training, and mentorship programs can help build a skilled workforce capable of leveraging IT to improve public health outcomes.

e. Regulatory Compliance: Public health agencies should stay abreast of evolving regulatory requirements and ensure compliance with data privacy laws, such as the Health Insurance Portability and Accountability Act (HIPAA) and the General Data Protection Regulation (GDPR). Clear policies and procedures should be established for data governance, consent management, and ethical use of health data.

2. Enhancing Interoperability and Data Exchange:

a. Standardization: Efforts should be made to adopt common data standards and terminologies to facilitate interoperability among IT systems. International standards, such as HL7 FHIR and SNOMED CT, can provide a framework for harmonizing health data across different platforms and settings.

b. Health Information Exchange (HIE): Public health agencies should collaborate with healthcare providers, technology vendors, and policymakers to establish health information exchange networks that enable seamless sharing of health information. HIE initiatives can improve care coordination, support population health management, and enhance disease surveillance efforts.

3. Investing in IT Infrastructure and Workforce Development:

a. Infrastructure Investment: Public health agencies should prioritize investments in IT infrastructure, including hardware, software, and network infrastructure, to support the adoption and use of IT solutions. Cloud-based solutions, scalable platforms, and interoperable systems can provide flexible and cost-effective options for deploying IT infrastructure.

b. Workforce Development: Training programs and educational resources should be developed to build the capacity of public health professionals in areas such as health informatics, data analytics, and technology integration. Partnerships with academic institutions, professional organizations, and industry stakeholders can facilitate workforce development initiatives and promote knowledge exchange.

4. Addressing Privacy and Security Concerns:

a. Encryption and Access Controls: Public health agencies should implement encryption, access controls, and other security measures to protect health data from unauthorized access, disclosure, or modification. Data encryption, secure authentication mechanisms, and role-based access controls can help safeguard sensitive information.

b. Risk Management: Regular risk assessments and security audits should be conducted to identify vulnerabilities and assess the effectiveness of security controls. Public health agencies should develop incident response plans and protocols for addressing security incidents, breaches, or data breaches promptly.

5. Leveraging Emerging Technologies for Public Health:

a. Artificial Intelligence (AI): Public health agencies should explore the potential of AI technologies, such as machine learning, natural language processing, and predictive analytics, to improve disease detection, outbreak prediction, and public health decision-making. AI-driven solutions can analyze large datasets, identify patterns, and generate actionable insights to inform public health interventions.

b. Internet of Things (IoT): IoT devices, such as wearable sensors, remote monitoring devices, and environmental sensors, can provide real-time data on health metrics, environmental conditions, and disease vectors. Public health agencies should leverage IoT technologies to monitor population health trends, track disease outbreaks, and inform targeted interventions.

The advancing the integration of information technology in public health management requires concerted efforts from stakeholders across the healthcare ecosystem. By addressing challenges related to data privacy, interoperability, access disparities, workforce capacity, and regulatory compliance, public health agencies can maximize the benefits of IT to improve healthcare delivery, enhance disease surveillance, and promote population health outcomes. By adopting strategies for enhancing interoperability, investing in IT infrastructure and workforce development, addressing privacy and security concerns, and leveraging emerging technologies, public health agencies can position themselves to meet the evolving needs of the communities they serve and drive positive health outcomes.

7. CONCLUSION

Using information technology (IT) in public health management has a huge potential to improve the delivery of healthcare, the monitoring of diseases, and the health results for the whole community. We've talked about the different trends, problems, and possible future paths for putting IT to use in public health in this study. IT solutions have changed the way public health is managed. For example, electronic health records (EHRs), telemedicine, mobile health (mHealth) apps, and data analytics have all been put into use. These tools have made it easier for people to get medical care, made it easier to keep an eye on diseases, and given people more control over their health. To make IT fully useful in public health, though, we need to solve a number of problems. These include worries about data privacy and security, problems with sharing, differences in access, the ability of the workforce, and following the rules. Public health departments can get the most out of IT to help achieve their goals by coming up with ways to deal with these problems and using new tools. In the future, everyone involved in healthcare needs to work together better, put money into IT infrastructure and training for workers, and put data safety, sharing, and access to technology at the top of their list of priorities. In this way, public health agencies can use the changing power of technology to improve the delivery of healthcare, improve the monitoring of diseases, and eventually improve the health and well-being of people all over the world. When IT is used in public health management, it changes the way healthcare is provided and handled in a big way. By being open to new ideas, getting past problems, and working together to reach our goals, we can make a future where technology is a key part of improving people's

and communities' health and making life better around the world.

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