

Management in Health Care

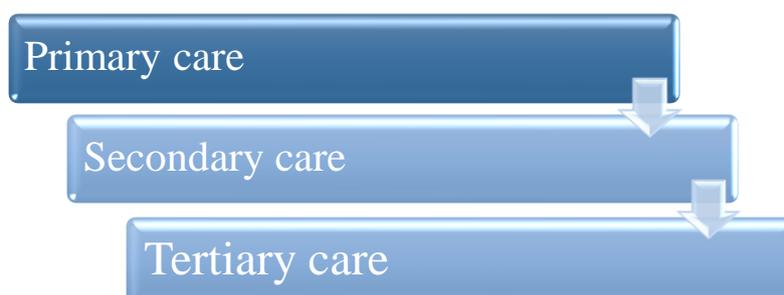
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What is health care..?

The healthcare system is in charge of ensuring that people with illnesses, disorders, or other complications have a high quality of life. The primary goal of the health care system is to offer patients safe medications and supportive settings for treating their conditions. Anytime a patient refuses to follow orders or expresses a desire to stop taking their prescription or receiving medical attention, the appropriate advice should be given. Physicians, pharmacists, nurses, and any other medical professionals including physiotherapists, physician assistants, etc. make up the medical care team. Quality of care is a reality in the healthcare sector. It is crucial for the patient's welfare and financial support.¹ One of the key components to maintaining the patient's wellbeing is giving them the appropriate mental and emotional care. To deliver high-quality treatment, it is essential that multiple partners share their knowledge through collaboration.² This is just as crucial as medical care, diagnoses, and surgeries. People who have mental illnesses are far more likely to experience difficulties than those who have physical illnesses or injuries.

Different levels of health care:

Mainly there are 3 types of healthcare system.



Primary care :

The World Health Organization (WHO) advanced the conversation around primary healthcare with its Declaration of Alma Ata from 1978. WHO recently admitted that there is ambiguity in the term's definition and usage. There isn't a standard or definition that applies to universities for primary healthcare. The notion was explored in the Alma-Ata document's ambiguity as both a degree of care and as a general strategy to health policy and service

provision. Primary healthcare is typically seen as the initial level of care in high-income countries. It is viewed more as a system or as a broad strategy in low-income nations where considerable barriers to accessing health care persist.³ In order to achieve the goals of accessibility and cost, primary healthcare and health promotion are therefore seen as essential components of public health and should be offered globally.⁴ There may be a misunderstanding based on the notion that primary care-centered services are always less expensive than hospital-based services, although this may not always be the case. By making more primary care available, it is possible to improve population health at a reduced cost.⁵ Functions of a primary care physician have been widened to include the following in line with more active roles:

- To provide continuous and comprehensive care.
- To refer to specialists and / or hospital services.
- To co-ordinate health services for the patient.
- To guide the patient within the network of social welfare services and public health services.
- To provide the best possible health and social services in the light of economic consideration.⁶

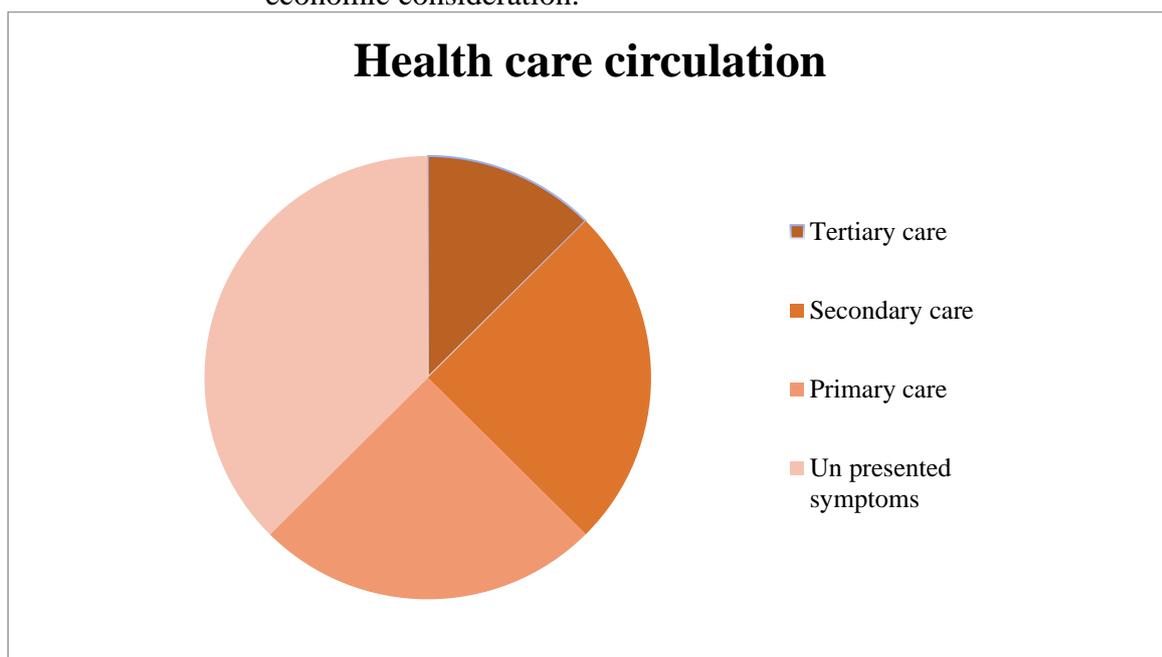


Fig (1). Health care circulation – basic management of health care

The majority of the population will have undiagnosed symptoms, according to analysis, in the healthcare system that aims to give people a great quality of life. which the primary care will be acquired next. Depending on the region, secondary care will more or less maintain equality. The tertiary care will offer the lowest degree of care. These are encountered in primary care the most frequently, with secondary and tertiary care seeing less of them. Some of the people will be using self-medication while others will experience symptoms.⁷ Today, it is crucial to examine data monitoring in order to supply a much more expansive future

strategy than a limited one. This can contribute to the dissemination of improved knowledge about the capabilities of the healthcare system to the general public.

The various methods of data collection can be conducted with the help of healthcare devices and can be categorized into four parts:

- (a) Stationary Medical Devices: specific for physical locations
- (b) Medical Embedded Devices: placed inside the human body
- (c) Medical Wearable Devices: prescribed by doctors
- (d) Wearable Health Monitoring Devices: worn on the body

To safeguard the data, blockchain technologies are employed. Decentralization is a key component of blockchain, which shields data from hacker attacks.⁸ Sharing medical information and data is essential for raising the standard of the healthcare system and making it more intelligent.⁹ Since each user has a unique role, access to these data should be reviewed in light of the privileges assigned to each role. By using blockchain technology, there are simple solutions to guarantee the mode of access.¹⁰ In the current environment, biomedical and healthcare instruments like genomics, portable biometric sensors, and smartphone apps are capable of producing a significant amount of data. We must therefore be aware of and evaluate requirements that can be fulfilled utilizing this data. For example, this may give us new information about how to improve healthcare through procedural, technical, medical, and other means. All of these, taken together, showed that patient-specific medical specialties or personalized medicines will soon be available.^{11,12} The following are in short term, 3 approaches that could be implemented to aid in providing more systemic evaluation of primary care:

1. PHC (Primary Health Care) could be included in ongoing or upcoming cohort studies. Measures can be performed with the aid of validated instruments as the primary care assessment Tools.¹³
2. PHC services can be examined carefully using standardised surveys, such as living standard measurement surveys or demographic and health surveys.
3. Studies focused on PHC strategies can be conducted in various nations where primary healthcare systems are being built. To significantly enhance the primary healthcare system, this might be contrasted with other systems.

For establishing a high quality primary health care practice, its therefore important to publish and share data of both successful and unsuccessful studies in a large scale.¹⁴

Secondary healthcare :

In emerging regions and places where there is a need for improved quality of life and patients with average incomes who can receive support from the secondary healthcare system, secondary healthcare practice is crucial. It is essential to integrate secondary healthcare practices in society in order to ensure safety and efficacy. The patients who are suffering as

second victims are an additional crucial factor to take into account. Second victims assistance should be a crucial component of research, conferences, and training as the patient safety movement develops. Managers, clinicians, and the academic community must start and assess supportive measures for second victims in order to guarantee safe and just environments of care. Currently, it seems that comprehensive support plans should include assistance from coworkers, managers, and supervisors. Senior organizational leaders should set up and sustain the organization's support network. All victims of significant health care adverse events should receive short-term, middle-term, and long-term assistance, and second victims should be encouraged to participate in the creation of support structures. A family practice with 9000 patients can serve as a primary care organization, an acute hospital can serve a population of roughly 2,000,000, and a regional cancer center can serve as a secondary care organization, caring for a population of about 3.2 million.¹⁵ However, it may not be acceptable to generalize the distribution of primary, secondary, and tertiary systems because it may differ at the national level or between various nations. Since it is not unique in every place, it can be understood better through practical examples.

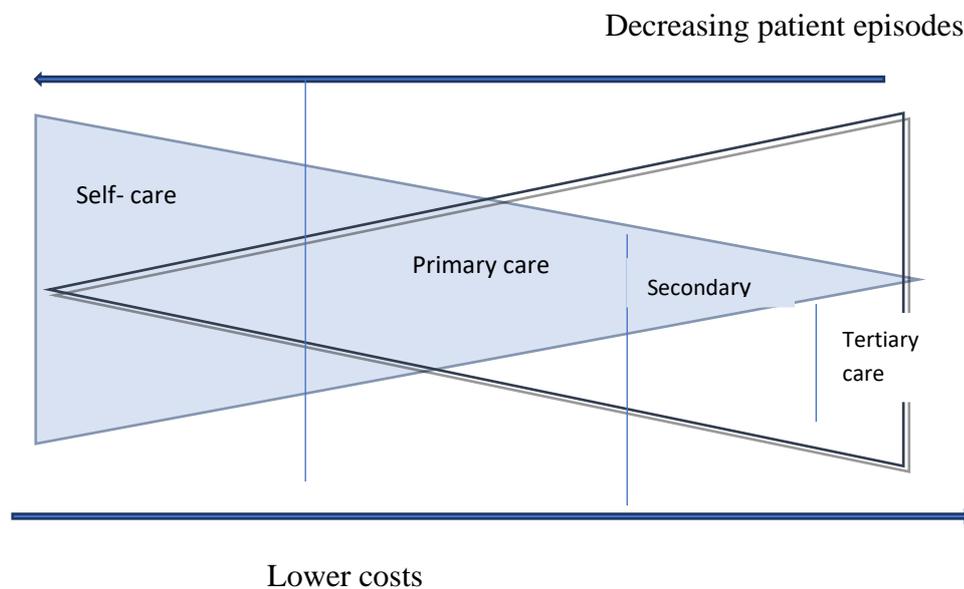


Fig . 2 . Proportion of expenditure on healthcare

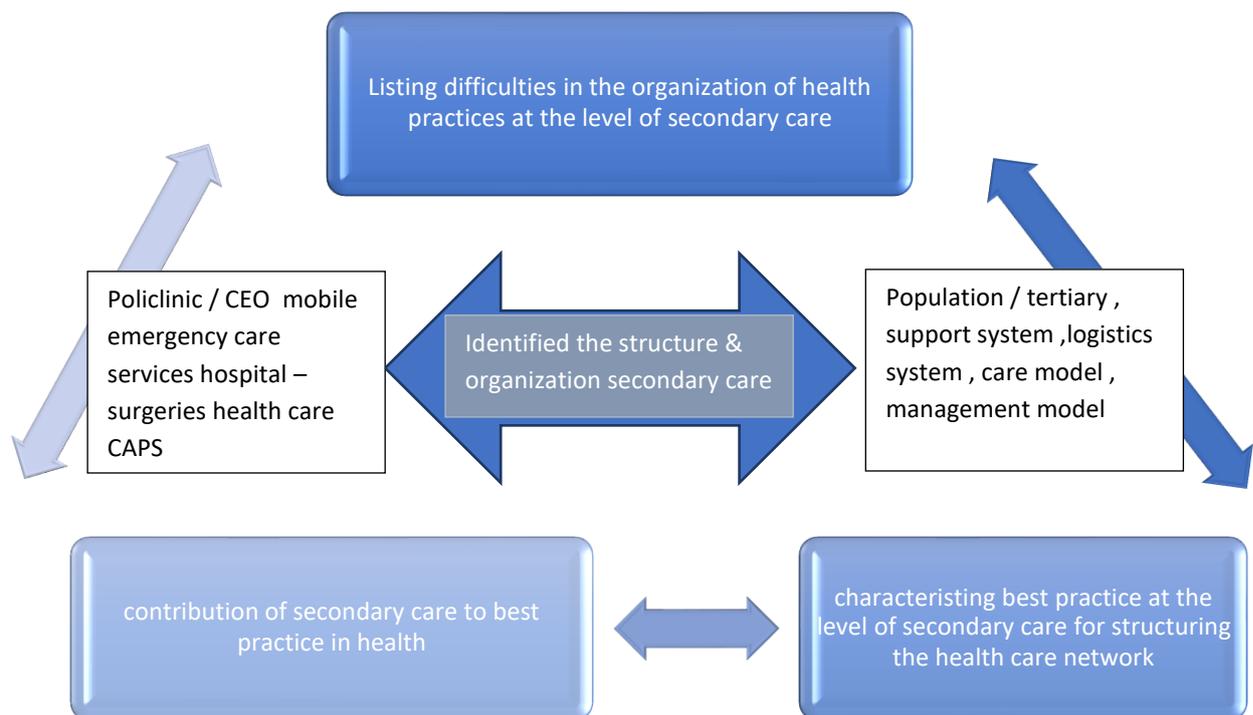
This is how patient outcomes are categorised in relation to costs. The chart makes it apparent that self-care or self-medication will be the least expensive option while the likelihood of the condition getting better is lower. As we proceed from left to right, it becomes clear that the expense of the therapy significantly rises while also resulting in a higher quality of life.

Patients may be required to obtain a reference from their primary healthcare provider in order to receive care from a secondary healthcare provider, depending on the systems in place in the country's health care system. Nevertheless, in some systems, medical specialists may meet patients without a recommendation, and the patient may choose to self-refer for the service. In the majority of nations with private health insurance or self-pay systems, this arrangement is the most prevalent. In general, secondary care professionals include physical therapists, respiratory therapists, occupational therapists, speech therapists, and nutritionists

who fall under the category of allied health services. Both patient self-referrals and physician referrals can be used to obtain them.¹⁶

Grounded Theory is the primary method used to analyse the secondary healthcare system (GT). By comparing and carefully analysing the facts under investigation, GT methods seek to find and relate concepts. As a byproduct, it offers a theoretical explanation for the phenomena.¹⁷

For the support of formulation of the theoretical model, four analytical categories were identified. This is demonstrated in the schematic format below.



(fig.3) Organization of health practices in the care network based on the interactions at the secondary care level; analytical categories

Tertiary care :

The tertiary care level is for extremely specialised care that involves complicated and advanced equipment, therapy, or procedures for a short or long period of time, frequently for a serious or life-threatening ailment. One of the key elements that affects how a healthcare system functions is the health care delivery system. It depends on how well the services provided to the public in a health system can operate and can adequately meet the needs of the public. As a result, networks of personnel and facilities help supply quality services because healthcare services are complex and difficult to evaluate.

According to a study on patient satisfaction in healthcare provision, performance in services delivery is where the potential of the health system lies to improve people's lives and meets the opportunity to realise health gains. As a result, tertiary level health care systems,

particularly regional hospitals, are expected to give and exhibit performance in line with professionalism. To evaluate the effectiveness of tertiary care, patients' access to the services is crucial. The quantity of patients that other secondary and primary healthcare systems refer to the hospital is a reflection of the growing burden. ¹⁸

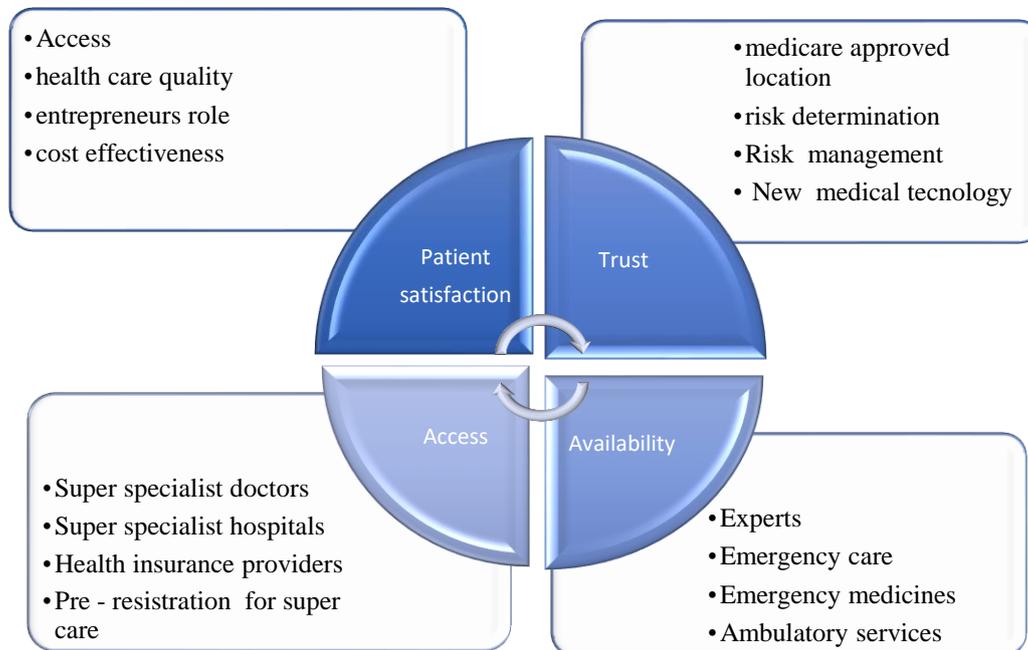


fig.(4) . Architecture of tertiary Healthcare Delivery model

Management - relative results:

Recently, talent management experts have pursued a number of worthwhile study avenues. As interest in talent management grows daily, many approaches may be seen in various research.

In the literature, four main perspectives on talent management are typically illustrated.

1. The first one is a set of procedures and duties that are closely related to human resource management. ¹⁹ In this viewpoint, researchers attempt to distinguish between the various talent management strategies based on their strategic, future-oriented orientation, and connection to tactical goals. ²⁰
2. The second viewpoint focuses on combining the competencies of talented individuals to achieve worthwhile results in talent management. Therefore, the highly qualified and devoted working group in an organisation is referred to as this form of management. ²¹
3. The third strategy focuses on the function of employee flow within the company and directs attention to employer supply and demand as well as decisions and planning. ²²
4. The fourth approach places special emphasis on the viewpoint and organisational interests of the staff, which results in self-analysis. ²³

Trends for the Future of Health:

10 aspects can be said to improve the future health care management trends globally.

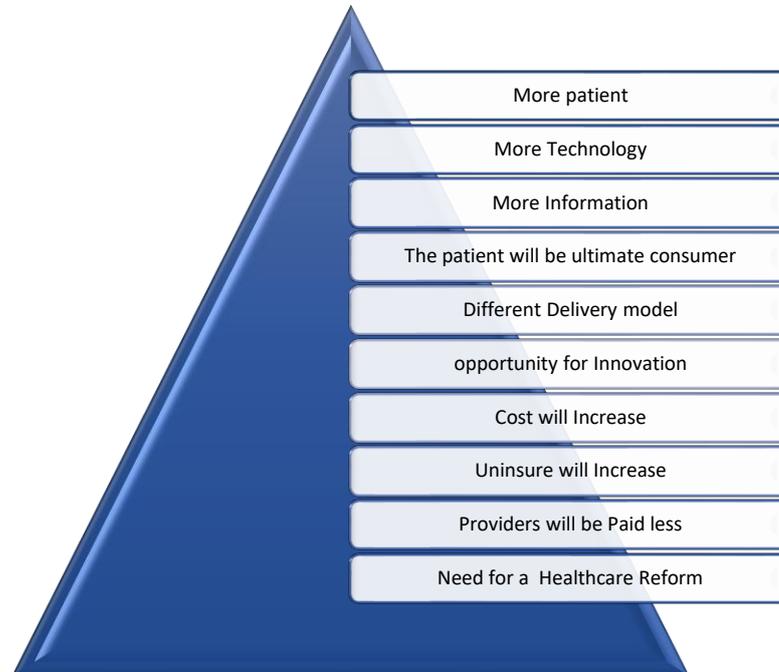


Fig.(5) .Ten 10- Year Trends for the future of Healthcare

1. More patient :

Information / data sharing can be made possible:

- Secured and shared personal health record
- Effective disease prevention and primary care
- Targeted and better quality acute care
- Long-term chronic disease management

More number of patients can produce the outcome of giving convenient and effective health services delivery, lower medical costs, and improved service quality due to clear rules and responsibilities in each of the health care sectors. ²⁴

2. More Technology:

Technology is crucial to the current and future expansion of the healthcare industry. Improved technology can make it simpler to access data about a patient's real-time health, insurance status, and financial situation. All of information can be utilised to support provider judgement, enhance patient health, and lower expenses. With advancements in digital healthcare technologies, such as 3D printing, remote diagnosis, wearables, electroceuticals, digital therapeutics, virtual reality (VR), augmented reality, artificial intelligence (AI), computer vision, and more, the future of healthcare is taking shape right before our eyes.

Computer assisted diagnosis of coronary artery disease integrating echo, magnetic resonance, and position emission tomography is one of many existing procedures using contemporary technologies. These are invasive techniques, although less invasive ones that use catheter techniques will result in better functional results. Genetic fingerprinting or DNA chip technologies will significantly enhance risk assessment. Understanding the risk will enable other technologies to extend life more effectively. Understanding the benefits and drawbacks of these techniques can help future approaches to therapeutic and diagnostic techniques.^{25, 26}

Digital technology in healthcare and medicine has the ability to change ineffective healthcare systems into appropriate ones, offer more affordable, quicker, and effective treatments for diseases (such as AIDS and Ebola), and equalize the interaction between experts and patients. The use of electronic technologies can help enhance patient admission, billing, and discharge operations. Compared to earlier day-to-day job methods, it makes the working processes considerably simpler and more efficient. Data computerization will eventually reduce errors and the amount of paperwork required to maintain records. Such records can be preserved in a far more practical way, and depending on the demands of the healthcare system, access to them can be made private and confidential.²⁵

3. More Information:

The development of healthcare practices depends on having the necessary skills and knowledge of therapeutic techniques. Additionally, exchanging expertise and knowledge with others in the healthcare industry can lead to creative solutions and advancements in healthcare practices as well as make it easier to compare treatment methods across industries.²⁷

The availability of basic, secondary, and tertiary resources must be improved for the benefit of the future. The main goal of health care practice is the improvement of the patient and his or her quality of life, thus it's crucial to have a team spirit and group work mentality in addition to growing skills and knowledge.²⁸

Market-oriented corporate cultures are vital for healthcare executives and practitioners for two main reasons, according to the literature. It first enables businesses to continuously gather data on the requirements of their target clients (patients). Second, a company in the health industry can develop customer value with the aid of such a customer-focused strategy.²⁹

4. Patient is always the ultimate consumer:

The best strategy for enhancing the delivery of health care is to acknowledge that patients are the real consumers. For the same purpose, Patient Self-determination (PSDA) was created. It grants the patient the full freedom to choose the course of therapy.³⁰ According to the law, it is the duty of the health care provider and management to provide all information requested by the patient, including information from the patient's chart, give the patient written information about the institution's advance directive policies, and create written policies and educational programmes about advance directives for the community and medical staff.^{31, 32}

The quality indicators have become a significant part of hospital and physician assessment. Clinical studies are appearing correlating quality of care with patient survival.³³

5. Different delivery model:

For the health care sectors to improve patient happiness, delivery method development is equally crucial. ³⁴ It is necessary to introduce new, enhanced, and creative health care delivery models that can improve primary care and the creation of patient-centered medical home (PCMH) models. ³⁵ There are differing opinions regarding the cost and quality of care provided by PCMHs, and some studies have shown promising therapeutic outcomes in high-risk or elderly populations but not in groups of healthy young adults. ^{36,37} Therefore, risk management is a crucial component. The five main steps in risk management are as follows:

- Step 1: Establish the context
- Step 2: Identify risks
- Step 3: Analyze risks
- Step 4: Evaluate risks
- Step 5: Treat/Manage Risks³⁸

6. Opportunities for innovation:

The development and application of information technology (IT) and informative science (IS) are the key areas of innovation in the more recent scenario. ³⁹ Innovation in healthcare is sometimes defined as the process of adopting the best-demonstrated techniques that can assist practitioners in focusing on the patient, the functioning of the clinics, and the manner in which they provide patient care. Health care professionals must use innovative ideas to deliver higher-quality patient care in a faster, more efficient, and more affordable manner. ⁴⁰

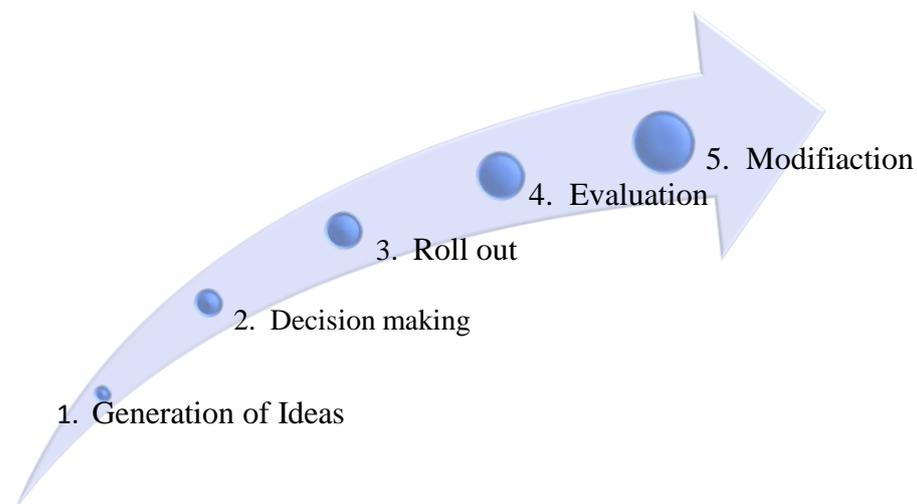


Fig 7. Innovative decision – making processes in the healthcare

The development of information technology and databases is essential to bringing about a major change within the healthcare system. Increased consumer awareness of healthcare operations and benefits, as well as improved communication between staff and patients and

physicians, are some of the advantages. By making a variety of patient demographics, clinical data, and other medical information readily available, this can also make practising medicine simpler.⁴¹

7. Cost will increase:

The expense of therapy and the system both rise at the same time as the system and technology advance. It's crucial to weigh the benefits and benefits of these enhancements against the implementation costs. To evaluate the cost-benefit or cost-effectiveness of the system, they should be compared based on the treatment's results. ^{27,42} As primary care systems are developed, more patients will be focused on receiving treatment there rather than in secondary care systems because people think primary care services are much more affordable than secondary care. This may help to increase the revenue from primary care. The primary goal of the health care management system is to bring suitable treatment facilities to patients closer and closer to them. ⁴³ Numerous studies are being conducted to discover the best financial data regarding cost containment. Comparing the cost per discharge to in-hospital or posthospitalization mortality is a frequent way to analyze this. ^{44,45}

8. Uninsure will increased:

As the cost of the system increase, there will be a gradual increase in the uninsured. Which will shift the the cost of caring of these people towards the AHCs(Academic Health Centers). The major payers are likely reduce their cost by reducing coverage, this will result in workers who will not be able to afford even basic health insurance.²⁵

9. Providers will be less paid :

Increase in the cost of the health care system asks for a decreased pay for the providers. This is something that will be eventually happening as the technology improves and new innovative methods comes into action.⁴⁶

10. Need for a health care reform :

The new health reform law introduces a range of payment and delivery system changes likely to result in a significant slowing of health care cost growth.⁴⁷ Reforms are undertaken in response to exogenous shocks , there is often a lack of clarity about their aims . An evidence based and analytically sound case for reform serves both to improve the quality of policy and to enhance prospects for reform adoption .⁴⁸

HEALTHCARE SIMULATION POTENTIALS

Healthcare simulation can be used as an effective tool, technique, or method. Improvement in any of the aspects, described below, will lead to the main goal - healthcare efficiency.

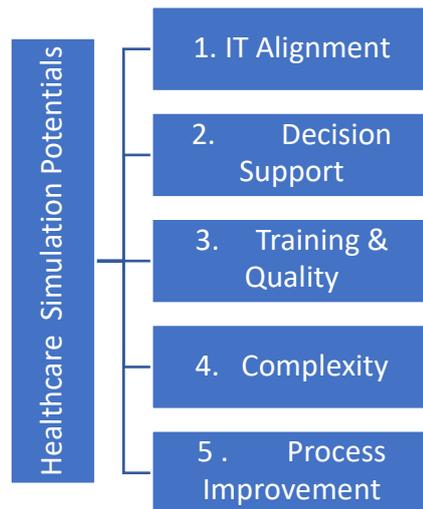


Fig . 8 . Healthcare simulation potentials aspects

Conclusion :

In future, healthcare system should be made more valuable and more effective. Acceptance of the healthcare system comes only with the development of the practice and technical methods used in every system. Ultimately all the systems should support each other for the improvement of the healthcare practice to produce a healthy society.

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