

## Role of Precision Medicine in Disease Treatment and Prevention

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### Abstract

Precision medicine is an effectual approach that basically supports any disease treatment and prevention as it takes individual heterogeneity in genes, climate and many more things. Through the adoption of precision medicinal drugs any sort of sickness remedy can without a doubt save you from those troubles in the right manner. Precision medicinal drug is a shape of affected person care that allows physicians to select medicines primarily based totally on a genetic know-how of the affected person's sickness. This medicinal drug is without a doubt capable of addressing those cutting-edge troubles surrounding the human frame through many fitness sicknesses because it helps remedy development in an ideal manner. Models of fitness coverage consist of estimates of the efficacy and fees of complicated fitness-care programmes, bearing in mind comparisons among policies.

#### Keywords

disease treatment and prevention, Health Technology Assessment, Precision medicine,

### INTRODUCTION

**Precision medicine** is an effectual approach that basically supports any disease treatment and prevention as it takes individual heterogeneity in genes, climate and many more things. This method simply allows the doctors and researchers to make more efficient and accurate predictions. In addition, disease treatment and prevention are a process that provides proper treatments for disease affected patients as it supports the treatment in a logical manner. Treatment usually starts just before or shortly after the first signs and symptoms of the disease appear. There are many kinds of diseases present such as **unintentional injuries, Alzheimer's disease, Diabetes** and many more others.

Many forms of troubles are supplied that essentially influence the human body also, it can be affected through right sickness remedies. According to [5], there are many effects such as sickness, pain, pressure, squeezing or a sensation of satiety within the centre of the chest that still lasts longer than some minutes. In addition, fitness and sicknesses additionally consist many different elements together as it includes heart-attack, intellectual fitness, obese and obesity, AIDS. As mentioned by [16], Bacteria species cause sicknesses together with strep throat, urinary tract infections, and tuberculosis.

On the other hand, through the adoption of precision medicinal drugs any sort of sickness remedy can without a doubt save you from those troubles in the right manner. As mentioned by [10], precision medicinal drugs are a shape that simply affects human body care that allows physicians to select medicines primarily. This medicinal drug is without a doubt capable of addressing those cutting-edge troubles surrounding the human frame through many fitness sicknesses because it helps remedy development in an ideal manner. Moreover, Next-technology sequencing (NGS) research can quickly classify or "sequence" giant components of a person's genome and are enormous advances in precision medicinal drug medical applications [13].

### Aim

In order to make proper understandings about disease treatments and the effectiveness of precision medicines will be the main aim of this report analysis. Proper justification of the historical background of precision medicine usage in disease treatment and prevention is one of the most important aims in this report analysis.

### Objectives

- To understand the proper needs of health disease treatments in order to decrease risk factors
- To understand the ways to prevent health disease by the adoption of precision medicine
- To make proper understanding about several strong viewpoint and effectiveness of precision medicine on human body

### LITERATURE REVIEW

### Evaluation of disease treatment and prevention

Models of fitness are basically coverage of the efficacy and fees of complicated fitness-care programmes, bearing in mind comparisons among policies. As mentioned by [9], dealing with modelling research is only to observe the validity of screening, prevention, and remedy models. The numerator of an incidence rate is often characterized in prevention trials and epidemiological studies of disease treatments. However, the occurrence of a series of signs and symptoms, as well as objective measures and the reality of presentation to a health care facility for treatment. Moreover,



different kinds of *Medicine, surgery*, and other therapies are basically used by medical researchers to help alleviate the symptoms and effects of a disease. The main cause of a disease determines how it is treated and these drugs are basically destroying bacteria from re-conduction on the other hand Antibiotics can be administered orally or intravenously.

### Impacts of Precision Medicine on human body

Better use of Electronic Health Records (EHRs) in patient care, making medical data more accessible to physicians and researchers. According to [21], there are many kinds of side effects that are also included in this treatment such as skin problems, trouble breathing, allergic reactions and many more other things. However, Precision medicine's integration into routine clinical care is hampered by a lack of technology, insufficient expertise, and research gaps. If these challenges are reached in a proper manner, then this treatment will provide many types of benefits such as emphasis should change from reaction to prevention, predict disease susceptibility, improve the identification of disease and many more other things [11]. Therefore, enhancing the matching mechanism between patients and medications, as well as awareness of the possibility of serious side effects, personalised medicine improves the health impact of current treatments. As mentioned by [3], precision medicine innovation offers significant benefits, but it will change the way certain health services are provided and assessed. There are many characterizations of Guidance's shelf such as structural uncertainty may rise.

## Sustainable viewpoints of Precision Medicine in disease treatment and prevention

Precision medicinal drugs are a successful method that essentially helps any sickness remedy and prevention as it takes man or woman heterogeneity in genes. This approach really permits the docs and researchers to make greater green and correct predictions [14]. Moreover, sickness prevention is a technique that offers right remedies for sickness affection because it helps the treatment or prevention method in a logical manner. Treatment generally begins off evolving simply earlier than or rapidly after the primary symptoms and symptoms and signs of the sickness appear. There are many varieties of illnesses including unintended injuries, Alzheimer's sickness, Diabetes and lots of greater others. As mentioned by [6], the Diagnostics Guidance committee debated whether the technology should be classified as predictive as well as prognostic, as this had a bearing on the test's cost effectiveness.



# Figure 1. Precision Medicine in disease treatment and prevention (Source: developed by [14])

Moreover, the prevalence of a chain of symptoms and signs, support for goal measures and the fact of presentation to a fitness care facility for treatment. If human bodiesareaffected by any kind of health disorder then, these scientific remedies will assist to manipulate it as it supports the prevention method. Medicine, medication, surgery, and different healing procedures are utilized by scientific practitioners to assist alleviate the signs and outcomes of an ailment [19]. There are numerous types of consequences and these are additionally covered in this treatment but it may include pores and skin problems, hassle breathing, allergies and plenty of extra different things. However, Precision medicine's integration into recurring medical care is hampered by means of a loss of technology, inadequate expertise, and study gaps.

### Literature gap

This study basically tried to make proper justifications about the Role of Precision Medicine in disease treatment and prevention. These types of study simply need many important viewpoints to understand the current situations and, in this case, the previous researchers have not mentioned any important viewpoints. This study also highlights many sustainable viewpoints such as Impacts of Precision Medicine on human body, Evaluation of disease treatment and prevention as these points are very effective to understand the whole study in a logical manner. The previous researcher did not mention any kind of source of information so it will be very difficult work to ensure the highlighted information.



### METHODOLOGY

In order to select the specific philosophy of the investigation's facilities, the researcher will simply generate many possible outcomes in order to capture the study. However, it also helps the researcher to be more concluded as it supports the enhanced rate of the research's results. There are a total of four types of research philosophy methods presented such as positivism, pragmatism, realism [8]. Positivism philosophy simply supports the researcher to ensure important realistic outcomes that are emphasised from research study. In this research paper, the researcher has used the positivism philosophy as it supports in gaining an understanding about precision medicine and its impact in environmental lifestyle. Positivism is a proper method of analysing society that basically emphasises rational methods as well as the society's factual existence.



This study is basically done by explanatory design as it supports the researcher to gather informational data in a logical manner. As mentioned by [1], there are many types of designs presented such as Descriptive, Explanatory, Diagnostic, Correlational and Experimental research design. In order to reflect considerable authority in inductive reasoning is to broaden many new technologies such as high-tech forms and methods [2]. This study will simply adopt a deductive method as it supports the researcher to make proper justifications about the impacts of Precision medicine on human bodies.

This research paper simply highlighted all data in an effective manner as it supports the researcher to gather data in a muchmore effective manner. In addition to this, due to adoption of secondary methods of data collection as it resolves all issues in a muchmore effective manner. On the other hand, it provides the researcher analyser tool to retrieve data and measurements about the sustainable viewpoints of Precision medicines on the human body. As mentioned by [17], there are many kinds of data collection methods presented such as interview, observation, analysis, and documentarian. This study will basically be done by thematic analysis as it will be very supportive for the next researcher to make proper understandings about the Role of Precision Medicine in disease treatment and prevention.

### DATA ANALYSIS AND FINDINGS



Figure 3. Precision Medicine's Concept (Source: developed by [5])

Definition of the different kinds of technologies and facilities that precision medicine includes was a preliminary consideration for this report. Each of the consulted experts, as well as ten papers from the study, offered a description for precision medicine, resulting in a broad range of interpretations. As mentioned by [5], Precision medicine is now synonymous with stratified medicine since it includes more than only pharmacokinetic and pharmacogenomics studies, according to most experts. It is also replacing the word personalised medicine, as it encompasses innovations that provide patients with special care pathways. For the purposes of this research, researchers interpret a method to be precision medicine if it can be used to stratify patients into a particular treatment route or therapy based on specific patient categories.



### Environmental and physiological characteristics of Precision Medicine

Medical treatment Tools will usually provide important information by a disease risk, diagnosis, prognosis, or treatment response. Moreover, predictive studies such as those that recognise the human epidermal factor receptor (HER2) gene to assess care allocation for patients with breast cancer, offer an estimation of the expected disease response to therapies. As mentioned by [22], the Diagnostics Guidance committee debated whether the technology should be classified as predictive as well as prognostic, as this had a bearing on the test's cost effectiveness. Because of the rapid speed of progress in precision medicine, assessment bodies may be faced with a higher volume of evaluations. Expert interviews revealed a range of opinions on how to deal with the issue.



Figure 4. Physiological characteristics of Precision Medicine (Source: developed by [22])

### Health Technology Assessment Issues

Precision drugs are a successful method that essentially helps any sickness remedy and prevention because it takes man or woman heterogeneity in genes, weather, and lots of greater things. As mentioned by [12], while interacting with certain precision medicine technologies and facilities are the one of the most important scope in Health Technology Assessment (HTA). However, the scope of the decision problem posed to HTA agencies and providing a proper and efficient guideline developer has become more difficult to describe in a logical manner.



(Source: developed by [12])

### DISCUSSION

Precision medicinal drugs are a helpful technique that essentially supports any kind of sickness remedy and prevention because it takes character heterogeneity in genes, weather and plenty of greater things. This technique certainly lets in the docs and researchers to make greater green and correct predictions. However, sickness prevention is a technique that offers right remedies for sickness affected sufferers because it helps the remedy in a logical manner. The measures that direct diagnosis and treatment will simply determine the quality of precision care. Moreover, some next-generation sequencing (NGS) studies simply can justify many vast parts of a person's genome.

### Recommendation

As per the effectual recommendation defines that, precision medicine can be a very beneficial adoption during the treatment of any health disease. Precision medication is a form of patient care that simply allows the doctors to choose medications based entirely on a genetic understanding of the patient's illness. Since it supports the proper creation of the human body, this medicinal substance is unique and capable of solving any cutting-edge issues that affect human bodies. Better use of Electronic Health Records (EHRs) in care makes medical data more accessible to physicians and researchers.

### CONCLUSION

Precision medicine is an effective approach that basically supports any disease treatment as it takes individual heterogeneity in genes, climate and many more things. This method simply allows the doctors and researchers to make more efficient and accurate predictions. On the other hand, the numerator of an incidence rate is often characterized in prevention trials and epidemiological studies of disease treatments. However, the occurrence of a series of signs and symptoms, as well as objective measures and the reality of presentation to a health care facility for treatment

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