



## GEOGRAPHICAL VARIATIONS IN HEALTHCARE: SUGGESTIONS BY REMEDAZO

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### ABSTRACT

The geographic variation is primarily the changing pattern experienced in the quality and quantity of healthcare needs of patients which is directly proportional to the geography or area in which a person/patient is currently living. This is very common in developing countries which defines the inefficiencies of the healthcare system of a government in that area. **Objective of the study:** In this paper, we as a medical tourism company would like to talk about the reasons for this inefficiency and suggest possible options to overcome and improvise it.

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## INTRODUCTION

### Geographic variation:

Geographic variation refers to the varying amount of healthcare use per population in different geographic areas. It focuses on the variations that are unexplained by population characteristics, for instance, demographics and shape of healthcare in that area. This implies that the healthcare system is not achieving the standard of performance that they should. If the geographic variation caused is due to any other reason apart from the health status, there will be a deviation seen in the interpretation from the optimum health care (1)

**Significance of geographic variation:** Geographic variation is explained by health-related factors that indicate the healthcare use of the patients, which is defined by the following factors:

Location of the patient  
Efficiency of healthcare

**Location of the patient:** Healthcare use that is not based on healthcare needs is not considered in the best interest of patients. Not just only this, but it can instead be harmful. In healthcare, we define that deviation as overuse, underuse and misuse. It could also reduce the benefit which could have been enjoyed by the patient (1)

**The efficiency of healthcare:** Efficiency of health care is a comparison of outputs from the delivery system, such as physician visits, relative value units, or health outcomes, with inputs such as expense, time, or content. (2) Using stochastic frontier analysis or data envelopment analysis, efficiency can be stated as a ratio of outputs to inputs or as a comparison to optimal productivity. (2) When it comes to healthcare, if the extra input implied does not contribute to the improvement of the outcomes, it tends to reduce the efficiency of healthcare. Even if the input is less than the amount required, it could also decrease efficiency.

**Types of care:** According to Dartmouth, types of care are classified into three categories simultaneously linked to underuse, misuse and overuse: (1)

**Effective care:** Effective care is something in which the services used are already proven in clinical trials and studies. In this type of intervention, the benefits outweigh the risks.

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According to Wenneberg (2002), the patients who are eligible for treatment should be well treated, in case there's a failure in medicine it is considered as underuse. Example: vaccinations to Polio, lung cancer screening for breast cancer.

**Preference-sensitive care:** Preference-sensitive care is the type in which the patient is suggested with two valid alternative options for his treatments. Example: lumpectomy or mastectomy for the treatment of early breast cancer. In this care, the patient is allowed to take the decision only if they have enough information to make a choice. Preference-sensitive care is related to misuse, which occurs due to the failure to communicate the risks and benefits of the options adequately.

**Supply-sensitive care:** Supply-sensitive care is all the services that a patient uses directly during the treatment. Example: physician, equipment used by the medical staff, healthcare facilities, etc. It is often related to overuse. As the patient who is suffering from long term chronic illness requires constant care, diagnostic tests and attention. (1) (3)

**Why is it essential?:** The investigation of geographic variation can be explained in the following aspects:

Measurements  
Analysis and Interpretation  
Policy implications

**Measurements:** Arrangements of geographic units in different ways may lead to inconsistency in results. This lack of consistency is directly related to the way of assigning the use of healthcare to a particular geographic unit. Geographic variation can also be influenced by the characteristics of geographic units, the population size of geographic units and number of geographic units. On the other hand, heterogeneity (diversity in character) in size or number of the geographic unit can cause a different variation which can exaggerate the degree of variation.

**Analysis and interpretation:** One of the main reasons for studying geographic variation is to identify the factors provided by healthcare professionals which can cause the variation or inefficiency. Also, geographic units should be able to describe the use of healthcare knowledge accurately.

**Policy implications:** The significance of geographic variation ultimately lies in the implementation of the results that came out after all the analysis and interpretation. Therefore, the geographic units need to be consistent; otherwise, the study may be of little or no use at all.

**Strategies to reduce geographic variation as a medical tourism company:** As per the research, we have segregated strategies to reduce geographic variation into three categories as follows:

Diagnosis  
Guiding policy  
Action plans

**Diagnosis:** Diagnosis in simple words is defined as spotting the exact nature of the illness by studying the symptoms.

) Measuring the geographic variation is not only crucial for understanding the degree of interpretation, but it is also useful in raising awareness among the public.

### How can we diagnose better?

Covering the first aspect of measurement  
Selection of the suitable geographic unit  
Adjusting the factors that can help affect geographic variation is important

**Identifying factors:** It includes the investigation in terms of supply, demands and healthcare system.

**Supply:** This factor includes the amount of healthcare supply, suppliers and the behaviour of healthcare suppliers. Supply: Distribution of healthcare resources which is out of proportion, including healthcare personnel and hospital should be considered here. Apart from that, the behaviour of healthcare suppliers, physicians, preferences, practice style.

**Demand:** This factor covers the cultural and social norms and characteristics of patients. The preference of patients, the way they preferred a particular doctor for treatment. Healthcare system: Here, we include traits of the healthcare system. The payment system and resource distribution policies which can influence geographic variation.

**Setting targets:** Setting a target is wholly related to determining the level of variation and finding the factors that are required to be corrected. Determining the level of variation mainly concerns with defining the optimum treatment and the desired rate of its utilisation. For treatment to be proved as an optimum treatment includes the evidence of its effectiveness and cost-effectiveness.

### Guiding policies

**Clinical guidelines:** The development and monitoring of the clinical guidelines that doesn't affect or bring any variation in the healthcare system are essential. It scatters the clinical evidence and reduces unwarranted variation.

**Decision support:** Decision-making process includes physicians and patients working together and choosing treatment options established on the evidence-based information for the best possible outcomes. It is the tool which facilitates shared decision making and helps the patient to think about the significance of other treatment options.

**Action plan:** Financial outlook: this part can be characterised in two ways payment systems and incentives. It shows how the healthcare system is being operated. Modifications in the fee of procedures done per year can control variation, which can increase the number of patients. It will also allow the hospital to raise incentives for the employees working and discourage the overuse of procedures done every year known as medical services overuse. Resource availability: Reallocation of resources can be done to reduce the geographic variations. Increasing access to healthcare in the less developed areas can be done. 2 Physicians from every hospital can support this and can visit once or twice every week can help us prove our point. Monitoring and feedback: This can help improve the performance and practice of healthcare providers.

Monitoring and asking the patients for feedback can help the patients feel vital. (1)

Primary care treatment quality: 4.8/10

Average call: 7.16/10

## METHODOLOGY

**The study will be conducted based on three categories:**

Demographic data  
Access to the treatment  
Patient's perspective on healthcare.

### Method of conduction of study

- ) The study will be conducted in a questionnaire form.
- ) Minimum 100 participants will be participating selected randomly.
- ) Questionnaires will be consisting of questions based on their last treatment.
- ) The questionnaire will be categorised into three categories:
  - ) Access to the treatment
  - ) Quality of the treatment
  - ) Patient's perspective on healthcare.

### Tools for analysis

## RESULTS

Aim of this study was to determine the inefficiencies in the healthcare sector. The questionnaire proved to help get the responses. According to the responses, the results will also be categorised into three segments on the scale of 1 to 10 as follows:

### Access to the treatment

How easy it was to make appointments: 7.2/10  
How easy it was to contact the doctor: 8.8/10  
Waiting time: 5.9/10  
access to the service: 7/10  
Any inequality or injustice: 6.9/10  
Access to the service: 6.5/10  
All resources available or not: 7/10  
Average score: 7.042/10

### Quality of the treatment

- ) Doctor's language: 7/10
- ) Sterilisation and hygiene: 7.7/10
- ) Follow up facility: 5.5/10
- ) Overall hospital environment: 6.7/10
- ) Comprehensive medical treatment: 8/10

Average score: 6.98/10

### Patient's perspective on healthcare

- o Consultation feedback: 9.2/10
- o Patient's involvement in decision making: 6.3/10
- o Patient's reaction to PATIENT CENTRIC CARE APPROACH: 9/10
- o Delivery of complete information about healthcare: 6.5/10

**Interpretation:** As per the above study, the average result was 7.06/10 which is unsatisfactory and shows that the healthcare sector still has a long way to go.

**Suggestions:** It is the need of an hour for the Government and hospitals to follow specific steps:

Improvement of primary healthcare facilities: it is an urgent need to focus on primary healthcare centres in rural areas, especially. People should be aware of immediate healthcare needs.

Better distribution of medicines: Government should start focusing on the distribution of medications in the pharmacies situated in rural areas.

Shifting doctor's focus on rural areas too: given that big corporate hospitals have greater access to the better resources that government hospitals. It is a suggestion that they can provide doctors with a little incentive to spend time in a mainly rural area following the CSR, i.e. Corporate Social Responsibility.

Increase in spending on healthcare by the government: GOI, i.e. The Government Of INDIA spends around 1.5 % of the GDP on healthcare which in comparison to other countries is remarkably low.

Allow the concept of barefoot doctors: the idea of barefoot doctors has been successfully applied in China. Barefoot doctors are well-trained farmers, rural healthcare professionals, folk healer etc. who are provided with minimal basic medical and paramedical training. The concept aimed to bring healthcare to the rural area where most of the urban doctors won't agree to settle.

Reduction in treatment cost: as per the low amount of GDP spent on healthcare, and hospitals should consider reducing the price of the treatments for the better accessibility of healthcare.

Better promotion of traditional medicinal systems: systems like AYUSH, NRHM, etc. should be promoted more and healthcare companies should also try supporting these initiatives. (7)

Mandatory in hospital quality assurance: In health care, the terms continuous quality improvement (CQI) and complete quality management (TQM) are synonymous. CQI has been used to improve clinical practice and is based on the idea that every method and every occasion has the potential for change (10)

### What are we as a Medical Tourism Company doing to improve the inefficiencies?

**Remedazo's step towards better healthcare:** At Remedazo, we firmly believe that you have the right to excellent, affordable and ethical medical care. Our mission is to embrace a treatment that combines compassion, the finest quality of care and complete security. We promise to turn a customary period of worry and stress into a smooth, safe and positive journey towards better and affordable healthcare. (8) The guidelines and policies that make us different from others are as follows:

**A well balanced team:** A good team should be made up of people from diverse backgrounds, with a wide variety of skills and experience. One of the primary steps in the improvement process, according to the IHI, is to form a balanced team. A senior leader who can counsel, monitor, and lobby for the team; and a clinical specialist with the requisite background to make informed clinical decisions and a project manager who can perform day-to-day duties and keep the team on track. (9)

**Ask the patient for unbiased feedback:** Feedback is an essential step for us as a healthcare provider as it helps us to identify gaps, improve quality and refine the inefficiencies.

**Providing the highest quality of care:** Helping patients get access to care from countries and places where the healthcare system is not as developed as it should be. Solving their queries online, providing them with better solutions, e consultations and much more.

**Making healthcare affordable:** According to research, if a person is coming to India for his/her medical treatment can save around between 30 to 70 per cent, including the cost of travelling expenses & accommodation. We are also providing packages which are budget-friendly and economical for patients. Thus, we are making healthcare more accessible and affordable at the same time.(6)

#### Introducing a patient-centred care approach

**A Patient-Centred Care Approach** is directly proportional to the patient's healthcare rights. Primarily, this approach is all about asking them what they want, listening to the problem carefully, providing them with the right solution and involving them in every decision of their own healthcare needs.(8)

**Complete transparency and security:** Transparency and security help patients increase their trust in the hospital and doctors. Also, allow patients to improve their relationship with doctors which leads to better outcomes.

Collaborating with different organisations and hospitals when multiple health workers from diverse backgrounds come together and collaborate with patients, families, caregivers and communities to deliver the highest quality of care.

#### The primary aim of this collaboration is to

- ) Reduce the errors made in healthcare professions
- ) Deliver better patient outcomes
- ) Also, it helps the hospital to delegate the work and reduce the workflow
- ) And, all of the above can also help reduce healthcare costs.

**Strengthening the coordination:** Coordination improves the patient's experience and helps facilitate the appropriate and efficient delivery of health care services both within and across systems.(8)

**Reducing fraud and patient abuse:** Explaining the patients about the insurance system and educating them about the protection of their insurance id. Also, to report any fraud and abuse, they come across immediately.

**One step at a time:** After setting a goal, with each step forward, we are moving closer to our destination. This one step at a time is helping us build patient's confidence and trust in us. Hence, it will increase our faith in achieving our goal.(8)

#### Courtesy

Remedazo Global Medical Tourism  
Dr Anoop Sisotia, Founder  
Mr Amit Kumar, Co-founder

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