# MANPOWER PLANNING SYSTEMS IN PUNE HOSPITALS

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## ABSTRACT

Health care is a labour-intensive industry, and human resources are the most important input into the provision of health care, and the largest proportion of health care expenditure. It is remarkable that the market for human resources in health care has been relatively under-researched and under-managed in all developed countries health systems. The planning of supply of and demand for human resources in healthcare is a neglected topic characterized by significant methodological weaknesses which have been discussed for decades but not resolved. Typical workforce planning systems ignore variations in practice and the possibility of changing productivity, skill mix and substitution.

**Key Words:** Manpower Planning**,** Objectives of HRP, Integration

## 1 Background

Workforce planning policies, where they exist, tend to assume that existing healthcare delivery systems are efficient, and the forecasts made are rarely costed systematically. In most healthcare systems, workforce planning is driven by healthcare expenditure, with resources dictating volume of provision. Typical workforce planning systems ignore variations in practice and the possibility of changing productivity, skill mix and substitution. Healthcare policy makers increasingly recognise the need for more integrated planning of human resources in healthcare, in particular making the management of human resources responsive to system needs and design, instead of vice versa.

**1.2 Definition of the Man power Planning**. It is essential to understand scientific definition of the man power planning. Various HR scientists have defined it in various ways.

The most pertinent definition is given by E.W. Vetter, who defines Human Resource Planning as

1 Manpower Planning A process by which an organization moves from its current manpower position to desired manpower position . Through planning management strives to have right number of people , right kind of people at the right places ,at right times , doing right things which result in both individual and organization receiving maximum long run benefit.

2 Dale Beach: Human Resource planning is a process of determining and assuring that the organization will have an adequate number of qualified persons ,available at proper times , performing jobs which meet needs of the enterprise and which provide satisfaction for individuals involved.

3 Bob Lander and Snell: It is a process of anticipating and making provision for the movement (flow) of people into within and out of organization.

4 Stainer G and Hainmam

Human Resource planning is the strategy for acquisition, utilization, improvement and preservation of an enterprises' human resources .It relates to establishing the quantitative requirement of jobs determining the number of personnel required and developing sources of manpower.

**Some authors use the term Manpower Planning while others use term Human resource Planning , we will treat both terms as equivalent and would be used interchangeably**.

### 1.3 OBJECTIVES OF HRP

- To carry out tasks of the Organisation by ensuring availability of Manpower.
- To identify areas of surplus manpower or the areas in which there is a shortage of personnel accordingly make new strategies to suit organization
- To meet the programmes of expansion, diversification etc
- To foresee the impact of technology on work , existing employees, and future human resource requirements.
- To improve the standards of skill , knowledge, ability , discipline etc to assess the surplus or shortage of human resource and take measures accordingly.

- To minimize the imbalances caused due to non availability of human resources of right kind, in right number in right time and at right place.
- To maintain congenial industrial Relations by maintaining optimum level and structure of human resources
- To make the best use of human resources.
- To estimate the cost of human resources.

**1.4 Planning and Managing human Resources**

Manpower Planning involves two steps

A) Planning manpower requirements

B) Planning manpower supplies

**1.5 STEPS INVOLVED IN MANPOWER PLANNING**

1 **Determine Objectives– Develop Strategic Business Plans of Organisation**

2 **Decide Resourcing Strategy**: Methods and sources to be followed to recruit employees.

3 **Scenario Planning** : Review of current Political . Cultural and Social Scenario

4 **Estimating / Forecasting Overall Human Resource Requirements**

Important forecasting methods are

**A Managerial Judgments :** This involves a simple method of estimating manpower requirements by asking respective managers about then requirement of manpower they have. This can be for one year or more than one year. In this case one can adopt top down approach which means requirements are invited from top managers who in turn can generate this requirements by asking individual requirement of subordinate and then consolidating the same .Alternative organization may adopt decentralized or bottom up approach in which requirements are generated from lower levels and then forwarded though chain of command. Requirements are finally consolidated to determine entire organizational requirement.

**B Expert Opinion :** This method uses panel of experts or people within the firm who have an understanding of market ,industry and the technological developments that influence HR requirements of the organization **.**A single expert may be used or a pool of experts may prepare their estimates and these could be combined for final estimation in a number of ways.

**C Delphi Technique** This technique combines the opinions of individual experts and retrieve the combined opinion to each individual expert till all the members agree **.**The experts do not meet face to face.

D **Group Brain storming** In this case all experts meet together and discuss HR requirement face to face. They make assumption about future business direction. They are able to predict future demands.

**E Nominal group Technique** This requires experts to individually and independently generate estimates and then share the with the group in a face to face to face meeting till the reach consensus.

**G Statistical Techniques**

i) **Ratio Trend analysis** : In this technique Past data is used for future forecasts

ii) **Econometric models** -They are also built on analysis of past data and bringing relationship between variables such as Sales , Production volume e.g. No of Patients and Number of Nurses , etc

**H Work Study Techniques :** Work study involves observation of number activities for each work, time required for each operation etc.

**5 Manpower Inventory** : Next step after forecasting manpower requirements is taking stock of present available manpower. It is called as a process of taking Manpower Inventory. In this process organization prepares the list of manpower it has. This is done in terms of knowledge, skills ,qualification and other parameters as per organizational requirement.

**6 Job Information :** Job is a set of tasks and activities desired from a particular position. It involves collecting of various requirements for effective performance .

**7 Job Descriptions** : Preparing job descriptions for various posts.

**8 Skills Analysis :** having knowledge is not enough. One should necessary skills to do a job efficiently and elegantly. This requires skills. They could be technical skills, presentation skills, counseling skills, behaviour skills etc

## 1.6 Manpower Planning in Healthcare industry-International Scenario

### 1.6.1 Remuneration Pattern

Payment systems for medical staff also differ across the five countries

In Australia, most medical services are provided by private practitioners paid by fee-for-service with a fixed rate of reimbursement.

In France, most general practitioners and specialists in the ambulatory sector are paid fee-for-service, while staff in public hospitals are salaried

In Germany, ambulatory care is organised on the basis of office-based physicians, and in both ambulatory and hospital care medical staff are paid fee-for-service.

In Sweden and the UK, public hospital doctors are all salaried, but hospital doctors in the private sector are paid fee-for-service.

In Sweden, primary healthcare physicians are also salaried, but in the UK, a

mixed payment system exists, primarily capitation but with target payments and some fee-for-service. The payment of physicians may be one of the keys to policy development in this area. For example, it may be that fee-for-service payment discourages changes in skill mix, because if nurses or non-physician clinicians substitute for doctors in providing health interventions, doctors' income is threatened.

### 1. 6.2 Background

Health care is a labour-intensive industry, and human resources are the most important input into the provision of health care, and the largest proportion of health care expenditure. It is remarkable that the market for human resources in health care has been relatively under-researched and under-managed in all developed countries health systems.

The market for human resources in health care, like any other labour market, is made up of an interaction between demand and supply. The demand for human resources in health care is derived from patients' demand for health services, which in turn is derived from the population's demand for 'health'. These demands are assumed to be related to the overall size and structure of a population, to patient expectations of health care and to the income of society.

The supply of human resources in health care is determined by many factors, including the income and perceived status of health professionals, and the relationship between different

health professionals in terms of skill mix, and use of complements and substitutes. External factors also influence labour supply, such as the European Union's working time directive, which regulates the labour supply of doctors in specialist and training grades.

In the freely operating labour markets discussed in textbooks, wages (the price of labour) adjust to create an equilibrium, matching the supply of and demand for labour. The market for health care human resources is not a free market for several reasons.

The planning of supply of and demand for human resources in health care is subject to two major weaknesses:

1. It is typically narrow in its focus, examining medical practitioners in isolation. This approach ignores the interrelationships between health professionals, and substitution possibilities (e.g. using nurse anesthetists in place of physicians).

2. It is often mechanistic and supply side driven, on account of the following factors

- Changes in participation
- Medical school intake
- Deaths in service
- Retirements
- Immigration
- Emigration

Workforce planners implicitly assume that existing systems of health care delivery are efficient, and make forecasts based on these existing systems, assuming current staff: patient ratios are appropriate. Often it is assumed that the historical supply of human resources, particularly physicians, reflects demand. This ignores the fact that physicians can influence the services they provide and other health care services used by patients (Barer 2002). Workforce planners also usually make incomplete costing of their forecasts. In most health care systems, workforce planning is expenditure driven, with resources dictating the volume of provision. However, the planners use crude physical numbers of staff, whose links to accurate financial forecasts are often frail.

Health care policy makers may recognise the need for more integrated planning of human resources in health care, in particular making management of human resources responsive to system needs and design, instead of vice versa.

**1.7 NABH Norms**

National Board for accreditation of Hospitals and Healthcare (NABH) prescribes following norms

**HRM.1** The organization has a documented system of human resource planning

**Objective elements**

a) The organization maintains an adequate number and mix of staff to meet the care, treatment and service needs of the patient.

b) The required job specifications and job description are well defined for each category of staff.

c) The organization verifies the antecedents of the potential employee with regards to criminal negligence background.

**1.8 Actual Study of Manpower planning in Pune Hospitals**

It has been observed that Manpower planning in hospitals depends on number of beds as capacity of Hospitals is measured in terms of number of beds. However as regards how many beds a hospital should have depends on various other factors such as philosophy of management , type of expertise they possess, other resources they have, etc.

**Patients** ;Hospital is a service industry there are no saleable commodities. This service need can not be artificially created .Secondly it is related to human health. As such no hospital can predict as to how many patients would visit on any day.

**Operations**

In hospitals operations to be performed can be classified in two major categories

1. Out patient department popularly known as OPD-where patients meet doctors and get medicine/prescription after diagnosis by the Doctor and stay is not required.
2. In patients department IPD. i.e in which is patients are admitted in hospitals .for further treatment
3. Operations and Surgeries

Further in IPD there are many categories , ICU , CCU ,Patients undergoing treatment in wards , Maternity Unit, Opthmology , ENT etc.

Basic purpose of this study was not at all to study Hospital Administration but to study manpower planning related issues.

**1.9 Standards for Manpower**

Because of these multiple factors and possibility of different combinations it is very difficult to scientifically calculate manpower in specified numbers . There are no prescribed standards/norms about actual number of personnel required.

**Category**

**1.9.1Manpower for Medical college with hospitals** .Norms are decides by Medical Council of India. It divides college into number of teaching Units and major departments are

a) Medicine b) Gynecology c) Accident and Trauma Care d) Pathology e) Radiology f) Cardiac Unit g) Opththmology h) Chest related diseases j)Psychiatry etc.
Basic objective being teaching manpower is divided in teaching faculty and hospital staff. Accordingly number of doctors and their ratio to students is decided by Medical council of India .It consists of following categories

Professors and HOD.
Associate professors
Assistant professors

Their qualification and experience are prescribed by. Medical council of India

**1.9.2 Manpower in Hospitals**

On Hospital Front major category of employment is
1 Qualified Doctors
2 Surgeons
3 Nurses
4 Technicians

5 Ward boys and other auxiliary staff

6 Other support staff

**1.9.3 Number required**

Bombay Nursing Act covers engagement of nurses in hospitals.

Ratio is 1:1 for critical care and 1:5 for non critical areas

**1.9.4 System of Manpower planning**

During pilot survey most of the hospitals claim that they have a scientific system of manpower planning .But this job is entrusted to HR Department

Questionnaire circulated and discussed with employees respondents were related to system of manpower planning ,Recruitment strategies and selection criteria

**1.9.5 Further classification** Manpower in Hospitals can be divided in three categories

1 Employed Professionals ; Doctors, Technicians and other support staff

2 Contractual workers : Whose services are hired to support main function such as Security, House Keeping, Laundry, Ambulance Service etc

3 Consultants : These are highly experienced professional Doctors who are not employed by the hospital but they visit hospitals on fixed days for medical investigations ,treatment and diagnosis of patients or for operations

**2 Statistical Validity of Data Collection**

Pilot study was conducted in different hospitals in Pune .Out of pilot study questionnaire first 15 questions related to manpower planning and were subjected to statistical analysis

Alpha was developed by Lee Cronbach in 1951:"_ > .9 – Excellent, _ > .8 – Good, _ > .7 – Acceptable, _ > .6 – Questionable, _ > .5 – Poor, and_ < .5 – Unacceptable" .

It should also be noted that while a high value for Cronbach's alpha indicates good internal consistency of the items in the scale. Results of this analysis was as under

**Reliability Statistics**

| Cronbach's Alpha | No of Items |
|---|---|
| .774 | 15 |

As cronbach's alpha value is .774 in above data set thus it is accepted for further research.

1. Cronbach L. Coefficient alpha and the internal structure of tests. Psychomerika. 951;16:297-334.

**3 Conclusion**

After detailed of visits to different hospitals, it was found that pattern followed by different hospitals vary as per their requirement and philosophy. There are many uncertainties involved in planning. It has been observed that manpower planning in hospitals is highly complex . Number of beds, availability of specialists, Medical equipments installed, Outsourcing decisions, Norms of Medical council of India, Norms of State medical Council, University Norms for college related hospitals affect manpower planning .Consultants play a major role in working of hospitals. Quality conscious managements have been resorting to accreditation by NABH. All these factors make it very difficult to estimate exact number personnel required by a particular hospital. One of the HR Experts expressed that if number of patients go down we cannot retrench the staff, as we do not know that it would be required again. Also medical emergencies could crop up at any point of time. To handle such uncertain some Hospitals are using their past experience to decide manpower while others prefer to keep excess staff. Manpower supply has become very dynamic. Hence there is a tendency to keep a certain minimums number as per plans already made. They are not frequently revised. In case they require additional people, normally they prepare a justification note and obtain approval from CEO. In case of urgent requirements consultants are hired by hospital. Hence further in depth study is highly necessary. Medical tourism is an upcoming venture which will add new dimensions to the subject of manpower planning .

**References**

**1 Introduction to Planning and Managing Human Resources**

Planning and Managing human Resources William J Rothwell and H.C. Kazanas Jaico Publishing House,2nd Edition2010

2 **Planning human resources in health care: Towards an economic approach**

**An international comparative review** March 2003 By Karen Bloor Alan Maynard University of York

**National informants:**

**Australia**: Professor Jane Hall, Centre for Health Economics Research and Evaluation

**France**: Dr Phillippe Ulmann, Conservatoire National des Arts et Metiers de Paris

**Germany**: Dr Oliver Farhauer, Technical University Berlin and European Centre for Comparative Government and Public Policy

**Sweden** : Professor Bjőrn Lindgren, Lund University

**3 Strategic Integration of Recruitment Practices and Its Impact on Performance in Indian Enterprises** Ashok Chanda, Trapti Bansal & Rupal Chanda

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4 Human Resource Planning " Getting people Ready, Frank F and Anne Smith willing and able to revitalize their community." 1994. pages 105-178

5 "Human Resource Planning : Dipak Kumar Bhattacharya " Excel Books, New Delhi2006

6 'HR Forecasting and Planning" Paul Turner Jaico publishing house, Mumbai 2008, Page 55-2007

7 Essentials of Human Resources management and Industrial Relations P Subba Rao Himalaya Publishing House, 2008 Edition

8 Eric W Vetter ; Manpower Planning for High Talent Personnel , Bureau of Industrial Relations Graduate school of Business Administration ,The University of Michigan, Ann Harbour, 1967 P15

9 Michael Armstrong Handbook of Personnel Management
Kogan Page Ltd, London,1976. Page 16