Internship Training

at

International Institute of Health Management Research, New Delhi

Review and Restructuring of Modules of First Year and Second Year (Hospital Stream) of Post Graduate Diploma in Health and Hospital Management at IIHMR, New Delhi

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<u>Introduction</u>

1.1   India is a country of 1.3 billion people which is growing each day. We are a country that faces all the seasons and weathers and has a geography that is conducive to several diseases. This coupled with the fact that our large population lives in conditions that are not healthy, generates the requirement of a complex health care system to meet health needs which are diverse from several countries and are ever evolving due to globalization and migration. The challenge therefore is to ensure the protection and promotion of public health by not only keeping abreast with the health needs but also to plan for the future to cater for new and emerging health requirements as they arise.

1.2   Public health is concerned with prevention and control of disease and promotion of health of the population. While the word 'health' per se evokes a close relationship between a doctor and his patients, it is much more complex and involves multifarious players, equal in importance amongst them being the manager who in addition to attending to health care, coordinates with medical and non-medical agencies to ensure a smooth operation. The manager plays the role of a leader who not only has an in depth knowledge of management skills but is also well aware of health policies and issues as well as, the intricacies of health care and is able to synergies management skills with effective health care delivery which is both cost effective and qualitatively supreme. This is feasible only through health focused management education which imparts training in public health and business so as to generate leaders who can meet the health management challenges of the twenty first century.

1.3   IIHMR, New Delhi established in 2008, is a premier institute which prepares health care managers through a syllabus specifically tailored to impart a concomitant health and

management education. While management involves planning, organizing, accounting, staffing, marketing, public relations, human resource management, epidemiology, biostatistics etc health care is oriented towards ensuring the good health of the population. An amalgamation of the two at IIHMR intends to produce leaders who can play an effective role in ensuring public health through hospitals, clinics, nursing homes, insurance companies and organisations undertaking health research, health related IT development or health related data collection. The syllabus at IIHMR, New Delhi is focused to meeting this end. However, the increased focus on public health in India due to the missed Millennium Development Goals, commitment to achieving the Sustainable Development Goals, emerging new technologies in health care and renewed government focus on meeting the health needs of the neglected and impoverished population, an increasing geriatric population requiring special health care focus, increasing health awareness and changing disease pattern coupled with increasing medical tourism has necessitated a review of the curricula and restructuring the same to meet the emerging demands and challenges and to give the students at IIHMR an edge over others so as to be able to meet the demand of availability of approximately3,88,800 jobs in the health care sector by 2022 as predicted by the Bureau of Labor Statistics in one of its reports.

PART II

CHAPTER 1

OBEJCTIVES AND METHODOLOGY

Aim

1.4   To prepare health care management leaders to meet the health challenges of the twenty first century by developing an innovative program through review and merit based restructuring of the curricula of Post Graduate Diploma in Hospital and Health Management at IIHMR, New Delhi.

Objective

1.5   To critically analyse the Modules of Post Graduate Diploma in Hospital and Health Management being imparted by IIHMR, New Delhi with a view to: -

   1.5.1   Suggest addition of new modules/deletion of existing modules, keeping in mind the current health management policy and practices separately for First Year and Second Year Health stream.

   1.5.2   Review the modules and identify overlapping topics across modules separately for First Year and Second Year Hospital stream for deletion/retention.

   1.5.3   Review and suggest addition and deletion of topics for each module, separately for First Year and Second Year Hospital stream for deletion/retention.

1.5.4 Suggest appropriate sequencing of modules separately for First Year and Second Year Hospital stream for deletion/retention.

Methodology

1.6 The review of the curricula involved a multi-pronged approach. This entailed an interaction with various stake holders i.e. the students and the agencies/organisations that employ them after graduation. Additionally, the curriculum of institutes providing MPH or MBA in Health Care Management or Public Health was also reviewed. The following was undertaken: -

1.6.1 Interaction with students of First year and Second PGDHM at IIHMR, New Delhi so as to obtain their view on the syllabus.

1.6.2 Interaction with placement interviewers of certain select organisations who had taken placement interviews of second year students in order to ascertain from them the requirements that would better prepare the students to meet the challenges of the industry.

1.6.3 A comparison of the syllabus with that of certain select institutes who provide similar or near similar training was also carried out so as to ensure that IIHMR, New Delhi is not only observing the trend of the sector but is also providing the students with that something extra which provides them an edge over others.

1.6.4 In order to understand the trend in the world and how IIHMR stands in comparison, a review of Masters in Health Care Management at Harvard T.H Chan School of Public Health and Masters in Public Health in Health Care Management at Yale School of Management vis-à-vis the curricula offered at IIHMR, New Delhi was also carried out.

1.6.5 Carrying out a detailed study of the current curricula with a view to identify overlap of topics, recommend proper sequencing of modules, deletion of topics no longer relevant and addition of new ones as required within each module and recommending addition/deletion of modules.

CHAPTER 2

MODULE ADDITION/DELETION

PGDHM Curriculum at IIHMR, New Delhi

2.1.   PGDHM syllabus at IIHMR, New Delhi is covered over two years with the first year being dedicated to topics that are common to all students and the second year offering specialization in health management, hospital management and health IT. This review shall restrict itself to the syllabus of the first year and second year health management. Broadly the syllabus can be classified into topics related to management and another set of topics which deals with health. These can be further classified as under: -

Table 2.1: First year and Second Year (Health Stream Syllabus at IIHMR, New Delhi

Ser	First Year	Second Year (Health Stream)
2.1.1	Health and Development	Marketing management of Hospital services
2.1.2	Health Policy and Health Care Delivery System	Operation Management in Hospital
2.1.3	Essentials of Hospital Services	Orgaisation and Management of Clinical Services with Field Visit
2.1.4	Essentials Epidemiology	Orgaisation and Management of Support Services with Field visit
2.1.5	Research Methodology	Health Insurance and Managed Care
2.1.6	Health Information Management	Hospital Management Information System
2.1.7	Biostatistics	Clinical Epidemiology
2.1.8	Demography and Population Science	Strategic Planning and Management in Healthcare
2.1.9	Principles of Management	Hospital Planning and Facility Management
2.1.10	Human Resource Management	Quality Management and Patient Safety in Hospitals

Ser	First Year	Second Year (Health Stream)
2.1.11	Financial Management & Accounting	Big Data Analytics
2.1.12	Marketing Management	Organisation and Management of Utility Services with Field Visit
2.1.13	Organizational Behavior	Material and Equipment Management
2.1.14	Essentials of Health Economics	Data management and Analysis
2.1.15	Communication Planning and Management	CSR/Business Ethics
2.1.16		Legal Framework
2.1.17		Entrepreneurship
2.1.18	-	Disaster Management

2.2. In addition to the above, the following is also offered: -

    2.2.1 **Non-Graded Induction Courses**.

        2.2.1.1   Human Process Lab.

        2.2.1.2   Communication Lab.

        2.2.2.3   Essentials of Computer Technology.

    2.2.2 **Electives**.   Students can opt for two out of the following: -

        2.2.2.1   Corporate Social Responsibility.

        2.2.2.2   Entrepreneurship.

        2.2.2.3   Big Data Analysis.

        2.2.2.4   Business Ethics.

        2.2.2.5   Urban Health.

2.3 **Comparison**. A comparison of the syllabus with the syllabus of other institutes in India and reputed foreign institutes providing similar course is as below: -

Table 2.2: Comparison of Curriculum at Various Institutes/Universities

S No	TISS	IIHMR	SYMBIOSIS	AMITY	AIIMS	Harvard School of Public Health (Masters in Health Care Management)
I Year						
1	Foundation Course	Health and Development	Organizational Behaviour	Introduction to Hospitals and Hospital Administration	Principles and Practice of Hospital Management & Administration	Organisational Behaviour
2	Philosophy of Research	Health Policy and Health Care Delivery System	Human Resource Management	Development of Management concepts- principles, communication	Health Care Management, Epidemiology- Biostatistics..	Transitioning to Physician Leadership
3	Social Science Perspective on Health	Essentials of Hospital Services	Management Accounting	Organizational Behaviour	Hospital Administration Legal aspects and Ethics Quality Management : Quality maintenance, Total Quality Management Medical Audit, Social Control, Consumerism	Operations Management
4	Basic economics & Health economics	Essentials of Epidemiology	Materials Management	Materials Management in Hospitals	Hospital Services Management Clinical Services	Health Care Negotiation and Conflict resolution

S No	TISS	IIHMR	SYMBIOSIS	AMITY	AIIMS	Harvard School of Public Health (Masters in Health Care Management)
5	Research Methodology (Quantitative Method)	Research Methodology	Business Communication	Accounting for Mangers	Project Work	Marketing
6	Research Methodology (Qualitative Method)	Health Information Management	Fundamentals of Hospital Planning and Engineering Issues	Quantitative Techniques for Management in Hospital Administration	Field Visit Report	Environmental health and Epidemiology
7	Financial Management and Accounting	Biostatistics	Planning & Management of Hospital Clinical Services	Marketing in Hospitals Business	Viva-voce	Social and Behavioural determinants of health
8	Organisational Behaviour	Demography and Population Science	Planning & Management of Hospital Supportive Services	Communication - I	Biostatistic	Communication Skills for Managers
9	Introduction to Public Health	Principles of Management	Principles and Practices of Management	Behavioural Science - I	Epidemiology	Financial Accounting and Analysis
10	Introduction to Epidemiology	Human Resource Management	IT Applications for Healthcare	Foreign Language - I		Cost Accounting and Analysis
11	Evolution and Administration of Health Services	Financial Management & Accounting	Research Methodology	Epidemiology		Marketing Health Services
12	Introduction to Biostatistics	Marketing Management	Biostatistics & Basic Epidemiology	Human Resource Management		
13	Health Financing Including Health Insurance	Organizational Behavior	Creativity & Innovation	National Health Policy		
14	Management of National Health Programs	Essentials of Health Economics	Integrated Disaster Management	Health Economics		

S No	TISS	IIHMR	SYMBIOSIS	AMITY	AIIMS	Harvard School of Public Health (Masters in Health Care Management)
15	Elective foundation	Communication Planning and Management	Essentials of Marketing Management	Research Methology		
16	Open Elective	-	Introduction to Financial Mgmt			
S No	TISS	IIHMR	SYMBIOSIS	AMITY	AIIMS	Harvard School of Public Health (Masters in Health Care Management)
17			An Overview of Pharmaceutical Sector	Quality of Patient Care		
18			An Overview of Health Insurance	Biomedical Waste Management		
19			Health Regulatory Environment	Health Care Delivery		
20			MIS for Hospitals	Business Communication – II		
21			Business Statistics	Behavioural Science II		
22			Operations Research	Foreign Language II		

S No	TISS	IIHMR	SYMBIOSIS	AMITY	AIIMS	Harvard School of Public Health (Masters in Health Care Management)
23			An Overview of Clinical Research			
24			Non Profit Sector in Healthcare			
25			Study Report :Public health Sector Undertakings / Healthcare Govt. agencies			
26			Conceptualization & Management of Events – I			
	Second Year					
27	Community Engagement in Health	Marketing management of Hospital services	Strategic Management	Hospital Planning	Accounting and Finance Administration in Health Care System	Managing Information in Health Care
28	Supply Chain Management	Orgaisation and Management of Clinical Services with Field Visit	Operations Research	Planning & Organization of Clinical Services	Health System and Information Technology,	Quality Improvement in Health Care
29	Health Management Information System	Orgaisation and Management of Support Services with Field visit	Health Economics	Planning & Organization of Non Clinical Services	Organisational Behaviour	Financial Management of Health Care Institutions
30	Health Planning	Health Insurance and Managed Care	Organisation & Administration of Super Specialty Hospitals	Planning & Organization of Utility Services	Materials Management in Hospitals	Health Care Management Practicum
31	Gender Health and Rights	Hospital Management Information System	Project Management	Business Communication - III	Project Management in Health Sector	Competitive Strategy

S No	TISS	IIHMR	SYMBIOSIS	AMITY	AIIMS	Harvard School of Public Health (Masters in Health Care Management)
32	Human Resource Health	Clinical Epidemiology	Community Health	Behavioural Science - III	Hospital House Keeping	Provider Payment Systems and Policy
33	Health Legislation	Strategic Planning and Management in Healthcare	Management of Operations	Foreign Language - III	Emerging Trends in Health Care Management	Field Project in Quality Improvement
34	Disciplinary Elective (Any Two) Mental Health	Hospital Planning and Facility Management	National Health Programme	Case Study - I	Dissertation	
35	Urban Health	Quality Management and Patient Safety in Hospitals	Comparative Health Systems	Internship	Viva –voce (Comprehensive)	
36	Health Insurance	Big Data Analytics	Conceptualization and Management of Events – II	Hospital Hazards,		
37	Advanced Biostatistics	Organisation and Management of Utility Services with Field Visit	Business Analytics	Health Insurance, Medical Audit		
38	Strategic Management in Health Care	Material and Equipment Management	Healthcare IT-1	Recent Trends in Hospitals, Entrepreneurship & Consultancy		
39	Operations Management and Organisational Development	Data management and Analysis	Healthcare Insurance 1	Hospital Information Systems		

S No	TISS	IIHMR	SYMBIOSIS	AMITY	AIIMS	Harvard School of Public Health (Masters in Health Care Management)
40	Internships – One in 1st Year	CSR/ Business Ethics	Pharmaceutical Management 1	Business Communication - IV		
41	Internship and Dissertation in 2nd Year	Entrepreneurship	Quality & Accreditation in Healthcare Sector	Behavioural Science - IV		
42		Operations Management in Hospital	Corporate Governance and Ethics	Foreign Language - IV		
43		Disaster Management	Project	Case Study - II		
44			Dissertation	Dissertation		
45			Introduction to Entrepreneurship	Disaster Management		
46			Emerging Trends in Healthcare Sector			

Note

- ✓ **Same colours indicate similarity of syllabus amongst the compared universities/institutes**

- ✓ **Use of the symbol for percentage (%) implies that the topic is covered in Hospital Stream**

- ✓ **IIHMR, New Delhi conduct certain un-graded modules viz Essential of Computer Service, Human Process Lab and Communication Lab over a fifteen-day period with five days earmarked for each**

2.4   Johns Hopkins University, Carey Business School offers a one year full time or a two year part time Master of Science in Health Care Management. This too was reviewed but has not been tabled primarily because it is a one year full time or two year part time course where as all the courses under consideration in the Table above are two year courses. A perusal of the curricula reveals that the university offers subjects as per Table below: -

Table 2.3: Course Syllabus MS in Health Care Management at Johns Hopkins University[6]

Core Credits (20 Credits)	Health Care Depth Electives (Choose 4 Credits/2 Course Set)	Non-Health Care Depth Electives (Choose a maximum of 4 credits/2 Courses)
Accounting for Decision Making in Health Care • Frameworks for Analyzing Health Care Markets • Fundamentals of Health Care Operations • Fundamentals of Health Care Systems • Health Care Law and Regulation • Health Innovation and Evaluation • Health Marketing and Access • Health Care Organizations and Management • Providers and Payers • The U.S. Health Care System: Past, Present, and Future	• Applied and Behavioral Economics in Health Care • Biotechnology and Pharmaceuticals • Emerging Frontiers in Health Technologies and Strategies • Heath Care Financing and Financial Management • Medical Devices and Diagnostics • Negotiation in Health Care Settings • Research and Policy Seminars in Health Care • The Wire: Business Solutions for Community Health Improvement	• Accounting and Financial Reporting • Big Data Machine Learning • Consumer Behavior • Corporate Finance • Data Analytics • Decision Models •Managing Complex Project • Pricing Analysis • Strategic Human Capital

Core Credits (20 Credits)	Health Care Depth Electives (Choose 4 Credits/2 Course Set)	Non-Health Care Depth Electives (Choose a maximum of 4 credits/2 Courses)
Action Based Learning (Choose 4 Credits/One Set) • Client Consulting Practicum I and II • Biomedical Innovations Commercializing I and II • Health Policy Design and Implementation I and II • Improvement of Health Services I and II		

2.5   Carey Business School does offer a two year Masters in Health Administration [7] which has in its curriculum modules which are similar to those in the curriculum of IIHMR, New Delhi. These include Statistics, Legal and Ethical Issues in Health Services Management, Managed Care and Health Insurance, Fundamentals of Management for Health Care Organizations, Budgeting and Financial Management in Healthcare Organisations, Quantitative Tools for Managers, Organizational Leadership, Financial Accounting, Strategic Planning, Health Management Information Systems, Human Resources in Health Organizations, Marketing in Health Care Organizations, Medical Practice Management, Healthcare Quality and Patient Safety: Management Perspectives, Current Topics in Public Health, Health Economics and Epidemiologic Inference in Public Health.

View of Employing Organisations/Agencies

2.6   An interaction was carried out with certain agencies/organisations which had undertaken placement interview for placement of students in their agencies/organisations. These included of NHSRC, ZS Associates, Helpage India and Apollo Munich. The organisations were of the opinion that while the students had knowledge the application was lacking and improvement in certain aspects would help them perform better professionally. The reasons ascribed by them were as under: -

    2.6.1   The knowledge was bookish and expression at times was weak.

    2.6.2   Students lacked self-confidence.

    2.6.3   Students lacked the ability to apply their knowledge practically for e.g How to establish a Health Camp?

    2.6.4   Students were unable to handle situational leadership requirements i.e. they were unable to think and apply themselves to handling tight, suddenly emerging situations through innovative/ out of box solutions.

    2.6.5   Students were lacking in general awareness about the health care sector and were unaware and not up to date with the latest developments

    2.6.6   Students were weak in Biostatistics and basic understanding of Epidemiology.

<u>Results</u>

2.7   A comparison of the curricula above shows that the course content of PGDHM at IIHMR, New Delhi is a focused syllabus as compared to others in India and indeed is better structured and focused since it is dedicated to three different streams of health, hospital and health IT management (health & health IT management have not been compared due to the scope of this report). When we consider TISS which conducts a two year course of MPH in Health Administration, the course covers aspects of Health Management but unlike IIHMR, New Delhi does not give a student the foundation of hospital administration primarily because TISS runs a different course on Hospital Management. Symbiosis Institute of Health Sciences offers a two year MBA in Health and Hospital Management. A scrutiny of the syllabus shows that it is quite exhaustive. This is mainly because Symbiosis is offering a combined Health and Hospital Management curriculum which in IIHMR, New Delhi is divorced during the second year. The result is a large number of modules to be covered (49 including electives), which appears to be far too many.

2.8   When the course syllabus at IIHMR is equated with that being imparted by Harvard T.H Chan School of Public Health and Yale School of Public Health, a difference emerges with a number of courses being conducted at Yale and Harvard not being conducted at IIHMR, New Delhi. This can be attribute primarily to both striking a balance to catering to their national requirements, while at the same time being viable enough to suit the large number of international students who attend these courses. Interestingly the syllabus offered at Johns Hopkins University is quite similar to the one being offered at IIHMR, New Delhi whether in the one year full time or two year part time Master of Science in Health Care Management or Masters in Health Administration though not in totality. For e.g. their two year Masters in Health Administration covers nearly all the topics that are covered at IIHMR except for

Research Methodology while the same is offered in the Master of Science in Health Care Management albeit as an elective.

2.9   A comparison of the modules, without comparing the topics that are covered within the modules, resonates the similarity of core modules across institutes whether national or international although not in all cases. For e.g. Yale conducts modules of Epidemiology and Research Methodology, as well as, Biostatistics, but Harvard only conducts the modules of Epidemiology whereas Johns Hopkins does not cover Research Methodology. TISS covers Research Methodology in great detail followed by Biostatistics (two modules Introduction to Biostatistics and Advanced Biostatistics) and Epidemiology whereas Symbiosis covers Research Methodology with Epidemiology and Biostatistics being covered as one module, Research module preceding the one of Epidemiology and Biostatistics. Yale (which offers modules on Research Methodology, as well as, Epidemiology) conducts Epidemiology before Research Methodology. Modules which are common in the compared institutes but are not conducted at IIHMR, New Delhi include of Negotiation and Conflict Resolution and Emerging Trends/ Current happenings in health care.

2.10   When the comments of various placement interviewers at Para 2.6 above is considered, it is evident that they have experienced a lack of some skills amongst the students that they interviewed, ingraining which, they felt would contribute to students performing better in their professional life.

<u>Discussion</u>

2.11   The contents of Tables 2.2 and 2.3 show that the topics being covered at IIHMR, New Delhi are comprehensive. They meet the current requirements of educating and skilling Health Care Managers so that they can perform. The curricula in fact is better than other institutes in India as shown in Table 2.2 and is indeed better structured and focused since it is dedicated to three different streams of health, hospital and health IT management while at the same time establishing a base knowledge of hospital functioning which is not so in many others. TISS conducts a course in Masters in Health Administration, which also covers some aspects of Health Management but not as comprehensively as done at IIHMR and none of Health IT Management. This could also be because it offers courses on Hospital Administration, Epidemiology and Health Policy as independent masters programs. The two year MBA in Health and Hospital Management offered by Symbiosis Institute of Health Sciences though comprehensive and in great detail, since it covers various aspects of both health and hospital management, does not offer Health IT as a separate stream of management which today owing to the IT interface requirement for smoother work performance and timely as well as better health care delivery is a must, and is a stream offered as a stream for specialization in the second year at IIHMR, New Delhi. Also, the 46 modules and three Electives on offer (one to be chosen) which totals to 47 modules besides internship and project, appears to be content heavy which makes comprehension tenuous.

2.12   The international universities under reference in Table 2.2 viz University of Harvard, T.H Chan School of Public Health and University of Yale, School of Public Health, offer a syllabus a which is understandably quite different from that being offered at IIHMR, New Delhi which is owing to both these universities primarily catering to their country's requirement while

at the same time striking a balance so as to cater to International Students and be attractive to them. But unlike at IIHMR, nothing which is related to Hospital is covered for the reason that the course under comparison is for health care. The syllabus of MS in Health Care Management at Johns Hopkins University covers a variety of topics from health care policy to financing and health care systems. A question arises as to what is it that they do differently. Firstly, the course content is less which implies that education is in depth and comprehension is better since there is greater time available because of the lesser number of modules. Secondly, since they also cater to international students who it is assumed shall be going back to their countries, certain modules are interesting. These are Determinants of Health, Ethics in Public Health, Negotiation in Health Care Settings, Emerging Trends in Healthcare Sector (also offered by Symbiosis Institute of Health Sciences), Innovative Problem Solving and Design Thinking, Leadership, Social Justice and Health Equity. These are modules which are not in vogue in Indian institutes. All or few can be included not because they are being offered at Yale or Harvard Universities or at Johns Hopkins but because their applicability is true to the Indian health milieu, particularly modules like Leadership, Innovative Thinking, Negotiation and Emerging Trends in Health care. Modules of Determinants of Health, Ethics in Public Health and Social Justice and Health Equity too are significant in our national setting but have to be weighed against leadership etc. for conduct and also against whether including them would make the course syllabus intensive. When the comments of various placement interviewers at Para 2.6 above is considered, they have highlighted few aspects in which our students lack viz situational leadership and knowledge of current happenings in health care sector. Inclusion of the modules of Leadership, Negotiation and Emerging Trends/ Current Happenings in the Health Care Sector will help tide over these issues and help the students at IIHMR, New Delhi be better managers in their professional life. Of course including these would imply that the existing course has to be finely scrutinized to eliminate modules/topics which are not viable any longer

or are repetitive in nature so as to enable time for covering these topics while at the same time ensuring that the syllabus remains India centric being a country with diverse needs different from those in developed countries. Thus, the Modules of Essentials of Computer Services, Communication Lab and Human Process if deleted would make available 15 working days which can be utilised in covering the modules recommended to be added. The topics to be covered under these modules shall be covered subsequently.

2.13   Furthermore, the modules of Health Information Management and Principles of Management can be deleted. Health Information Management can be deleted since its topics are not of relevance and those which are, can be covered as part of Health Management Information System or as part of the new module of Emerging/Current Trends in the Health Care Sector. Principles of Management can be deleted because its topics, except Introduction to Management and Evolution of Management, can be covered in other modules such as Human Resource Management, Strategic Management, Leadership and Supply Chain Management or are being covered in them. The topics of these modules which can be deleted and others which are required to be shifted to other modules or are already being covered in them shall be indicated in Chapter 3 and 4. The ungraded modules viz Essential of Computer Service, Human Process Lab and Communication Lab should be deleted as these do not really serve a purpose being more in the nature of an ice breaker within the students, giving them some education about computers which most students today are already aware of and undertaking certain exercises which being ungraded have no record and are thus of no consequence to the students personal development and progression since in the absence of individual grading, the Professors handling the students after these ungraded modules have no idea about the capabilities and qualities of the students.

2.14   The aspect of students lacking self-confidence and their restricted ability to express themselves, as indicated by interviewers, can only be applicable to some students and not everybody. Nevertheless, it is essential that this lacunae is addressed. One way of doing so could be by ensuring that each and every student makes a presentation of at least two to three slides independently or as part of a group within the first few weeks of the course (as part of presentations during modules) so that their verbal expression and tentativeness during public speaking can be ascertained. These students can then be focused upon and be given more opportunities than others through the duration of the course. Another option is to include a five day module of Mock Interview at the beginning of the course where after those identified as weak can be interviewed again and again through the duration of the course. Alternatively, while the ungraded modules have been recommended to be deleted, instead of them or Mock Interview a Student Induction program primarily to ascertain their communication capabilities can be conducted within the first few weeks or in the first week itself for a suitable duration but of not more than five days. This should be graded so that the professors are able to identify students with weak communication skills/comprehension/analytical ability who can then be honed through mock interview and greater attention to through repeated opportunities for class participation and presentations. The methodology of conducting this exercise shall be discussed in a subsequent Chapter.

2.15   In as far as Electives are concerned the four electives that are offered at IIHMR, New Delhi limit the choices available to the students and they should be offered more number of electives. This should be viewed against the availability of Professors for conducting these Electives. The Electives that can be offered are listed at Chapter 5.

CHAPTER 3

OVERLAPPING TOPICS ACROSS MODULES

3.1   The syllabus of PGDHM at IIHMR, New Delhi as mentioned at Para 2.1 and 2.2 can actually be grouped under the heads of health, finance, managerial functions and so on. In order to ascertain which topics, if any, in the various modules are overlapping, it would only be prudent that the core curriculum is well categorised for some modules can be classified   under more than one category. For e.g. health insurance can be categorized under both health and finance.

3.2   **Categorisation of Modules**. The various modules can be classified into categories as under: -

Table 3.1: Categorisation of Modules at IIHMR, New Delhi

Ser No	Category	First Year	Second Year (Hospital Stream)
3.2.1	**Leadership**		
3.2.1.1		Organizational Behavior	Strategic Planning and Management in Healthcare
3.2.1.2		Communication Planning and Management	
3.2.2	**Managerial**		
3.2.2.1		Principles of Management	Marketing Management of Hospital
3.2.2.2		Human Resource Management	Hospital Management Information System
3.2.2.3		Marketing Management	Hospital Planning and Facility Management
3.2.2.4		Health Information Management	Orgaisation and Management of Clinical Services
3.2.2.5			Orgaisation and Management of Support Services

Ser No	Category	First Year	Second Year (Hospital Stream)
3.2.2.6			Orgaisation and management of Utility Services
3.2.3	**Financial**		
3.2.3.1		Essentials of Health Economics	Health Insurance and Managed Care
3.2.3.2		Financial Management and Accounting	Material and Equipment Management
3.2.4	**Public Health**		
3.2.4.1		Health and Development	Disaster Management
3.2.4.2		Health Policy and Health Care Delivery System	Health Management Information System
3.2.4.3		Essentials of Hospital Services	Quality Management and Patient Safety in Hospitals
3.2.4.4			Legal Framework in Health Care
3.2.5	**Analytical**		
3.2.5.1		Essentials of Epidemiology	Clinical Epidemiology
3.2.5.2		Research Methodology	Big Data Analytic
3.2.5.3		Biostatistics	Operation Management in Hospital
3.2.5.4		Demography and Population Science	Data Management and Analysis

3.3   The above modules are conducted for a number of days which can be a week or two weeks.

Module wise syllabus is given in the tables below (less the Assignments): -

Table 3.2: Syllabus of Modules under Leadership Category

Ser No	Category	First Year	Second Year (Hospital Stream)
3.3.1	**Leadership**		
3.3.1.1		**Organizational Behavior (3)** • Introduction to OB • Changing Context • Attitudes and Job Satisfaction	**Strategic Planning and Management in Health Care (3)** • Strategic Management Introduction

		• Personality • Work Motivation • Perception • Roles and Role Effectiveness • Transactional Analysis • Foundations of Group Behaviour • Understanding Work Teams • Conflict management • Leadership styles and Theories • Communication at workplace • Organizational Culture and Climate • Learning Process	• Leadership Concepts and Skills • Mission and Vision • Environment Analysis • External Analysis • Internal Analysis • Business Level Strategy • Corporate Strategy • Blue Ocean Strategy • Strategic Evaluation and Control • Strategy Implementation • Value Chain Analysis
3.3.1.2		**Communication Planning and Management (3)** • What is Communication? • Shanon Weaver Model of communication • Health Belief Model (Berlo's Model) • Health Communication Model (Self Theory) • Understanding non-verbal communication • Behavioural change communication • Interpersonal communication • Intrapersonal communication • Types of Counselling • P Process • Johari Window • Media Advocacy • Memo Writing • E-Mail Writing • Public Speaking • Effective Listening	

Table 3.3: Syllabus of Modules under Managerial Category

Ser No	Category	First Year	Second Year (Hospital Stream)
3.3.2	**Managerial**		
3.3.2.1		**Principles of Management (3)** • Introduction to Management • Evolution of Management • Planning • Organising • Controlling • Human Resource Management • Supply Change Management • Types of Leadership • Motivation • Management by Objective • Movie – Evolution of Management Thought	**Marketing Management of Hospital (3)** • Sales in Healthcare • Advertising and Promotion • Assignment - Develop an advertising & d hospital • Corporate and TPA • Overview of International Marketing • Digital Marketing in Healthcare • Pricing • Marketing Finance • Pricing assignment • Hospital Consulting • Diabetes month campaign/Cervical cancer screening campaign • Evaluation - Innovation in Healthcare Sales - Learning & differentiating strategies from Non Healthcare industry
3.3.2.2		**Marketing Management (3)** • Understanding of Marketing Management, Concepts of Marketing • CRM - Role Play • Marketing Strategic Planning • Marketing Planning	**Hospital Management Information System (3)** • Introduction • Concepts on Health and Hospital Information Management • HMIS architecture • HMIS organization • HMIS structure

Ser No	Category	First Year	Second Year (Hospital Stream)
		• MIS and Market Research • Consumer Market and Buying Decision Process • Business Markets • Competitive Strategies • Product • Price • Place • Promotion	• Information collection for HMIS • Information processing for HMIS • Applications of HMIS • Assignment Presentation
3.3.2.3		**Health Information Management (3)** • Introduction • Standards for HIE • Health Information Management • EHR / PHR / PHI • M Health, Tele-home care, IoT • Change Management and Capacity Building • Safety and Ethics related to Digital Health • Regulations and User Demand • Career Options	**Hospital Planning and Facility Management (1.5)** • Overview of healthcare as an enterprise, history and development of hospitals, hospital planning –proposal writing • Hospital Planning: Feasibility Study- Financial and Technical evaluation • Detailed Project Report • Hospital Design- Master Plan • Hospital Design- Functional analysis • Hospital Design- Architectural Design of clinical and support services • Services- OPD/Diagnostics/ Radiology/Emergen-cy/OT/ Central Sterile/Pharmacy/ Engineering service system plan/Laundry/ Dietary and Kitchen • Hospital Design- Architectural Design of Utility services and equipment Plan

Ser No	Category	First Year	Second Year (Hospital Stream)
3.3.2.4		**Human Resource Management (3)** • Introduction to HRM • Human Resource Planning (HRP) • HRP activity • Job Analysis • Recruitment • Selection • Induction , Placement , Internal Mobility and Separations • Training and Development • Career and Succession Planning • Compensation Administration • Incentives and Employee Benefits • Employee Grievances and Discipline • Collective Bargaining • Employee empowerment and participation • Strategic HRM • Personnel records and administration • Work Life balance • New concepts in HRM	**Orgaisation and Management of Clinical Services (3)** • Out Patient depart (OPD) including Pediatric, antenatal and poly clinic • In patient department (IPD) • Emergency/ Disaster Management • Organisation and Management of Nursing Services • Organisation Management of Operation Theater • Group Work and Presentation
			Orgaisation and Management of Support Services (3) • Laboratory Services, Quality Assessment in Clinical Laboratory System. • Transfusion Services • Radio diagnosis and imaging services • CSSD • Quality Assurance • Group work & Assignment

Ser No	Category	First Year	Second Year (Hospital Stream)
			Orgaisation and management of Utility Services (3 • Hospital Waste Management • Linen and Laundry Services • Mortuary services • Basic & Allied Engineering Services • Pharmacy Services • Hospital Dietary Services

Table 3.4: Syllabus of Modules under Financial Category

Ser No	Category	First Year	Second Year (Hospital Stream)
3.3.3	**Financial**		
3.3.3.1		**Essentials of Health Economics (3)** • Health Economics: An Introduction • The Production of Health • Overview of Medical Care sector • Demand for Health Care • Health Financing in India • National Health Insurance Reforms • Economic Evaluation of Public Health Interventions • Cost of Health Services: Concepts and Estimations • Costs vs. revenues: Break-even Analysis • Market Failure and Government Intervention	**Health Insurance and Managed Care (1.5)** • Introduction to Health Insurance • Social Health Insurance • Pricing in Hospitals and Insurance • Employee State Insurance Scheme in India • Health Insurance in India, including IRDA and Regulatory Framework • Community Health Insurance • Corporate Business and Insurance • RSBY and Ayushman Bharat National Health Protection Scheme (AB-NHPS) • Managed Healthcare

Ser No	Category	First Year	Second Year (Hospital Stream)
			• Advertising/ Promotion in Healthcare and Insurance • Public Relations in Healthcare and Insurance • Private Health Insurance in India • TPA • Sales/Marketing in Healthcare and Insurance • International Experiences in Healthcare and Insurance • Community Health Insurance in India
3.3.3.2		**Financial Management and Accounting (3)** • Overview • Techniques of Capital Budgeting • Marginal Cost • Break Even and CVP Analysis • Working Capital Management • Standard Costing and Variance Analysis	**Material and Equipment Management(3)** • Role of Materials in Hospitals • Material Management Cycle • Functions • Problems and Issues • Role of Materials Manager • Purchase of materials • Purchase processes • Principles of purchases • Forecasting • Contract Agreements • Receipt Storage • Cold Chain Management • Distribution of materials • Material Handling • Inventory Control • Codification • Standardization • Value Analysis • Equipment Management-Purchase Cycle-Demand • Process- Procurement-Repair and Maintenance • Field Visit

Ser No	Category	First Year	Second Year (Hospital Stream)
			• Equipment Audit • Condemnation of Equipment • Role of IT in material management • Stores Preservation • Stores Accounting • Foreign Purchase and Import of Medical Devices • Central Drug Standard Control Organization • Legal and Ethical Aspects of Material Management • Material Management Performance • Quality Control • Prescription Audit • Rational Use of Drugs • Group work and Presentations

Table 3.4: Syllabus of Modules under Public Health Category

Ser No	Category	First Year	Second Year (Hospital Stream)
3.3.4	**Public Health**		
3.3.4.1		**Health and Development (1.5)** • Introduction • Concepts of Health and Well Being • Health Indicators • Determinants of Health • Development and Health • Human Development Index • Concept of Disease • Levels of Prevention & Modes of Intervention • Health in International Development Agenda • MDGs to SDGs	**Disaster Management (1.5)** • Overview • Disaster Management in India • Planning during Disaster Response • Disease Management • Food and Nutrition • Water and Sanitation • Incident Command System • Mass Casualty Management • Disaster Management in Hospitals • Leadership for Disaster and Health

Ser No	Category	First Year	Second Year (Hospital Stream)
		• Organization of Health Care Delivery in India	• Planning during Disaster Response • Disease Management • Communications • Mass Casualty Management • Special Exercises • Presentations
3.3.4.2		**Health Policy and Health Care Delivery System (3)** • Introduction • Definition of health system • Health system components and functions • Building blocks of health care system • Current status of health human resources and infrastructure and related issues • Health management information system and relevant issues • Evolution of health care delivery system in India – glimpse of health care in British India • Lessons learnt from health services in British India • Health care delivery system in post independent India – key features • Health care delivery system in rural India – SC, PHC, CHC, District hospitals – roles and responsibilities of health functionaries • Organizational set up of health care in India • Different stakeholders in provision of health care. • Financing for health and out of pocket expenditure • Concept of universal health coverage and related issues	**Health Management Information System (3)** • Concepts in Information Management • Basics of Computer • Data and Database Management • HMIS – Organization and Structure • HMIS – Decision Making • Information Needs and Indicators • Data Collection and Generation • Data Transmission and Flow of Information • Data Processing • Data Quality • Applications and Use of HMIS • Evaluation of MIS Overview of EMR, EHR & HIS

Ser No	Category	First Year	Second Year (Hospital Stream)
		• Different committees on health • National Health Policy-2017 • Nutrition Policy and National Population Policy • National Health Mission (NRHM/ NUHM) • NUHM and urban health in India • Challenges posed by urban health and special features of NHM • National Programs – Rationale and Overview • NVBDCP, NACO, RNTCP, NLEP • NPCDCS • Universal Health Coverage (UHC) – concepts and overview • Financing for UHC, National Health Protection Scheme • Health in All Policies (HiAP) – rationale and overview **Time 55 hrs Course Syllabus64 hrs. Thus needs to be curtailed**	
3.3.4.3		**Essentials of Hospital Services (1.5)** • Hospitals and Hospital as a System • Overview of Health Sector • Role of Hospital Administrator • Planning and Organization of Out Patient Services • Accident and Emergency Services • Progressive Patient Care • Planning and Organizing ICU • Planning and Organization of Hospital Laboratory Services	**Quality Management and Patient Safety in Hospitals(3)** • Introduction • Approach to Quality Management • Quality Improvement • Tools for Quality Improvement • Clinical Governance • NQAS • Never Events • Developing a Quality Culture • Patient Safety • NABH Standards

Ser No	Category	First Year	Second Year (Hospital Stream)
		• Planning and Organization of Hospital Imaging Services • Planning and Organization of Medical Records Department • Hospital Monthly Statistical Bulletin • Inpatient Services • Nursing Care and Ward Management • Operation Theater	Accreditation National and International
3.3.4.4			**Legal Framework in Health Care (1.5)** • Legal Issues in Medical Care • Legal Issues in Hospitals and Management of Medico Legal Cases • Day to Day Problems in Dealing with Patients • Industrial and Food and Drug Acts Applicable to Hospitals • Classification of Offences • Consent • Confidentiality • Criminal Trials in India • Professional Ethics • Consumer Protection Act • RTI Act • Medical Termination of Pregnancy Act • Clinical establishment Act • Mental Health Care Act • Sexual Harassment of Women at Work Place • Violence Against Medical Profession

Table 3.5: Syllabus of Modules under Analytical Studies Category

Ser No	Category	First Year	Second Year (Hospital Stream)
3.3.5.1		**Essentials of Epidemiology (3)** • What is Epidemiology • Types of Epidemiology Studies • Cross Sectional Design • Cohort • Case Control • Introduction to Surveillance • Surveillance and IDSP • Evaluation of Surveillance • Clinical Epidemiology • Strobe • Outbreak Investigation	**Clinical Epidemiology (1.5)** • Understand and apply principles of infectious disease epidemiology, • The sources of data in hospital epidemiology including hospital surveillance and death certification, the importance of ICD, • The steps in conduct of Outbreak investigation, • Design analytic studies for application in hospital and investigation of outbreaks, • Calculate measures of association in the form of Odds ratio and Relative risk, • Interpret results of a study in terms of Bias, Chance and Confounding, • Describe the concepts of Screening for disease and its application.
3.3.5.2		**Research Methodology (3)** • Foundations of Research • Problem Identification & Formulation - Research Question • The Review of Literature • Research Design and Types of Research • Sampling and Sampling Design • Ethical issues in research • Methods of Data Collection • Data Analysis • Interpretation of Data and Report Writing	**AT VARIANCE WITH SLIDES TAUGHT** • Introduction to Health Research • Identifying Research Problem • Ethical Issues in the Research • Developing a Research Proposal • Overview of Research Design • Research Tools and Data Collection Methods

Ser No	Category	First Year	Second Year (Hospital Stream)
			• Sampling Methods • Designing Survey Tools • Bias and confounding • Introduction to Program Evaluation • Gender Health Research • Data Management • Analyze Information for Drawing Inferences • Report writing • Content, coverage and design of NHFS 4
3.3.5.3		**Biostatistics (3)** • Introduction to Statistics and Biostatistics • Data Sources • Types of Variable • Common Measurements: Rates, Ratio, Proportion, Percentage and Index • Presentation of data • Descriptive statistics • Concept, Purpose and Type of Sampling • Sample Size Determination • Correlation & Regression • Simple & Multiple Regression Analysis • Concept of Basic Probability • Probability Distribution • Confidence Interval • Testing of Hypothesis • Test of Significance: Chi Square & T Test	**Operation Management in Hospital (3)** • Introduction to Operations Research • Concepts and Definition of Operations Research • Linear Programming • Solution by Graphical Method • Special Cases and Limitations • Transportation Problems • Assignment Problems • Integer and Goal Programming • EOQ Models • Quantity Discount Models • ABC Analysis • PERT • CPM • Queuing Theory • Waiting Time
3.3.5.4		**Demography & Population Science (3)** • Intro Population Science and Demography including sources of demographic data • Demographic Transition (Population structure and composition, Age sex pyramid)	**Data Management and Analysis (1.5)** • Public Health Data • Public Health Data Sources • Introduction to Database • Data Coding, Editing and Transformation • Data Quality

Ser No	Category	First Year	Second Year (Hospital Stream)
		• Population Characteristics (Age dependency and implications, Quality of data and data appraisal) • Concept of fertility (Basic measures of fertility, Divorce and remarriage) • Mortality Definition (Sex and age patterns of mortality, basic measures of mortality) • Life Table techniques • Migration Type, Pattern, Consequences, Migration and health • Ratios, rates and Proportion • Population Growth rates	• Preparing Data for Analysis • Tabular Presentation • Graphic Presentation • Introduction to SPSS • Data Entry and Database Creation • Importing Database and Overview to Database Management Options
			• Descriptive Analysis • Cross Tab and Chi Square Test • T Test • Correlation Analysis • Simple Linear Regression • Analysis

Results

3.4   From Tables 3.1 to 3.5 above it is discernible that the PGDHM Course at IIHMR, New Delhi covers a total of 30 modules, of which 15 are conducted in the first year and another 15 are conducted in the second year. In addition, there are electives and certain non-graded topics whose syllabus has not been discussed above. These modules can be categorized under the heads of those related to leadership, managerial, finance, public health and analytical.

Considering that the scope of the report is restricted to first year and second year health stream only, other modules concerning Hospital Management and Health IT Management have not been included. The topics that are covered in each module show that except for a very few modules such as Legal Framework in Health, Marketing Management, Human Resource Management and Supply Chain Management there are topics within other modules that are overlapping in nature either in whole or as part of a topic. The modules with overlapping topics are as under: -

Table 3.6: Overlapping Topics in Modules

Ser	Topic	Overlapping Module	Covered as
3.4.1	Leadership Related		
		Organisational Behaviour (Ist Year)	Leadership Styles and Theories
		Strategic Planning (Ist Year)	Leadership Concepts and Skills
		Principles of Management (Ist Year)	Types of Leadership
		Disaster Management (IInd Year)	Leadership for Disaster
		Strategic Management (IInd Year)	Capacity Development for Leadership Skills
3.4.2	Communication		
3.4.2.1		Organisational Behaviour (Ist Year)	Communication at Work Place (includes of topics mentioned in next row)
		Communication Planning and Management (Ist Year)	• What is Communication? • Understanding non-verbal communication • Interpersonal communication • E-Mail Writing • Effective Listening
		Strategic Management (IInd Year)	Capacity Development for Leadership Skills (includes of enhancing listening skills)
3.4.3			

Ser	Topic	Overlapping Module	Covered as
3.4.3.1	Research and Epidemiology	Research Methodology (Ist Year)	Problem Identification & Formulation - Research Question
		Research Methodology (Ist Year)	• Identifying Research Problem • Developing a Research Proposal
3.4.3.2		Research Methodology (Ist Year)	• Ethical issues in research
		Epidemiology (Ist Year)	Various Study Designs
3.4.3.3		Research Methodology (Ist Year)	Interpretation of Data and Report Writing
3.4.4		Research Methodology (Ist Year)	• Bias and confounding • Sensitivity, Validity and Reliability (as part of Research Design)
		Epidemiology	• Bias and confounding • Sensitivity, Validity and Reliability (as part of Research Design)
3.4.6.2		Biostatistics (Ist Year)	• Types of Variable • Rates, Ratio, Proportion, Percentage and Index
		Data Management and Analysis (IInd Year)*	Preparing Data for Analysis
		Demography (Ist Year)	Rates, Ratio, Proportion, Percentage and Index
3.4.6.3		Biostatistics (Ist Year)	• Correlation & Regression • Simple & Multiple Regression Analysis • Testing of Hypothesis • Test of Significance: Chi Square & T Test
		Data Management and Analysis (IInd Year)*	• Cross Tab and Chi Square Test • T Test • Correlation Analysis • Simple Linear • Regression Analysis
3.4.6.4		Data Management and Analysis (IInd Year)*	Data Quality
		Health Management Information System	Data Collection/Processing (Data Quality covered as a part of this topic)
3.4.6.5		Research Methodology (Ist Year)	Methods of Data Collection

Ser	Topic	Overlapping Module	Covered as
3.4.7	Graphic Presentation Tabular Presentation	Biostatistics (Ist Year)	Descriptive Statistics (Types of Graph), Presentation of Data (Tabular Presentation)
		Data Management and Analysis (IInd Year)*	Graphic Presentation, Tabular Presentation
3.4.12	Health Management Information System	Health Policy and Health Care Delivery System (Ist Year)	Health Management Information System and Relevant Issues
		Health Management Information System (IInd Year)	Above topic covered in various parts in Health Management Information System
3.4.13	Financing for health and out of pocket expenditure	Health Policy and Health Care Delivery System (Ist Year)	Financing for health and out of pocket expenditure
		Essentials of Health Economics in India (Ist Year)	Health Financing in India
3.4.14	Disease Concept	Health and Development (Ist Year)	Concept of Disease
		Epidemiology (Ist Year)	Types of Epidemiological Study (Above topic covered as a part of this topic)
3.4.15	Health Care Delivery Organisation	Health and Development (Ist Year)	Organization of Health Care Delivery in India
		Health Policy and Health Care Delivery System (Ist Year)	• Health care delivery system in rural India – SC, PHC, CHC, District hospitals – roles and responsibilities of health functionaries • Organizational set up of health care in India
		Essentials of Hospital and Hospital Services (Ist Year)	Overview of Health Sector
3.4.16	MDG and SDG	Health and Development (Ist Year)	MDGs to SDGs
		International Health (IInd Year)	MDGs to SDGs
3.4.19	Disease Surveillance Program	Epidemiology (Ist Year)	Integrated Disease Surveillance Program and Surveillance
3.4.21	Ayushman Bharat	Health Insurance and Managed Care	RSBY and Ayushman Bharat National Health Protection Scheme (AB-NHPS)

Ser	Topic	Overlapping Module	Covered as
3.4.22	Motivation	Principles of Management (Ist Year)	Motivation
		Organisational Behaviour (IInd Year)	Work Motivation
3.4.23	Prevention & Intervention	Health and Development (1st Year)	Levels of Prevention & Modes of Intervention
		Essentials of Epidemiology (1st Year)	What is Epidemiology (includes of Levels of Prevention and Modes of Intervention as a sub part)

Note : * Topics of Data Management and Analysis though similar to Biostatistics cannot be deleted since they are the computer based application of the topics covered in Biostatistics

Discussion

3.5   It is evident from the foregoing that there are a large number of topics in different modules over the first year and second year Health Streams which are overlapping. A careful examination will show that in some cases the topics overlap because the topic in the second year is related to the previous year's module for e.g. Epidemiology in first year is related to Applied Epidemiology in second year Health Stream or for instance Research Methodology in the first year is related to Health Survey Research Methods in the second year health stream. Since the related modules are conducted in two different years it becomes important that certain topics are repeated for recall and comprehension. But there are some topics within the first year and some within the second year health stream where the modules are not related i.e. one module is not a precursor to the other. For e.g. Health Policy and Health Care Delivery System (Ist Year) and Essentials of Health Economics in India (Ist Year) are unrelated modules, yet there is an overlap of topics.

3.6   The overlap of topics should be seen from the perspective of their impact on the course duration. The PGDHM at IIHMR New Delhi has a two-year schedule from July to May of the next to next year. This affords a total of 730 days (considering PGDHM 18 being conducted from 02 Jul 18 to 30 Jun 2020) for the course. The time which is available for imparting instructions either in class or through visits is as under: -

Table 3.7 : PGDHM Course Class Based Duration for Education

Ser No	Event	Number of Days	Cumulative Reducing Balance (Days)
3.6.1	Total Duration	**730**	**-**
3.6.2	Non-working Saturday and Sunday	208	522 (Working Days)
3.6.3	Holidays 2018, 19 and 20 (2018 – From 02 Jul; 3 Days 2019 – 7 Days 2020 – Up till 31 Jan; 01 days)	11	511 (Working Days)
3.6.4	Diwali Break 2018, 19 and 20 (2018 – 5 days 2019 – 1 day but on Sunday 2020 – Not applicable)	05	506
3.6.5	Sports Week (over Two Years)	10 (Working Days)	496 (Working Days)
3.6.6	Alumni Conference (over Two Years)	0 (Working Day since held on Saturday)	496 (Working Days)
3.6.7	Term and Supplementary Exams (1st Year)	30 (Working Days excluding one holiday and including 07 days no work after Supplementary exams)	466 (Working Days)
3.6.8	Term, Elective and Supplementary Exams (2nd Year)	28 (Working days excluding one holiday)	438 (Working Days)
3.6.9	Summer Internship (1st Year)	51 (Working Days) from 01 Apr to 05 Jun including 03	387 (Working Days)

Ser No	Event	Number of Days	Cumulative Reducing Balance (Days)
		days no work after Summer Internship and before Supplementary exams	
3.6.10	Dissertation Internship (2nd Year)	80 (Working Days excluding 5 days of elective and supplementary exams)	307 (Working Days)
3.6.11	Scientific Paper	22 (Working Days)	**285**
3.6.12	Number of Working Days Available		**285 (Working Days including for ungraded and elective modules)**

Note : Ser 3.6.3 onwards is excluding Saturdays and Sundays

3.7   From Table 3.6 above, it is discernible that there are in actual a total of 285 working days only which are available over a 730 days course. This may reduce/ increase by a few days due to some additional holidays/ depending upon leap year or if the course is started/ finished on different days than that taken into consideration for the purpose of calculation at Table 3.6 above. Besides, the days accounted in Table 3.6 as being available, the disruption during the placement interviews, although not reducing the number of working days effects the comprehension of the topics covered by those students who are unavailable since they are involved in facing the placement interviews. When this is considered in light of the overlapping topics it can be stated with conviction that though the topics are all of significance, if they have been already taught once they should not be taught again. Thus, the time duration of a module could be reduced or more practice could be undertaken in a particular module or a new topic could be covered within the same duration.

CHAPTER 4

ADDITION/DELETION OF TOPICS ACROSS MODULES AND THE SEQUENCE OF MODULES

4.1   The addition/ deletion of topics across the modules can be decided based on the contents of Table 3.5 in Chapter 3, the discussion at Para 3.5 to 3.7 of Chapter 3, the view of placement interviewers at Para 2.6 of Chapter 2 and the views of the students themselves. The views of the students are significant because they are an important stakeholder since what they learn and how they use their learning in their professional life will not only lead to their professional growth and result in an effective performance but also create a name for the institute i.e. IIHMR, New Delhi which is their alma matter.

4.2   **Views of Students**.   The views of students with regards to the syllabus at IIHMR, New Delhi based on inputs from them can be reduced to the following: -

   4.2.1   Topics which are similar to each other should follow each other.

   4.2.2   Modules which cover topics that shall usually have questions from, during an interview, should be covered in the latter part of the first year and the early part of the second year, so that the topics are relatively fresh. Since the topics will be relatively fresh, the students shall be able to pay attention to the modules that are underway during the placements and not neglect them because of the unavoidable requirement of spending time on relearning things owing to the modules having been conducted in the early part of the first year.

4.2.3   There should be a class on how to face an interview and if feasible mock interviews should be included in the syllabus.

4.2.4   Two modules should be imparted simultaneously, so that one module is covered pre-lunch and the other module is covered post-lunch. This would help break the monotony generated by the same module being covered through the day and through the week or two weeks.

4.2.5   The syllabus of modules with 1.5 Credit Score should facilitate learning. At present the syllabus of some modules is vast and not conducive to learning.

4.2.6   Duration of some modules such as National Health Planning, Biostatistics, Research Methodology and Epidemiology was less.

4.2.7   The module's books should be available on the day the module starts. Additional study material/ reference material should be a part of the book itself. The slides should be in consonance with the contents of the module book with the latter being an amplification of the slides.

4.2.8   As far as possible the lecturers should not be changed. If unavoidable the slides should not be as per the lecturer deputed instead but should be the same one as would have been covered by the original lecturer.

4.3   The views of the students when considered in context of the views of placement interviewers at Para 2.6 viz lack of self-confidence and general awareness in the students about the health care sector, not being up to date with the latest developments, and Table 3.5 show that there are a number of topics that should be added/ deleted.

4.4   It also flows from the requirement as projected by the students, as well as, the fact that better comprehension shall be facilitated if the modules follow a sequence where in related topics are concomitantly covered while at the same time ensuring that such topics which are required for all three streams should be accordingly covered in the first year. The present sequence of modules is as under: -

Table 4.1 : Existing Sequence of Conduct of Modules

Ser	First Year Modules	Second Year Hospital Stream Modules	Remarks
4.4.1	Essentials of Computer Services *	Operation Management in Hospital (3) ^	*Un-graded * ^ Related Modules
4.4.2	Communication Lab*	Marketing Management in Hospital (3) ^	*Un-graded ^ Related Modules
4.4.3	Human Process *	Clinical Epidemiology (1.5)%	Un-graded * % Related Modules
4.4.4	Health and Development (1.5)	Orgaisation and Management of Clinical Services (3) **$**	$ Related Modules
4.4.5	Essentials of Hospital Services (1.5) **&**	Health Insurance and Managed Care (1.5) **	& Related Modules ** Combined Module for all three streams
4.4.6	Health Policy and Health Care Delivery System (3)	Orgaisation and Management of Support Services (3) **^**	**^** Related Modules
4.4.7	Principles of Management (3)@	Strategic Planning (3)	@ Topics can be covered as part of other modules
4.4.8	Financial Management and Accounting (3)	Orgaisation and Management of Utility Services (3)	
4.4.9	Research Methodology (3)&	Quality Management and Patient Safety in Hospitals (3) @@	& Related Modules @@ Combined Module for Health and Hospital Streams
4.4.10	Communication Planning and Management (3)	Hospital Planning (1.5)	# Related Modules
4.4.11	Bio Statistics (3)#	Health Management Information System (3)	# Related Modules

Ser	First Year Modules	Second Year Hospital Stream Modules	Remarks
4.4.12	Human Resource Management (3)	Material and Equipment Management (3)	#Related Modules
4.4.13	Essentials of Epidemiology (3) #	Data Management and Analysis (1.5) **$$**	# Related Modules $$ Combined Module for Health and Hospital Streams
4.4.14	Marketing Management (3)	Disaster Management (1.5) **$%**	$% Combined Module for Health and Hospital Streams
4.4.15	Essential of Health Economics (3)	Legal Framework in Health Care (1.5)	Combined Module for Health and Hospital Streams
4.4.16	Organisational Behaviour (3)		
4.4.17	Demography and Population Sciences (3)#		
4.4.18	Health Information Management (3)		

Note: 8 (1.5 Credit Modules) x 5 Working Days Modules = 40 Days

22 (3 Credit Modules) x 10 Working Days Modules = 220 Days

03 Un-Graded Modules x 5 Working Days = 15 Working Days

03 Elective Modules x 5 Working Days = 15 Working Days

Total 1st Year = 155 Working Days (including Un-Graded Modules); 42 Credits

Total 2nd Year = 135 Working Days (including Elective Modules not graded); 36 Credits

Total = 290 Working Days (actually 285 days due to holidays) 78 Credits less summer

internship and dissertation internship

Results and Discussion

4.5   **Topics for Addition/ Deletion**.   The following aspects need to be kept in mind while deleting or adding topics: -

4.5.1   The *topic* that is *being deleted* from a particular module *should not affect the understanding*. *If* this is *so, all such topics should be re-capped within a duration of not more than one period.*

4.5.2   Several topics which have been already covered in other topics either in full or as part of the topic, have been recommended to be deleted. However, it is likely that the entire topic that is being deleted has not been covered in sum total in the topic to which it is an overlap. Thus, it is essential that when deleting a topic *the topic is reviewed to ensure that, its content not covered in the topic to which it is an overlap should be included in the topic concerned if relevant/applicable.*

4.6   The topics that can be deleted and those which can be added by shifting are given below: -

Table 4.1 : Topics for Deletion and Addition (Latter by Shifting)

Ser	Module Topic to be Deleted From/Added to	Covered as/ Duplicated in	Topic to be Added to/Covered in Module/Remarks
4.6.1	**Leadership**		
	Organisational Behaviour (Ist Year)	Leadership Styles and Theories	**Leadership Added to new Module by shifting**
	Strategic Planning (IInd Year)	Leadership Concepts and Skills	
	Principles of Management (Ist Year)	Types of Leadership	

Ser	Module Topic to be Deleted From/Added to	Covered as/ Duplicated in	Topic to be Added to/Covered in Module/Remarks
	International Health (IInd Year)	Role of Leadership	
	Disaster Management (IInd Year)	Leadership for Disaster*	
	Strategic Management (IInd Year)	Capacity Development for Leadership Skills	*** Covered in the other topics in this row**
4.6.2	**Communication**		
4.6.2.1	Organisational Behaviour (I[st] Year)	Communication at Work Place (includes of topics mentioned in next row)	Topics at Ser 4.6.2.1. and 4.6.2.2 be covered in Communication Planning and Management module only.
	Communication Planning and Management (I[st] Year)	• What is Communication? • Understanding non-verbal communication • Interpersonal communication • E-Mail Writing • Effective Listening	Topics at Ser 4.6.2.2 are recommended to be covered in Leadership Module. The portion of these topics related to communication should not be covered in these topics.
	Strategic Management (IInd Year)	Capacity Development for Leadership Skills (includes of enhancing listening skills)	
4.6.3	**Research**		
4.6.3.1	Research Methodology (I[st] Year)	• Problem Identification & Formulation - Research Question • Identifying Research Problem • Developing a Research Proposal	
4.6.3.2	Research Methodology (I[st] Year)	• Ethical issues in research • Methods of Data Collection	
		• Research Tools and Data Collection Methods	

Ser	Module Topic to be Deleted From/Added to	Covered as/ Duplicated in	Topic to be Added to/Covered in Module/Remarks
4.6.3.3	Research Methodology (Ist Year)	• Research Design and Types of Research	Cover under Epidemiology. Delete from the rest
	Clinical Epidemiology (IInd Year)	• Study Design Descriptive Studies • Study Design Experimental Studies • Study Design Case Control • Study Design Cohort	
	Epidemiology (Ist Year)	• Types of Epidemiological Studies • Study Designs	
4.6.3.4	Research Methodology (Ist Year)	Interpretation of Data and Report Writing	
4.6.3.5	Epidemiology	• Bias and confounding • Sensitivity, Validity and Reliability (as part of Research Design)	
4.6.4	**Sampling**		
	Biostatistics (Ist Year)	• Concept, Purpose and Type of Sampling • Sample Size Determination	Material on Concept, Purpose and Type of Sampling and Sample Size Determination should be covered under Biostatistics and only material not related to them be covered in the other modules
	Research Methodology (Ist Year)	Sampling and Sampling Design	
	Health Survey and Research Methods (IInd Year)	Sampling Method	
4.6.5	**Data**		
4.6.5.1	Biostatistics (Ist Year)	Data Sources	Cover under Biostatistics only * Delete only Census, SRS and NSS script
	Data Management and Analysis (IInd Year)	Public Health Data Sources	
4.6.5.2	Biostatistics (Ist Year)	• Types of Variable • Rates, Ratio, Proportion, Percentage and Index	Cover under Biostatisticss. A recap be done in other module @ Only Types of Variables and Epidemiological Thinking for Analysis
	Data Management and Analysis (IInd Year)	Preparing Data for Analysis@	
4.6.5.3	Biostatistics (Ist Year)	• Correlation & Regression	Cover topic under Biostatisctics

Ser	Module Topic to be Deleted From/Added to	Covered as/ Duplicated in	Topic to be Added to/Covered in Module/Remarks
		• Simple & Multiple Regression Analysis • Testing of Hypothesis • Test of Significance: Chi Square & T Test	
4.6.5.4	Health Management Information System (IInd Year)	Data Collection and Processing	Cover topic under Health Management Information System except Validation Tests which shall be covered under Data Management and Analysis
	Data Management and Analysis (IInd Year)	Data Quality	
Graphic Presentation & Tabular Presentation			
4.6.6	Biostatistics (Ist Year)	Descriptive Statistics (Types of Graph), Tabular Presentation	Cover topic under Biostatistics
	Data Management and Analysis (IInd Year)	Graphic Presentation & Tabular Presentation	
NHFS4			
4.6.7	Demography (Ist Year)	Content, coverage and design of NHFS4	
Demographic Transition			
4.6.8	Demography(Ist Year)	Demographic Transition – India	Cover under Demography and delete from the other Module
	Population Program Management (IInd Year)	Aging and Public Health	
Health Program			
4.6.9	Health Policy and Health Care Delivery System (Ist Year)	• NRHM • NUHM and Urban Health • NVBDCP, NACO, RNTCP, NLEP • NPCDCS	
Health in All Policies			
4.6.10	Health Policy and Health Care Delivery System (Ist Year)	Health in All Policies (HiAP) – Rationale and Overview	Cover under Health Policy and Health Care Delivery System and delete from the other Module
	International Health (IInd Year)	Health in All Policies	
Health Management Information System			
4.6.11	Health Policy and Health Care Delivery System (Ist Year)	Health Management Information System and Relevant Issues	Cover under Health Health Management Information System and

Ser	Module Topic to be Deleted From/Added to	Covered as/ Duplicated in	Topic to be Added to/Covered in Module/Remarks
	Health Management Information System (IInd Year)	Above topic covered in various parts in Health Management Information System	delete from the other Module
Financing for Health and Out of Pocket Expenditure			
4.6.12	Essentials of Health Economics in India (Ist Year)	•Health Financing in India •National Health Insurance Reforms	Cover under Essentials of Health Economics and delete from the other Module
	Health Policy and Health Care Delivery System (Ist Year)	Financing for health and out of pocket expenditure	
Disease Concept			
4.6.13	Health and Development (Ist Year)	Concept of Disease	Concept of disease covered as a part of Epidemiology. No deletion since context is different
	Epidemiology (Ist Year)	Types of Epidemiological Study	
Health Care Delivery Organisation			
4.6.14	Health and Development (Ist Year)	Organization of Health Care Delivery in India	Cover under Health Policy and Health Care Delivery System and delete from the other
	Health Policy and Health Care Delivery System (Ist Year)	• Health care delivery system in rural India – SC, PHC, CHC, District hospitals – roles and responsibilities of health functionaries • Organizational set up of health care in India	
	Essentials of Hospital and Hospital Services (Ist Year)	Overview of Health Sector	
MDG and SDG			
4.6.15	Health and Development (Ist Year)	MDGs to SDGs	Cover under Health and Development
	Program Planning, Implementation, Monitoring and Evaluation (IInd Year)	• Concept of Planning • Concept of Program • Planning and Health Planning Cycle	

Ser	Module Topic to be Deleted From/Added to	Covered as/ Duplicated in	Topic to be Added to/Covered in Module/Remarks
		• Situational Analysis- Concepts and Approaches • Health Problems and Prioritisation	
	Disease Surveillance Program		
4.6.18	Epidemiology (Ist Year)	Integrated Disease Surveillance Program and Surveillance	Cover under Epidemiology
	CPM		
4.6.19	Operations Research (IInd Year)	CPM	Cover under Operations Research and delete from the other Module
	Ayushman Bharat		
4.6.20	Health Insurance and Managed Care (IInd Year)	RSBY and Ayushman Bharat National Health Protection Scheme (AB-NHPS)	Cover under Health Insurance and Managed Care and delete from the rest
	Health Policy and Health Care Delivery System (Ist Year)	Financing for UHC, National Health Protection Scheme	
	Motivation		
4.6.21	Organisational Beahviour (IInd Year)	Work Motivation	Cover under Leadership (new module) and delete from the rest
	Principles of Management (Ist Year)	Motivation	
	Topics of Module - Principles of Management (1st Year)		
4.6.22	Introduction to Management		Delete.
	Evolution of Management		Delete
	Planning		Delete. Cover under Strategic Management
	Organising		Delete. Cover under Organisational Behviour
	Controlling		
	Human Resource Management		Delete since covered in a dedicated Module
	Supply Change Management		
	Types of Leadership		Delete. Cover under Leadership (new module)
	Motivation		

Ser	Module Topic to be Deleted From/Added to	Covered as/ Duplicated in	Topic to be Added to/Covered in Module/Remarks
	Management by Objective		Delete. Cover under Organisational Behaviour
	Movie – Evolution of Management Thought		Delete
Topics of Module - Health Information Management (1st Year)			
4.6.23	Introduction		Delete
	Standards for HIE		
	Health Information Management		Cover under Health Management Information System
	EHR / PHR / PHI		Cover under Health Management Information System
	M Health, Tele-home care, IoT		Cover under Emerging Trends in Health Care Sector
	Change Management and Capacity Building		Delete
	Safety and Ethics related to Digital Health		
	Regulations and User Demand		
	Career Options		
Progressive Patient Care			
4.6.24	Essentials of Hospital Services	Progressive Patient Care	Delete
Hospital Imaging Services			
4.6.25	Essentials of Hospital Services	Planning and Organization of Hospital Imaging Services	Reduce content to imaging devices in vogue
Conflict			
4.6.26	Organisational Behaviour	Conflict and Conflict Redressal	Delete. Cover under Negotiation and Conflict Resolution (new module)
Rational Use of Drug			
4.6.27	Logistics and Supply Chain Management	Rational Use of Drugs and Evidence Based Medicine	Delete. Not Relevant to the Module
Prevention and Intervention			
4.6.28	Health and Development (1st Year)	Levels of Prevention & Modes of Intervention	Cover under health and Development and

Ser	Module Topic to be Deleted From/Added to	Covered as/ Duplicated in	Topic to be Added to/Covered in Module/Remarks
	Essentials of Epidemiology (1st Year)	What is Epidemiology (includes of Levels of Prevention and Modes of Intervention as a sub part)	delete from Essentials of Epidemiology
Universal Health Coverage			
4.6.29	Health Policy and Health Care Delivery System (1st Year)	Universal Health Coverage (UHC) – concepts and overview	Topics are repeated within the module. Probably a typo error. Else should be covered only once
		Universal Health Coverage Concepts	
Data Collection Methods			
4.6.30	Research Methodology (Ist Year)	Methods of Data Collection	Cover under Research Methodology. Only that portion not covered in Research Methodology should be covered in Health Survey and Research Methods
	Health Survey and Research Methods (IInd Year)	Research Tools and Data Collection Methods	
Topics of Module : Health Insurance and Managed Care			
4.6.31	Health Insurance and Managed Care	Advertising/ Promotion in Healthcare and Insurance	Delete since not core to understanding Health Insurance. Also, the number of topics are too many to cover within a one week module
		Public Relations in Healthcare and Insurance	
		Sales/Marketing in Healthcare and Insurance	
		International Experiences in Healthcare and Insurance	
Criminal Trial			
4.6.32	Legal Framework in Health Care	Criminal Trials in India	Delete

Addition of New Topics and Reason for the Same

4.6   **Artificial Intelligence**.   Artificial Intelligence should be included as a topic as part of the modules on Evolving Trends in the Health Care Sector. Addition of this topic is made essential since Artificial Intelligence is set to revolutionise the health care sector and is

already doing so. While medical applications such as robotic surgery, diagnosis etc are already happening another field of application is in virtual nursing and work flow and administrative tasks. As such therefore it can be introduced as a topic so that students are aware of its significant inroad into the health sector and how it can be exploited for effective health care.

4.7   **Manpower Audit in Hospital**.   This topic should be added to Human Resource Management since like recruitment, another important function which the Hospital Manager has too undertake is to carry out a periodic review of the justification for employment of every employee of the hospital and if required shed the manpower that is not required either due to better employment of others or due to incorrect initial estimation of the requirement of recruitment. This is a skill more essential for those who get employed as managers in the private sector.

4.8   **Communication Planning and Management**.   Two of the learning objectives of this module are Develop a Health Communication Plan and Strategy and Develop Matrix of Targeted Behaviour, Audience, Key Messages, Media Choice, Indicators of Change. These are however, not covered and should be included for an important role of the health care manager is the ability to communicate with the population which becomes all the more important particularly during a disaster or an epidemic. These topics can be covered as under: -

4.8.1   **Planning Health Promotion Campaigns**
   4.8.1.1   Knowledge gap hypothesis
   4.8.1.2   Ethical implications of health campaigns
   4.8.1.3   Defining the situation and potential benefits
   4.8.1.4   Analyzing and segmenting the audience
   4.8.1.5   Establishing campaign goals and objectives
   4.8.1.6   Selecting channels of communication
   4.8.1.7   Assignment – Team Project

4.8.2 **Designing and Implementing Health Campaigns**

       4.8.2.1   Designing campaign messages

       4.8.2.2   Piloting and implementing

       4.8.2.3   Evaluating and maintaining a campaign

       4.8.2.4   Assignment – Team Project

4.8.3   To Memo and E Mail writing add writing of Business Letters Minutes, Notices and Reports

4.9   **Laws of Contract and its Management**.   An important task of the Manager is to ensure that the contract that is entered into with an employee or a supplying agency or a servicing agency and the Management of the contract can withstand legal scrutiny so that the establishment can stoutly and correctly defend itself against incorrect legal suits. As such therefore, this topic should be included as part of the modules on Legal Framework in Health Care.

4.10   Topics shall also be included on account of new modules of Leadership, Negotiations and Conflict Resolution and Emerging Trends in Health Care. These are indicated in Chapter 5.

4.11   **Syllabus of Modules with 1.5 Credit Score**.   The point raised by students with reference to the syllabus of Modules with 1.5 Credit Score is owing to the content vs the duration. Modules with a 1.5 Credit Score are covered over five working days or a total of 28 hours (5 hours and 30 minutes per day). In a day four periods (two periods of 1 hour 30 minutes and another two of one hours and 15 minutes) are conducted. If one period, every day of 1 hour 15 minutes is for practical, the total time available for theory classes then are 21 hours and 45 minutes. Considering this it is ascertained that since the syllabus of all existing modules which

are of 1.5 Credit Score can be conducted within the available time frame since the syllabus have been pruned either because of being duplicated or because of relevance or can be covered within the available teaching duration. The syllabus of Legal Framework in Health Care is however vast. Although the syllabus has been covered within the time period of 5 days, nevertheless the comprehension would be better should the syllabus be made more precise as under:-

Table 4.2 : Syllabus of Modules with Credit Score 1.5

Ser	First Year Modules	Second Year Health Stream Modules	Remarks
4.11.1	-	**Legal Framework in Health Care (1.5)** • Legal Issues in Medical Care • Legal Issues in Hospitals and Management of Medico Legal Cases • Day to Day Problems in Dealing with Patients • Industrial and Food and Drug Acts Applicable to Hospitals • Classification of Offences • Consent • Confidentiality • Criminal Trials in India • Professional Ethics • Consumer Protection Act • RTI Act • Medical Termination of Pregnancy Act • Clinical establishment Act	The topics should be reviewed for greater preciseness. For e.g. ethics, negligence, duties of doctors, Consumer Protection Act etc which are repeated under different topic heads should be covered only once. Duties of doctors, negligence of doctors can be handled over as a written or group assignment so as to reduce the content which is vast for a five working day schedule Criminal Trials in India should be deleted and instead sections of IPC and CrPC which too should be restricted to those applicable to medico legal cases/ medical profession only The topics of consent and confidentiality forms a part

Ser	First Year Modules	Second Year Health Stream Modules	Remarks
		• Mental Health Care Act • Sexual Harassment of Women at Work Place • Violence Against Medical Profession	of Ethics/Legal Issues in Medical care and should be covered as sub topics there in by recuing the content rather than as a separate topic each Mental Health Act should be covered in lesser details Violence against doctors should be covered as part of Day to Day Problem in Dealing with patients

4.12 A perusal of Table 4.1 would show that a number of topics have been deleted from various modules mainly because they are covered in another module. Due to the deletion, modules viz Principles of Management and Health Information Management are no longer required to be conducted. Furthermore, Modules of Program Planning, Implementation, Monitoring and Evaluation; Applied Epidemiology; Data Management and Analysis; Health Survey and Research Methods and Demography and Population Studies have been so curtailed due to the deletion of topics that they can be covered in conjunction with other Modules which are related to them.

4.13 The addition/deletion of modules will result in the requirement of the duration of some modules to be reduced while that of a few others are required to be increased so as to facilitate better comprehension. This also implies that the credit score shall accordingly increase or decrease. The modules whose duration is required to be increased or decreased shall be as given in the table below: -

Table 4.3 : Change in Module Duration and Credit Score

Ser	Increase/Decrease	Increase/Decrease in Credit Score	Remarks
4.13.1	Hospital Planning (1.5) ^	Increase to 3	^ Conduct for 10 Working Days
4.13.2	Health Policy and Health Care Delivery System (3) *	Increase to 4	* Conduct for 15 Working Days
4.13.3	Bio Statistics (3) #	Increase to 4	# Conduct for 15 Working Days
4.13.4	Essentials of Epidemiology (3) %	Increase to 4	% Conduct for 15 Working Days
4.13.5	Legal Framework (1.5) @	Increase to 3	@ Conduct for 10 Working Days due to deletion of topics

Note: If increasing the Credit Score is not as per AICTE guidelines, the Credit Score can remain the same with the module duration being enhanced

Sequence of Modules

4.14   The 15 topics each to be covered in the first and second year (Health stream) should be so sequenced that topics which are common to all are covered within the first year as far as possible with the least number of common topics being covered in the second year. Also, common topics that may be required to be covered in the second year should preferably be covered in the early part of the second year so that students of Health and Hospital Management who attend placement interviews in the second year towards the middle of the training cycle are aware of the topics which shall enable them to face the interview for both Health and Hospital related employment.

4.15   Another important facet is to determine which module precedes the other. There are certain topics such as Strategic Management, Human resource Management etc which are topics that can be covered in isolation provided the leadership related topics have been covered. At the same time there are other topics which ought to be conducted in a proper sequence for better flow and making students erudite. For e.g. Communication, Negotiation and conflict Management should be positioned consequent to module on Leadership for both of these flow out of or as a result of a leader's role. In case of analytical modules, Research Methodology, Health Survey and Research Methods and Program Planning, Implementation, Monitoring and Evaluation; Epidemiology and Applies Epidemiology, Biostatistics, Demography and Data Management and Analysis are closely interrelated or are offshoots. A major question begging response is with regards to the Research set and the Epidemiology Set. The question is as to whether Research should be covered before Epidemiology or vice versa. Currently Research Methodology precedes Epidemiology in the first year where as in the second year (health stream) the order is reversed with Applied Epidemiology preceding Health Survey and Research Methods. In the Indian institutes that have been compared at Table 2.2 Research precedes Epidemiology where as in the international institutes compared only one offers both Research Methodology and Epidemiology where in Epidemiology precedes Research Methodology. If observed academically and practically, Research Methodology lays out how to research a problem where as epidemiology specifies the tool with which to research a problem. Therefore, Epidemiology should be covered before Research. In as far as Applied Epidemiology and Health Survey and Research Method are concerned, following the same sequence, the latter should be conducted before the former. Preferably they should be covered towards the end of the first year or at the very beginning of the second year for these are skills that employer expect the students to be knowledgeable about and therefore the closer that they

are covered to the placement dates the better shall it be for the students in terms of retention.

The sequence of modules should be as proposed below: -

Table 4.4: Recommended Sequence of Modules

<div align="center"><u>**Option 1**</u></div>

	First Year Modules	**Second Year Hospital Stream Modules**	**Remarks**
4.13.1	Leadership and Innovative Thinking (3)	Organization and Management of Clinical Services (3)	
4.13.2	Communication Planning and Management (3)	Organization and Management of Support Services(3)	
4.13.3	Negotiation and Conflict Resolution (1.5)	Organization and Management of Utility Services (3)	
4.13.4	Health and Development (1.5)	Research Methodology (3)	Combined class Health, IT and Hospital Management
4.13.5	Essentials of Hospital Services (1.5)	Hospital Planning (1.5)	
	Mock Interviews (5 Working Days)	Emerging Trends/Current Happening in the Health Sector (1.5)	
		Mock Interviews an hour each every alternate week or as required after class for a minimum of five times)	
	45 Working Days	50 Working Days	
	Term Exam	**Term Exam**	
4.13.6	Health Policy and Health Care Delivery System (4.5)*	Operation Management in Hospital (3)	* Conduct for 15 Working Days
4.13.7	Financial Management and Accounting (3)	Strategic Planning (3)	
4.13.8	Human Resource Management (3)	Health Insurance and Managed Care (1.5)	

	First Year Modules	**Second Year Hospital Stream Modules**	**Remarks**
4.13.9	Essential of Health Economics (3)	Quality Management and Patient Safety in Hospitals (3)	
4.13.10	Marketing Management (3)	Marketing management of Hospital Services(3)	
4.13.11		Elective (5 Working days)	
	Mock Interviews an hour each every alternate week or as required after class for a minimum of five times)	Mock Interviews an hour each every alternate week or as required after class for a minimum of five times)	
	55 Working Days	50 Working Days	
	Term Exam	**Term Exam**	
4.13.12	Bio Statistics (4.5)#	Health Management Information System (3)	#Conduct for 15 Working Days
4.13.13	Demography and Population Sciences (1.5)	Quality Management and Patient Safety in Hospitals (3)	
4.13.14	Data Management and Analysis (1.5)	Elective	
4.13.15	Essentials of Epidemiology (4.5)**%**	Elective	%Conduct for 15 Working Days
4.13.16	Clinical Epidemiology (1.5)	Disaster Management (1.5)	
4.13.17	Organisational Behaviour (3)	Legal Framework in Health Care (1.5)	
4.13.18		Emerging Trends in Health Care Sector (1.5)	
	55 Working Days (155)	45 Working Days (145)	
	Term Exam	**Term Exam**	
	Mock interviews in the ten days between supplementary exams and commencement of summer internship		
Total	155 Working Days	145 Working Days	**300 Days**

	First Year Modules	Second Year Hospital Stream Modules	Remarks
	43.5 Credits	39 Credits	**82.5 Credit**
		Change credits if emerging trends added	

Option 2

Ser	First Year Modules	Second Year Hospital Stream Modules	Remarks
4.10.1	Leadership and Innovative Thinking (3)	Hospital Planning(3) ^	^ Increased to two week and credit of 3.
4.10.2	Communication Planning and Management (3)	Organization and Management of Clinical Services (3)	
4.10.3	Negotiation and Conflict Resolution (1.5)	Organization and Management of Support Services (3)	
4.10.4	Health and Development (1.5)	Organization and Management of Utility Services (3)	
4.10.5	Essentials of Hospital Services (1.5)	Essentials of Health Economics(3)	@ Combined class Health and Hospital Management
	Mock Interviews (5 Working Days)	Mock Interviews (5 Working Days)	
	45 Working Days	55 Working Days	**15c**
	Term Exam	**Term Exam**	
4.10.6	Health Policy and Health Care Delivery System (4.5)*	Operation Management in Hospitals (3)	* Conduct for 15 Working Days
4.10.7	Financial Management and Accounting (3)	Strategic Planning (3) $	$Combined class Health and Hospital Management
4.10.8	Human Resource Management (3)	Health Insurance and Managed Care (1.5) &	&Combined class Health and

Ser	First Year Modules	Second Year Hospital Stream Modules	Remarks
			Hospital Management
4.10.9	Organisational Behaviour (3)	Quality Management and Patient Safety in Hospitals (3) !	! Combined class Health and Hospital Management
4.10.10	Marketing Management (3)	Material and Equipment Management (3)	
4.10.11		Elective (5 Working days)	
	Mock Interviews an hour each every alternate week or as required after class for a minimum of five times)	Mock Interviews an hour each every alternate week or as required after class for a minimum of five times)	
	55 Working Days	50 Working Days	**13.5 c**
	Term Exam	**Term Exam**	
4.10.12	Bio Statistics (4.5)#	Health Management Information System (3)	#Conduct for 15 Working Days
4.10.13		Marketing management of Hospital Services(3)	
4.10.14	Data Management and Analysis (1.5)	Elective	Shift from Second Year
4.10.15	Essentials of Epidemiology (4.5)**%**	Elective	%Conduct for 15 Working Days
4.10.16	Clinical Epidemiology (1.5)	Disaster Management (1.5) *@	Shift from Second Year
4.10.17	Research Methodology (3)	Legal Framework in Health Care (1.5)	
4.10.18		Emerging Trends in Health Care Sector (1.5)	
	55 Working Days (155)	45 Working Days (130)	**10.5 c**
	Term Exam	**Term Exam**	
	Mock interviews in the ten days between		

Ser	First Year Modules	Second Year Hospital Stream Modules	Remarks
	supplementary exams and commencement of summer internship		
Total	155 Working Days	150 Working Days	**305 Days***
	43.5 Credits	39 Credits	**82.5 Credit**

Option 3

Ser	First Year Modules	Second Year Hospital Stream Modules	Remarks
4.10.1	Leadership and Innovative Thinking (3)	Strategic Planning and Management in Healthcare (3)	New Inclusion in Syllabus
4.10.2	Negotiation and Conflict Resolution (1.5)	Marketing Management of Hospital (3)	New Inclusion in Syllabus
4.10.3	Communication Planning and Management (3)	Hospital Planning and Facility Management (1.5)	
4.10.4	Organizational Behavior (3)	Orgaisation and Management of Clinical Services (3)	
4.10.5	Human Resource Management (3)	Orgaisation and Management of Support Services (3)	
4.10.6	Marketing Management (3)	Orgaisation and management of Utility Services (3)	@ Combined class Health and Hospital Management
	Mock Interviews (5 Working Days)	Mock Interviews (5 Working Days)	
	60 Working Days **16.5**	60 Working Days	**16.5**
	Term Exam	**Term Exam**	
4.10.7	Essentials of Health Economics (3)	Health Insurance and Managed Care (1.5)	***** Conduct for 15 Working Days
4.10.8	Financial Management and Accounting (3)	Material and Equipment Management (3)	$ Combined class Health and Hospital Management

Ser	First Year Modules	Second Year Hospital Stream Modules	Remarks
4.10.9	Health and Development (1.5)	National Health Programs (1.5)	
4.10.10	Health Policy and Health Care Delivery System (3)	Quality Management and Patient Safety in Hospitals (3)	*@Combined class Health and Hospital Management
4.10.11	Essentials of Hospital Services (1.5)	Legal Framework in Health Care (1.5)	
4.10.11		Elective (5 Working days)	
	Mock Interviews an hour each every alternate week or as required after class for a minimum of five times)	Mock Interviews an hour each every alternate week or as required after class for a minimum of five times)	
	40 Working Days **12**	40 Working Days	**10.5**
	Term Exam	**Term Exam**	
4.10.12	Essentials of Epidemiology (3)	Health Management Information System (3)	
4.10.13	Clinical Epidemiology (1.5)	Disaster Management (1.5)	
4.10.14	Biostatistics (3)	Elective	
4.10.15	Demography and Population Science (1.5)	Elective	
4.10.16	Data Management and Analysis (3)	Research Methodology (3)	#$Combined class Health and Hospital Management
4.10.17	--	Operation Management in Hospital (3)	(&) Combined class Health and Hospital Management
4.10.18	--	Legal Framework in Health Care (1.5)	
	40 Working Days (140) **12**	50 Working Days (150)	**12**
	Term Exam	**Term Exam**	
	Mock interviews in the ten days between supplementary exams and		

Ser	First Year Modules	Second Year Hospital Stream Modules	Remarks
	commencement of summer internship		
Total	140 Working Days	150 Working Days	**290 Days***
	40.5 Credits	39 Credits	**79.5 Credit**

CHAPTER 5

REVIEW AND RESTRUCTURING OF THE CURRICULA OF PGDHM AT IIHMR, NEW DELHI

5.1   The preceding chapters are a review of the PGDHM at IIHMR, New Delhi. They consider the first year syllabus and the second year syllabus (only of Hospital Management) with a view to validate the syllabus to the industry or trend viability so that the students passing out from IIHMR, New Delhi not only meet the current requirement of the health care sector but are also geared to meet the emerging requirements and in addition have an edge over their compatriots so as to be able to perform better.

5.2   While the current syllabus is up to the mark when compared with various institutes in India such as Tata Institute of Social Sciences and some foreign universities such as Yale, Harvard and Johns Hopkins, there never the less are certain modules/topics which merit deletion and a few which need to be added. Furthermore, when the views of stakeholders to include the students and the sector which employs them is taken into consideration, there is a pressing need to ensure that the requirements projected by them are met.

5.3   With the foregoing requirement, the review was done to suggest addition/deletion of modules; to identify topics that are overlapping across the various modules; addition/deletion of topics; and sequencing of modules.

5.4   **Modules Recommended to be Added/ Deleted**.   The PGDHM syllabus is covered over 730 days, but having provided for internships, exams, co-curricular activities and holidays, in actual only 285 working days are available to cover the 78 Credit Score syllabus. Any addition/deletion of modules or topics should not only ensure that the timeline is adhered to but also that doing so should not erode the comprehension of the module/topic. The modules that can be added/ deleted are as under: -

5.4.1   **Modules Recommended to be Added**.

5.4.1.1   **Leadership and Innovative Thinking**.   This topic be included as a separate module to contain topics pertaining to leadership theory, challenges to the leader as a professional and personal challenges; operational challenges and opportunities and the leader's role in governance and health care. Leadership related topics in the various modules should be culled and then collated under this common module. Topics related to innovative thinking to train the future leaders in making decisions based on the available team ability, time constraints and resource situation should be covered. This shall also bridge the gap of Situational Leadership which placement interviewers found students to be weak in. The topics to be covered within the module are mentioned in Table 5.2

5.4.1.2   **Negotiation and Conflict Resolution**.   The importance of this module is in the fact that organisational conflict is a given and the manager ought to be able to handle it in a manner as to not adversely affect organsiational functioning and patient care. The students should be imparted theoretical and practical knowledge of negotiation and conflict resolution with particular emphasis on analytical skills, negotiation techniques and conflict resolution so

that they can identify the causes of conflict, analyse disputes and use methods to prevent and resolve conflict. The topics to be covered within the module are mentioned in Table

5.4.1.3   **<u>Emerging Trends/Current happenings in the Health Sector</u>**. Health care is continuously evolving for the fight against disease and to maintain good health is eternal. Thus, it is essential that the students are up to date with what is happening in the health care sector. While they should inculcate the habit of staying abreast through personal readings, a structured module shall bring all the students at par. This should also meet the requirement of employers who found the students lacking in this aspect. The course content shall be dynamic for changes are ever occurring. However some topics such as Artificial Intelligence, new technologies in hospital care etc can be included. The topics to be covered within the module are mentioned in Table 5.2

5.4.1.4   **<u>Mock Interviews/Student Induction</u>**.

5.4.1.4.1   **<u>Mock Interviews</u>**. Most students undertaking the course have usually not faced an interview and do so for the first time when they face their first placement interview. As such there is a lot of anxiety and tentativeness as well as trepidation amongst the students

which invariably effects their performance and selection prospects. It is thus essential that a class be taken on How to face an Interview? Further, all the students should be made to undergo at least one mock interview in the early part of the first year. However, those who have been identified as being week should undergo more such interviews through the first year once in a week for an hour (for a minimum of five hours between term exams and after the class duration) and also in the second year. The gap of ten days between supplementary exams and commencement of summer internship can also be used for mock interview, thus ensuring that this time is utilised.

5.4.1.4.2 **Student Induction**. An alternative to the Mock Interview pre the first year's first exam, is the Student Induction Program. Besides enabling students to intermingle and learn, this can help identify a student's communication and analytical ability and grade it. Those who are good can be mentors to those who are not. Also, those who are identified as week can then undergo Mock Interview to improve their abilities. For this purpose, students can be divided into batches. Each batch should have a Conducting Professor and an Observing Professor with both scoring each student on a scale of ten. Depending upon the number of professors available the batch can be a minimum of 10 students. Two instill seriousness amongst students they should be informed of the aim behind the exercise and that they shall be graded. Each student should have his/her roll number clearly mentioned on a

piece of paper pinned to the chest to enable the professor to identify the student (since if the exercise is conducted at the very outset of the course, the professors shall not be aware of the name of the students). A batch should undergo two exercises. In the first exercise aimed at identifying the ability of the students to understand a topic, formulate their thoughts and express themselves, a student should be asked to pick out a topic from a common pool of hand written topics kept with the Conducting Professor, think for a minute and speak on the topic for two minutes. A professor, whether Conducting or Observing, can ask a question or two if required. The topic can be something as simple as Salt or the National Flag. Timings should be strictly adhered to and a bell be used to identify the time. In the second exercise aimed to identify the ability of a student to work as and in a team and to identify his/her state of tentativeness/inhibition, a team should be offered a topic from a batch of hand written topics kept with the conducting professor. Each student should agree to the topic. If one out of ten does not agree, another topic can be picked till such time a consensus on the topic is reached. The topics on offer should not be more than five and a time of not more than 10 minutes should be given to arrive at a consensus. This will also help identify leaders and followers. Each student should be permitted to speak on the topic as part of a discussion for not more than three minutes. Those who are dominating the conversation should be asked to not speak any longer and others who have not spoken or have spoken less should be called out to speak. The Conducting and Observing Professors can

then tally up the score given by them individually and independently to arrive at a common score for each student.

5.4.2 **<u>Modules Recommended to be Deleted</u>**.

5.4.2.1   The non-graded induction courses of Essentials of Computers, Human Process Lab and Communication Lab can be done away with for they mainly serve the purpose of breaking ice amongst the students, making them self-aware and imparting to them basic knowledge of computers which in today's world most students have.

5.4.2.2   Modules of Principles of Management which covers Human resource, Strategic, Marketing and Logistic Management should be deleted from the syllabus since these topics are covered as independent modules.

5.4.2.3   In addition the module of Health Information Management can also be deleted .

5.4.3   Once the modules have been added/deleted the PGDHM curricula shall be as under: -

Table 5.1: PGDHM Curricula after Addition/Deletion of Modules

Ser No	Category	First Year	Second Year (Health Stream)
3.2.1	**Leadership**		
3.2.1.1		Leadership and Innovative Thinking (3)	Strategic Planning and Management in Healthcare (3)
3.2.1.2		Negotiation and Conflict Resolution (1.5)	
3.2.1.3		Communication Planning and Management (3)	
3.2.1.4		Organizational Behavior (3)	
3.2.2	**Managerial**		
3.2.2.1		Human Resource Management (3)	Marketing Management of Hospital
3.2.2.2		Marketing Management (3)	Hospital Management Information System
			Hospital Planning and Facility Management
			Orgaisation and Management of Clinical Services
			Orgaisation and Management of Support Services
			Orgaisation and management of Utility Services
3.2.3	**Financial**		
3.2.3.1		Essentials of Health Economics (3)	Health Insurance and Managed Care
3.2.3.2		Financial Management and Accounting (3)	Material and Equipment Management
3.2.4	**Public Health**		
3.2.4.1		Health and Development (1.5)	Disaster Management
3.2.4.2		Health Policy and Health Care Delivery System (4.5)	Health Management Information System
3.2.4.3		Essentials of Hospital Services (1.5)	Quality Management and Patient Safety in Hospitals
3.2.4.4			Legal Framework in Health Care
3.2.5	**Analytical**		
3.2.5.1		Essentials of Epidemiology (4.5)	Clinical Epidemiology
3.2.5.2		Applied Epidemiology (1.5)	Big Data Analytic

Ser No	Category	First Year	Second Year (Health Stream)
3.2.5.3		Biostatistics (4.5)	Operation Management in Hospital
3.2.5.4		Demography and Population Science (1.5)	Data Management and Analysis
3.2.5.5		Data Management and Analysis (3)	
3.2.6	**Miscellaneous**		
3.2.6.1		Emerging Trends/Current Happenings in the Health Sector (1.5)	
3.2.6.2		Mock Interviews	Mock Interviews
	Electives		

5.5   **Overlapping Topics**.   The PGDHM curricula has a number of modules which are related and therefore there is an overlap of topics. While the overlap is because they enable comprehension of the topic, the fact also is that the overlap is the consequence of related modules not being conducted in succession but with a time gap in between which therefore necessitates that the topics are covered again.   The overlapping topics are as identified at Table 3.5.

5.6   **Addition/Deletion of Topics and Sequencing of Modules**.   From Para 5.5 it follows that the topics which are overlapping should be taught only ones and in the beginning itself so that the Modules that follow and in which these topics overlap can refer to the topic having been already covered, do a re-cap (if required) and proceed forward. The same topic covered in carious Modules should be re-prepared so that it covers all the requirements of each of the Module in which the topic is so that it can be covered holistically by the first educator and in the first instance itself. Such topics that are overlapping should then be deleted from one or more module in which it is overlapping. This besides saving on time for addition of new modules or for conduct of

practical, would also invariably result in lessening of the topics covered in the module from which the topic is deleted to the extent that a module in itself needs to be deleted. Principles of Management is thus no longer needed to be conducted as a module, as already brought out at Para 5.4 above. Comprehension can also be ensured through conducting modules in a sequence such that related modules are conducted concomitantly. Also modules from which interview questions are usually likely for the students undertaking Health stream should be conducted towards the end of the first year and the beginning of the second year so as to ensure easier recall during interviews, more so when the students are during the period also undergoing second year modules/preparing to take their term tests. The sequence of modules is given at Table 4.3. Module wise topics consequent to deletion/addition of topics is given in the Table below: -

Table 5.2: Module Wise Topics to be Covered

Ser No	Category	First Year	Second Year (Hospital Stream)
5.6.1	**Leadership**		
5.6.1.1		**Leadership and Innovative Thinking (3)** http://www.ila-net.org/communities/MIGs/EdSyllabi/Foundationsof.pdf • Leadership Styles and Theories • Leadership Concepts and Skills • Types of Leadership • Role of Leadership • Ethical Leadership • Motivation Concepts and Application • Capacity Development for Leadership Skills • Situational Leadership • Personal Development	**Strategic Planning and Management in Health Care (3)** • Strategic Management Introduction • Mission and Vision • Environment Analysis • External Analysis • Internal Analysis • Business Level Strategy • Corporate Strategy • Blue Ocean Strategy • Strategic Evaluation and Control • Strategy Implementation • Value Chain Analysis • **Planning**

Ser No	Category	First Year	Second Year (Hospital Stream)
		• Stress and Stress Management • Participative Management and Delegation • Team Leadership/Group development • Effective Decision Making and its Framework • Problem Solving, its Identification and Structuring • Investigating Ideas and Solution	
5.6.1.2		**Negotiation and Conflict Resolution** (1.5) https://london.ac.uk/courses/negotiation-and-conflict-management https://ocw.mit.edu/courses/sloan-school-of-management http://www.du.ac.in/du/uploads/departments/FMS • What is Negotiation? • Scope, Types, Styles, Tactics and Strategies of Negotiation • Distributive and Integrative Negotiation • Cultural Differences in Negotiation • Conflict and Conflict Resolution • Persuasion Principles, Strategies and Influencing Others • Conciliation and Mediation • Arbitration and Dealing with a Difficult Person • Avoiding Mis-understanding in Negotiation and Role of Trust in Negotiation • Win Win Negotition • Complaints and Criticism • Ethics in negotiation	
5.6.1.3		**Organizational Behavior (3)** • What is OB? • Diversity in Organsiations • Attitudes and Job Satisfaction	

Ser No	Category	First Year	Second Year (Hospital Stream)
		• Personality and Values • Perception and Individual decision making • Foundations of Group Behaviour • Understanding Work Teams • **Management by Objective** • Foundations of Organisation Structure • Performance Management • Organizational Culture and Climate • Organisational Change • Organisational Behavior and Changing Context • **Organising and Controlling**	
5.6.1.4		**Communication Planning and Management (3)** • What is Communication? • Shanon Weaver Model of communication • Health Belief Model (Berlo's Model) • Health Communication Model (Self Theory) • Understanding non-verbal communication • Public Speaking • Effective Listening • Interpersonal communication • Intrapersonal communication • P Process • Behavioural change communication • **Planning Health Promotion campaigns** • **Designing and Implementing Health Campaigns** • Types of Counselling • Johari Window • Media Advocacy • Memo Writing, E-Mail Writing	

Ser No	Category	First Year	Second Year (Hospital Stream)
		• **Business Letters Minutes, Notices and Report Writing**	
5.6.2	**Managerial**		
5.6.2.1		**Marketing Management (3)** • Understanding of Marketing Management, Concepts of Marketing • Marketing Strategic Planning • Marketing Planning • MIS and Market Research • Consumer Market and Buying Decision Process • Business Markets • Competitive Strategies • Product • Price • Place • Promotion	**Marketing Management of Hospital (3)** • Sales in Healthcare • Advertising and Promotion • Assignment - Develop an advertising & d hospital • Corporate and TPA • Overview of International Marketing • Digital Marketing in Healthcare • Pricing • Marketing Finance • Pricing assignment • Hospital Consulting • Diabetes month campaign/Cervical cancer screening campaign • Evaluation - Innovation in Healthcare Sales - Learning & differentiating strategies from Non Healthcare industry
5.6.2.2		**Human Resource Management (3)** • Introduction to HRM • Human Resource Planning (HRP) • HRP activity • Job Analysis • Recruitment • Selection • Induction , Placement , Internal Mobility and Separations • Training and Development • Career and Succession Planning	**Hospital Management Information System (3)** • Introduction • Concepts on Health and Hospital Information Management • HMIS architecture • HMIS organization • HMIS structure • Information collection for HMIS • Information processing for HMIS • Applications of HMIS • Assignment Presentation

Ser No	Category	First Year	Second Year (Hospital Stream)
		• Compensation Administration • Incentives and Employee Benefits • Employee Grievances and Discipline • Collective Bargaining • Employee empowerment and participation • Strategic HRM • Personnel records and administration • Work Life balance • New concepts in HRM • **Manpower Audit in Hospital**	
			Hospital Planning and Facility Management (1.5) • Overview of healthcare as an enterprise, history and development of hospitals, hospital planning –proposal writing • Hospital Planning: Feasibility Study-Financial and Technical evaluation • Detailed Project Report • Hospital Design-Master Plan • Hospital Design-Functional analysis • Hospital Design-Architectural Design of clinical and support services • Services-OPD/Diagnostics/ Radiology/Emergen-cy/OT/ Central Sterile/Pharmacy/ Engineering service system plan/Laundry/ Dietary and Kitchen • Hospital Design-Architectural Design of

Ser No	Category	First Year	Second Year (Hospital Stream)
			Utility services and equipment Plan
			Orgaisation and Management of Clinical Services (3) • Out Patient depart (OPD) including Pediatric, antenatal and poly clinic • In patient department (IPD) • Emergency/ Disaster Management • Organisation and Management of Nursing Services • Organisation Management of Operation Theater • Group Work and Presentation
			Orgaisation and Management of Support Services (3) • Laboratory Services, Quality Assessment in Clinical Laboratory System. • Transfusion Services • Radio diagnosis and imaging services • CSSD • Quality Assurance • Group work & Assignment
			Orgaisation and management of Utility Services (3 • Hospital Waste Management • Linen and Laundry Services • Mortuary services

Ser No	Category	First Year	Second Year (Hospital Stream)
			• Basic & Allied Engineering Services • Pharmacy Services • Hospital Dietary Services
5.6.3	**Financial**		
5.6.3.1		**Essentials of Health Economics (3)** • Health Economics: An Introduction • The Production of Health • Demand for Health Care • Economic Evaluation of Public Health Interventions • Cost of Health Services: Concepts and Estimations • Costs vs. revenues: Break-even Analysis • Market Failure and Government Intervention	**Health Insurance and Managed Care (1.5)** • Introduction to Health Insurance • Social Health Insurance • Pricing in Hospitals and Insurance • Employee State Insurance Scheme in India • Health Insurance in India, including IRDA and Regulatory Framework • Community Health Insurance • Corporate Business and Insurance • RSBY and Ayushman Bharat National Health Protection Scheme (AB-NHPS) • Managed Healthcare • Advertising/ Promotion in Healthcare and Insurance • Public Relations in Healthcare and Insurance • Private Health Insurance in India • TPA • Sales/Marketing in Healthcare and Insurance • International Experiences in Healthcare and Insurance • Community Health Insurance in India
5.6.3.2		**Financial Management and Accounting (3)** • Overview • Techniques of Capital Budgeting	**Material and Equipment Management(3)** • Role of Materials in Hospitals

Ser No	Category	First Year	Second Year (Hospital Stream)
		• Marginal Cost • Break Even and CVP Analysis • Working Capital Management • Standard Costing and Variance Analysis	• Material Management Cycle • Functions • Problems and Issues • Role of Materials Manager • Purchase of materials • Purchase processes • Principles of purchases • Forecasting • Contract Agreements • Receipt Storage • Cold Chain Management • Distribution of materials • Material Handling • Inventory Control • Codification • Standardization • Value Analysis • Equipment Management-Purchase Cycle- Demand • Process- Procurement-Repair and Maintenance • Field Visit • Equipment Audit • Condemnation of Equipment • Role of IT in material management • Stores Preservation • Stores Accounting • Foreign Purchase and Import of Medical Devices • Central Drug Standard Control Organization • Legal and Ethical Aspects of Material Management • Material Management Performance • Quality Control • Prescription Audit • Rational Use of Drugs • Group work and Presentations

Ser No	Category	First Year	Second Year (Hospital Stream)
5.6.4	**Public Health**		
5.6.4.1		**Health and Development (1.5)** • Introduction • Concepts of Health and Well Being • Health Indicators • Determinants of Health • Development and Health • Human Development Index • Levels of Prevention & Modes of Intervention • Health in International Development Agenda • MDGs to SDGs	**Disaster Management (1.5)** • Overview • Disaster Management in India • **Risk and Vulnerability Analysis and Mitigation** • Planning during Disaster Response • Disease Management • Food and Nutrition • Water and Sanitation • Incident Command System • Mass Casualty Management • Disaster Management in Hospitals • Leadership for Disaster and Health • Planning during Disaster Response • Disease Management • Communications • Mass Casualty Management • Special Exercises • Presentations
5.6.4.2	=	**Health Policy and Health Care Delivery System (4.5)** • Introduction • Definition of health system • Health system components and functions • Building blocks of health care system • Current status of health human resources and infrastructure and related issues • Committees on Health Care in India • Health care delivery system in post independent India – key features • Health care delivery system in rural India – SC, PHC, CHC, District hospitals – roles and responsibilities of health functionaries	**Health Management Information System (3)** • Concepts in Information Management • Basics of Computer • Data and Database Management • HMIS – Organization and Structure • HMIS – Decision Making • Information Needs and Indicators • **Health Information Management** • Data Collection and Generation • Data Transmission and Flow of Information • Data Processing • Data Quality • Applications and Use of HMIS

Ser No	Category	First Year	Second Year (Hospital Stream)
		• Organizational set up of health care in India • Different stakeholders in provision of health care. • Concept of universal health coverage and related issues • Different committees on health • National Health Policy-2017 • Nutrition Policy and National Population Policy • Challenges posed by urban health and special features of NHM • National Programs – Rationale and Overview • Health in All Policies (HiAP) – rationale and overview	• Evaluation of MIS Overview of EMR, EHR & HIS
5.6.4.3		**Essentials of Hospital Services (1.5)** • Hospitals and Hospital as a System • Role of Hospital Administrator • Planning and Organization of Out Patient Services • Accident and Emergency Services • Planning and Organizing ICU • Planning and Organization of Hospital Laboratory Services • Planning and Organization of Hospital Imaging Services (reduce to in vogue technology) • Planning and Organization of Medical Records Department • Hospital Monthly Statistical Bulletin • Inpatient Services • Nursing Care and Ward Management • Operation Theater	**Quality Management and Patient Safety in Hospitals(3)** • Introduction • Approach to Quality Management • Quality Improvement • Tools for Quality Improvement • Clinical Governance • NQAS • Never Events • Developing a Quality Culture • Patient Safety • NABH Standards Accreditation National and International

Ser No	Category	First Year	Second Year (Hospital Stream)
			Legal Framework in Health Care (1.5) • Legal Issues in Medical Care • Legal Issues in Hospitals and Management of Medico Legal Cases • Day to Day Problems in Dealing with Patients • Industrial and Food and Drug Acts Applicable to Hospitals • Classification of Offences • Consent • Confidentiality • **Criminal Trials in India** • Professional Ethics • Consumer Protection Act • RTI Act • Medical Termination of Pregnancy Act • Clinical establishment Act • Mental Health Care Act • Sexual Harassment of Women at Work Place • Violence Against Medical Profession • **Laws of Contract**
5.6.5	**Analytical Studies**		
5.6.5.1		**Essentials of Epidemiology (4.5)** • What is Epidemiology • Types of Epidemiology Studies • Cross Sectional Design • Cohort • Case Control • Introduction to Surveillance • Surveillance and IDSP • Evaluation of Surveillance • Clinical Epidemiology	**Clinical Epidemiology (1.5)** • Understand and apply principles of infectious disease epidemiology, • The sources of data in hospital epidemiology including hospital surveillance and death certification, the importance of ICD, • The steps in conduct of Outbreak investigation,

Ser No	Category	First Year	Second Year (Hospital Stream)
		• Strobe • Outbreak Investigation Various Study Designs - Delete Sampling and Smapling Design - Delete Bias and Confounding Senstivity, relaaability and validity	• Design analytic studies for application in hospital and investigation of outbreaks, • Calculate measures of association in the form of Odds ratio and Relative risk, • Interpret results of a study in terms of Bias, Chance and Confounding, • Describe the concepts of Screening for disease and its application.
5.6.5.2		**Research Methodology (4.5)** • Foundations of Research • Problem Identification & Formulation - Research Question • The Review of Literature • Ethical issues in research • Methods of Data Collection • **Data Analysis** • Interpretation of Data and Report Writing	**Operation Management in Hospital (3)** • Introduction to Operations Research • Concepts and Definition of Operations Research • Linear Programming • Solution by Graphical Method • Special Cases and Limitations • Transportation Problems • Assignment Problems • Integer and Goal Programming • EOQ Models • Quantity Discount Models • ABC Analysis • PERT • CPM • Queuing Theory • Waiting Time
5.6.5.3		**Biostatistics (4.5)** • Introduction to Statistics and Biostatistics • Data Sources • Types of Variable • Common Measurements: Rates, Ratio, Proportion, Percentage and Index • Presentation of data • Descriptive statistics • Concept, Purpose and Type of Sampling • Sample Size Determination	**Data Management and Analysis (1.5)** • Public Health Data • Public Health Data Sources • Introduction to Database • Data Coding, Editing and Transformation • Data Quality • Preparing Data for Analysis • Tabular Presentation • Graphic Presentation

Ser No	Category	First Year	Second Year (Hospital Stream)
		• Correlation & Regression • Simple & Multiple Regression Analysis • Concept of Basic Probability • Probability Distribution • Confidence Interval • Testing of Hypothesis • Test of Significance: Chi Square & T Test	• Introduction to SPSS • Data Entry and Database Creation • Importing Database and Overview to Database Management Options • Descriptive Analysis • Cross Tab and Chi Square Test • T Test • Correlation Analysis • Simple Linear Regression • Analysis
5.6.5.4		**Demography & Population Science (3)** • Intro Population Science and Demography including sources of demographic data • Demographic Transition (Population structure and composition, Age sex pyramid) • Population Characteristics (Age dependency and implications, Quality of data and data appraisal) • Concept of fertility (Basic measures of fertility, Divorce and remarriage) • Mortality Definition (Sex and age patterns of mortality, basic measures of mortality) • Life Table techniques • Migration Type, Pattern, Consequences, Migration and health • Ratios, rates and Proportion • Population Growth rates	
5.6.6	**Miscellaneous**		
5.6.6.1			**Emerging/Current Trends in Health Sector (1.5)** • Virtual Reality • Augmented reality • SMART Technology in Hospitals • AI and its Role in Health Care

Ser No	Category	First Year	Second Year (Hospital Stream)
			• Challenges in Clinical Decision Support • Data Mining and Big Data Analytics in Health Care • Patient Personalization and Personalized Medicine • mHealth, Tele Health and IoT • Wearable Technology Transforming Health Care https://www.franchiseindia.com/wellness/here-are-top-5-emerging-trends-in-healthcare-sector.11267

5.7   An additional aspect that needs to be looked into is continuity. While IIHMR, New Delhi undertakes education in the health sector, it is primarily a research institute and the professors are mainly involved in research/meeting contractual obligations. This implies that a professor who usually covers a syllabus may not do so and the same may be covered by another professor or a guest lecturer. To ensure that there is no change in the content being imparted it should be ensured that every module's slides should be kept in a central repository and the module booklet should be pre-published and available at least a week before commencement of the module. This would ensure that a guest lecturer or a replacement lecturer from within IIHMR has the study content readily available and can go through it beforehand. The happen chance can be also obviated through earmarking two professors per module to conduct the module, at the beginning of a batch itself which can be managed easily since there are several related modules whose professors can be backups to each other. A related aspect which requires ensuring is that the module book should be available to the student in the first period on the first day of the module and the content of the slides should be in synchrony to the module book,

so that the book facilitates reference during the conduct of the module and can also be used for future reference in one's career. Also, the material for additional study/ reference material should be a part of the module itself so that it is available along with the module content at one place besides which this shall also ensure economy through central printing.

Core Competency

5.8   The changes recommended above should lead to a core competency which is a mix of both business and health related competency. At the end of having undertaken PGD in Health Management the students should graduate from IIHMR, New Delhi with the competency to perform/conduct the following: -

    5.8.1   **Leadership Competencies**.

        5.8.1.1   Thorough negotiation and advocacy, influence management decision making, health policy and health policy decision.

        5.8.1.2   Be a good verbal and written communicator with good presentation skills

        5.8.1.3   Manage operations to ensure organizational performance in an health organization.

        5.8.1.4   Understand the nuances of marketing management and be able to apply them to public health programs and health service organizations

5.8.1.5   Ensure smooth organizational functioning through effective Human Resource Management while at the same time be able to ensure once own professional growth and development.

5.8.1.6   Comprehend economic and financial reports/statements, analyse them and enable public health management decision making based on such analysis.

5.8.1.7   Ensure cost effectiveness in operations through economic analysis.

5.8.1.8   Be able to ensure logistic effectiveness in the delivery of health care.

5.8.1.9   Understand the importance of data, how to obtain, analyse and utilize it.

5.8.2   **Health Care Competencies**

5.8.2.1   Comprehend Public Health, its determinants, how they influence health and how these can be improved to ensure prevention and promotion of health.

5.8.2.2   Have effective understanding of health systems, public policy, and environmental health.

5.8.2.3   Apply epidemiological methods to public health practice and situations, use data collection methods relevant to a health issue, analyse the data using biostatistics and computer based software and interpret the results for application to public health practice, research or policy.

5.8.2.4   Be able to define a research problem, identify the hypothesis, conduct the research, analyse and review the results, generate a conclusion and present it.

5.8.2.5   Be able to review and evaluate interventions, programs, outcomes, public health reports and research articles.

5.8.2.6   Have an understanding of legal aspects related to public health and ethical practices as well as how to ensure adherence to legal aspects and ethical practice of health care.

5.8.2.7   Have an understanding of disaster and be able to manage the medical requirements to alleviate the sufferings of those effected.

Conclusion

5.9 IIHMR, New Delhi established in 2008, is a premier institute which prepares health care managers through a syllabus specifically tailored to impart a concomitant health and management education. While management involves planning, organizing, accounting, staffing, marketing, public relations, human resource management, epidemiology, biostatistics etc health care is oriented towards ensuring the good health of the population. An amalgamation of the two at IIHMR intends to produce leaders who can play an effective role in ensuring public health through hospitals, clinics, nursing homes, insurance companies and organisations

undertaking health research, health related IT development or health related data collection. The syllabus at IIHMR, New Delhi is focused to meeting this end. However, the increased focus on public health in India due to the missed Millennium Development Goals, commitment to achieving the Sustainable Development Goals, emerging new technologies in health care and renewed government focus on meeting the health needs of the neglected and impoverished population, an increasing geriatric population requiring special health care focus, increasing health awareness and changing disease pattern coupled with increasing medical tourism has necessitated a review of the curricula and restructuring the same to meet the emerging demands and challenges and to give the students at IIHMR an edge over others so as to be able to meet the demand of availability of approximately3,88,800 jobs in the health care sector by 2022 as predicted by the Bureau of Labor Statistics in one of its reports.

5.10 While the current syllabus is up to the mark when compared with various institutes in India such as Tata Institute of Social Sciences and some foreign universities such as Yale, Harvard and Johns Hopkins, there never the less are certain modules/topics which merit deletion and a few which need to be added. Furthermore, when the views of stakeholders to include the students and the sector which employs them is taken into consideration, there is a pressing need to ensure that the requirements projected by them are met.

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