

UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL
UNIVERSITY DEVELOPMENT LINKAGES PROJECT
COOPERATIVE AGREEMENT DAN-5063-A-00-1112-00
ANNUAL ACTIVITY REPORT - YEAR 1 (1991-1992)

Background

The University of North Carolina/Indian Institute of Health Management Research Linkage Development Project has the following objectives:

1. To develop and offer a collaborative Executive MPH program in health policy and management to employ health professionals in India and nearby countries.
2. Development of opportunities for collaborative research in issues of health policy and management in India and nearby countries.
3. Development of short term faculty exchange between UNC-HPAA and IIHMR.
4. Development of field training opportunities for UNC-HPAA and IIHMR faculty to gain first-hand experience in South Asia.
5. Involvement of other institutions of higher learning in the US (especially the historically black universities and colleges) and South Asia.

However, during the first two years, the project is to focus on the achievement of Objective 1, namely to develop and offer a collaborative Executive Master's Program in Health Policy and Management for countries in South East Asia.

Report

This annual activity report is organized according to the 8-point outline supplied by AID-Washington.

1 & 2. ACTIVITIES AND PROGRESS

In the Annual Workplan for 1991-92, the following twelve activities were identified for the achievement of this objective. The project has progressed according to the schedule, in some cases ahead of it:

- i Sign sub-agreement with IIHMR
After several months of negotiation, the sub-agreement between UNC and IIHMR was signed on March 18, 1992. A copy of this sub-agreement has already been supplied to AID-Washington.
- ii Establish UDLP offices at UNC-CH and IIHMR
UDLP offices at UNC-CH and IIHMR have been established and are fully staffed.

Establishment of the UNC-CH office took longer than expected due to UNC-CH procedures for creating new positions. As a result, for several months, temporary staff had

to be used until the new position of a full time Administrative Assistant could be established. It should be noted that in the original proposal only a part-time secretary was budgeted, but it became clear very early that this position must be upgraded to full time Administrative Assistant. Mrs. Alison Richard joined in this position on May 18, 1992 and was designated as UDLP Coordinator.

The IIHMR was able to move more rapidly in establishing its office which is staffed with a full time research assistant and a part time secretary in addition to full time UDLP Co-Director. However, the original Co-Director resigned from the Institute during the first quarter, and the new Co-Director, Dr. R. K. Pal, took over during the second quarter.

iii Appoint and convene Joint UNC-IIHMR Program Committee

The Joint Program Committee consists of UDLP Director (UNC) and UDLP Co-Director (IIHMR). The Committee held only one formal major meeting at Chapel Hill from March 13 to 29, 1992. All other business of the Committee was conducted by mail, fax, telephone, and other informal contacts.

The primary role of the Committee is to ensure smooth and timely implementation of the UDLP objectives by taking into account inputs from various stakeholders. A great deal of energy was invested in developing a detailed blueprint of the Executive Program for South Asia, and in having this blueprint reviewed and approved by the Inter-Country Advisory Council on the one hand, and UNC and IIHMR authorities on the other. In the development of this blueprint, the main focus was on the development of curriculum, faculty selection, development of teaching material, faculty development, upgrading of computer and library facilities at IIHMR, development of IIHMR and UNC faculty, and student recruitment and financial support.

These discussions indicated an urgent need for a workshop of core faculty to develop a shared and common thinking on the Program and a pressing need for significant additional resources beyond those available from AID-Washington and from the corresponding UNC match. Accordingly, plans were developed for a faculty workshop in July and to find the needed funds from foundations and other international organizations for teaching material development, project staff upgrading and for institutional development.

iv Appoint Inter-Country Advisory Council

The UDLP Director visited India, Bangladesh, Nepal and Pakistan to brief the governments on the Executive Program for South Asia. He was unable to visit Sri Lanka and Maldives due to an airline strike, and Bhutan due to visa difficulty; these governments were briefed by letters and telephone calls. During these briefings, the nature, role, composition and importance of the Inter-Country Advisory Council were discussed and the need for high level representation from each country was underlined. All countries expressed ready willingness for participation. All countries except Pakistan have nominated their representatives on the Council.

The current membership of the Council is as follows:

Bangladesh	Mr. M. Fazlur Rahman, Joint Secretary, Ministry of Health and Family Welfare
Bhutan	Dr. J. Norbhu, Director, Department of Health Services
India	Dr. A. K. Mukherjee, Additional Director General, Health Services
Maldives	Dr. Abdul Sattar Yoosuf, Deputy Minister, Ministry of Health and Welfare
Nepal	Dr. B. D. Chataut, Director, Health Manpower Development and Training
Pakistan	To be nominated
Sri Lanka	Dr. U. H. S. de Silva, Deputy Director General (Planning), Ministry of Health and Women's Affairs
IIHMR	Dr. G. Giridhar, Director
UNC-CFI	Dr. R. K. Pal, Co-Director, Executive Program
	Dr. Mary Sue Coleman, Vice Chancellor, Graduate Studies and Research
	Dr. Sagar C. Jain, Director, Executive Program
WHO *	Dr. U KoKo, Director, South and East Asian Regional Office, New Delhi
SAARC *	Mr. I. H. Zaki, Secretary-General
	* Observer

Awaiting Pakistan's nomination and participation, the Secretary of Health in Pakistan is kept fully apprised of the proceedings of the Council and progress of the Executive Program for South Asia.

v Convene ICAC

The first annual meeting of the Council was held in New Delhi in April 1992. Representatives of India, Bangladesh, Nepal and Maldives and those of UNC and IIHMR attended. The representatives from Sri Lanka and Bhutan were unable to attend due to schedule conflicts but were briefed individually.

The main recommendations made by the Council are:

1. The Council should meet once a year.
2. The Executive Program should offer not only Master of Public Health (MPH) degree but also Master of Healthcare Administration (MHA) degree.
3. Both these degrees should be awarded by The University of North Carolina at Chapel Hill.
4. The Program should be opened in the fall of 1993 instead of January 1994.
5. Both these degrees should emphasize methods and techniques of policy analysis and management, providing broad and generalized training with special emphasis on

development of health leadership. Further, the learning should address the realities and limitations of South Asia and should be usable.

6. The Council rejected the proposal to teach the Executive Program on a part time basis and emphasized the necessity for making it a full time program.
7. For both degree programs, students should be required to spend one term at the University of North Carolina at Chapel Hill.
8. Only those who meet the qualifications for tenure track appointments at the University of North Carolina at Chapel Hill and have a reputation for effective teaching and have overseas experience should be mobilized to teach in this program.
9. All students in the Executive Program for South Asia should meet all requirements for admission and graduation established by the University of North Carolina at Chapel Hill. However, consideration should be given to accept a small number of non-degree candidates to accommodate the special circumstances of countries in the region.
10. Students for this Program should be recruited both from the public and private sectors.
11. The countries should use the funds available to them for overseas training to support students in this Program.

All these recommendations are being implemented resulting in the following actions:

- a. The Executive Program for South Asia will offer both MPH and MHA degrees on a full time basis, starting in the fall of 1993. Degrees will be awarded by the UNC-CH.
- b. MPH will require full-time studies of 12 months, and MHA of 15 months, and both will require a 6-week term at the UNC-CH.
- c. The curricula for both these degrees will emphasize generic methods of health policy analysis, management and leadership, then application in the field. For this purpose, high reliance will be placed on learning-by-doing methods of teaching, namely, case discussion, Carolina Simulation Method, and exercises of various types in the classroom, and precepted projects in the field.
- d. To ensure the feasibility of attracting the high quality faculty recommended by the ICAC, a modular curriculum design has been adopted; under this design each course will be taught on a full-time basis over a two-week period requiring 60 hours of classroom work.
- e. Up to two individuals may be admitted each year who do not hold baccalaureate or higher degrees from an accredited college or university. These individuals will be nominated by the Governments of Bhutan, Maldives, or Nepal. Extraordinary admissions will be considered on a case-by-case basis.

Further details are noted under the report on other activities.

vi Seek approval of curriculum proposal from UNC, IJHMR and others
A five term curriculum for Master of Public Health and a six term curriculum for Master of Healthcare Administration were developed (see enclosed) and submitted for approval by UNC and IJHMR. The status of this approval is as follows:

UNC: The proposal has been approved successively by the Department of Health Policy and Administration, School of Public Health, Graduate School Sub Committee on Program Review and the Administrative Board of the Graduate School. It is now pending final approval by the General Administration of the University of North Carolina.

IJHMR: The Governing Board of the Institute approved the establishment of the Executive Program for South Asia in collaboration with UNC-CH and, on the basis of authority vested in him, the IJHMR Director has given his full support to the proposed curricula.

vii Recruit and select needed faculty
Following the criteria established by the ICAC, the following have been recruited to serve on the faculty of the Program:

John Akin, Ph.D.	University of North Carolina at Chapel Hill
Philip Brachman, M.D.	Emory University/Centers for Disease Control
Susan DesHarnais, Ph.D.	University of North Carolina at Chapel Hill
Moye Freymann, M.D., Dr.P.H.	University of North Carolina at Chapel Hill
G. Giridhar, D.Sc.	Indian Institute of Health Management Research
Thomas Hall, Ph.D.	University of California, San Francisco
Sagar Jain, Ph.D.	University of North Carolina at Chapel Hill
Curtis McLaughlin, M.B.A., D.B.A.	University of North Carolina at Chapel Hill
Alfred Neumann, Ph.D.	University of California, Los Angeles
Udai Pareek, Ph.D.	Indian Institute of Health Management Research
Harcharan Singh, M.B.B.S., M.D.	WHO
K. Srinivasan, Ph.D.	Int. Inst. for Popul. Sci., India/UNC-CH
Rahim Talukdar, M.B.A., Dr.P.H.	Institute of Business Administration, Dhaka
Prem Talwar, Ph.D.	National Instit. of Health and Family Welfare, India
James Veney, Ph.D.	University of North Carolina at Chapel Hill
William Zelman, Ph.D., C.P.A.	University of North Carolina at Chapel Hill

Those who are not already members of the UNC faculty are being given adjunct appointments on the faculty of the Department of Health Policy and Administration and the UNC Graduate School.

viii Brief faculty on the Executive Program and obtain outline of their courses
All members of the Program faculty have been given a written, as well as in-person, briefing.

A faculty workshop was held in July 1992 with a view to developing common thinking about and approach to teaching in the Executive Program. The following attended:
Sagar C. Jain, Ph.D.
William Zelman, Ph.D.
Moye Freymann, M.D., Dr.P.H.
James Veney, Ph.D.

G. Giridhar, D.Sc.
 Rahim Talukdar, Ph.D.
 Samia Altaf, Ph.D. (Observer, Pakistan)
 Alison Richard (JDLP Coordinator)
 Kate Whetton-Goldstein (Special assistant to Dr. Jain)

In the workshop there was a great deal of discussion regarding the unique nature of the Executive Program for South Asia, and the need for using learning-by-doing methods of teaching. In this connection, a lot of time was spent on determining the relative merits of the case method, Carolina Simulation Method, computer based exercises, and field projects. It was decided that all these methods should be used by instructors as appropriate. Further, it was decided to develop at least two data sets for Carolina Simulation Method and a critical mass of teaching cases to reflect the reality of South Asian health systems. In addition, the need for developing a text book on South Asian health systems was also identified.

All members of the faculty have been requested to prepare their detailed course outlines and submit them for review and feedback. The first drafts of most of the course outlines have been received, and review of several of these have been completed.

ix & x Identify need for teaching material to be developed, assign responsibilities, and start developing these materials

As a part of the course outline, members of the faculty are requested to identify teaching cases and data sets needed for their courses. This information has started to flow in and will gain momentum after the review of the draft course outlines is completed and feedback is received by the faculty.

However, based on the recommendation of the Faculty Workshop in July 1992, three data sets for CASIM have been commissioned. In addition, a case writing workshop is planned for March 1993 which should result in six to ten completed cases. Further, a decision has been taken to write a text book on South Asian health systems. Seven country-chapters have been commissioned and the services of an editor retained to ensure timely completion.

xi Develop a teaching schedule

In the light of recommendations of the ICAC, the beginning of the Program is now set for the fall of 1993. The following schedule has been developed for the first cohort.

Term 1 - (Jaipur)

Saturday, August 28		Opening Ceremony and Orientation	
Aug. 30	-	Sept. 4	Prerequisite courses in computer, accounting/economics
Sept. 6	-	Sept. 17	Principles of Statistical Inference Talwar
Sept. 20	-	October 1	Principles of Epidemiology Brachman
Oct. 4	-	Oct. 15	Methods for Health Planning & Prog. Neumann
Oct. 18	-	Oct. 29	Administration & Planning I Talukdar
Nov. 1	-	Nov. 12	Demographic Techniques Srinivasan

Nov. 15	-	Nov. 26	Intl. and Comparative Health Admin.	Jain
Nov. 27	-	Nov. 28	Intro. to Health Services Research (Part I)	Jain

Term 2 (Home Country)

Dec. 6	-	Jan. 14	Application of Health Mgmt. Methods I	Jain & others
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Term 3 - (Jaipur)

Jan. 24	-	Jan. 28	Intro. to Health Services Research (Part II)	Jain
Jan. 31	-	Feb. 11	Intro. to Healthcare Financial Mgmt.	Zelman
Feb. 14	-	Feb. 25	Health Economics for Policy & Admin.	Akin
Feb. 28	-	March 11	Intro. to Mgmt. Info. Systems in Healthcare	Giridhar
March 14	-	March 25	Mgmt. of Human Resources in Health Organ.	Pareek
March 28	-	April 8	Leadership and Supervision	Jain
April 11	-	April 15	Intro. to Health Services Research (Part III)	Jain

Term 4 (Home Country)

April 25	-	June 3	Application of Health Mgmt. Methods II	Jain & others
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Term 5 (Chapel Hill)

June 27	-	Aug. 5	Comprehensive Exam, and Field work	Jain & others
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MHA: Fall 1994

Methods of Quality Control in Healthcare	DesHarnais
Population Policy and Program Development	Giridhar / Freymann
Issues in Health Policy	Singh
Health Administration and Planning II	McLaughlin
Health Manpower Planning	Hall
Program Evaluation	Veney

- xii **Prepare and distribute brochure and related materials on the Executive Program**
 A draft of the brochure has been prepared and approved by the Department of Health Policy and Administration, School of Public Health and the Graduate School. The services of a marketing firm have been retained for assistance in design work and printing; and the design work is now in its final stages. Printing of the brochure will start as soon as the final approval of the Program is received from the General Administration of the University of North Carolina.

3. PROBLEMS AND BARRIERS

The primary problem in operationalizing the Executive Program for South Asia is the need for additional funds. These funds are needed to support the upgraded position of a full time Administrative Assistant in the UNC-UDLP office, for upgrading the IIMR computer and library facilities, for much larger investment in the development of teaching material than originally

planned, and in the development of the IIHMR faculty. The need for additional funds were estimated to be around \$250,000. To find these funds, a variety of initiatives were taken which have to-date resulted in the following grants:

\$100,000 grant from The Rockefeller Foundation for general support of the Executive Program for South Asia.

\$75,000 grant from the Ford Foundation, India, for teaching material development.

\$10,000 grant from UNFPA, New York, for writing the text book on South Asian health systems.

We are still looking for supplementary funds for faculty development.

The next major barrier will be finding adequate funds for providing traineeships to the students (approximately \$25,000 per student for MPH and \$31,000 for MHA). Without these funds the Executive Program for South Asia cannot become a reality. For this purpose, discussions have been initiated with a number of international donor organizations. Simultaneously, discussions are also underway with the participating governments to help them develop policies and procedures for utilizing the funds for overseas training already at their disposal for supporting their candidates in this Program.

In addition, international and inter-institutional communications continue to be problematic, requiring use of expensive alternatives, namely overnight letters, faxes, and telephone instead of airmail. Very often even these expensive means of communication have to be supplemented by personal visits. This has placed an extraordinary financial burden on the Program for these methods of communication are not only inherently more expensive, but they also demand time from already overworked manpower.

4. SUSTAINABILITY

Sustainability of the Program has been of paramount concern from the very beginning and a lot of thinking and energy has been devoted to this subject. As a result, the following seven-point strategy has been developed and operationalized:

- i. **Institutionalization**: The Program should be perceived as a regular and on-going commitment (as against a time-bound project) by the UNC-CH on one hand and the IIHMR on the other hand, and it should be so institutionalized by each institution.

Appropriate processes initiated at the UNC-CH and the IIHMR have resulted in the establishment of the Executive Program for South Asia as a long term regular activity at each of these institutions with a clear understanding that while initially the UNC-CH will play a dominant role, eventually the Program will be run by the IIHMR, and that the UNC-CH role will gradually diminish as the capability of the IIHMR improves.

- ii. **Stakeholder Involvement**: All key stakeholders (UNC-CH, IIHMR, countries, donors, etc.) should be well informed, involved and committed to the Executive Program for South Asia. To ensure this, the following steps were taken:

UNC-CH: Faculty, relevant committees and administration from Department level to the President level have been briefed and several key persons are directly involved in the Program operations:

- a) Several senior and key members of the Department of Health Policy and Administration are mobilized to teach in the Program; the directors of Master, Doctoral, and Executive programs, and Department Chair are members of the department's Advisory Committee on Executive Program for South Asia;
- b) The Dean of the Graduate School and the Vice Chancellor of Health Affairs have become proactive supporters of the Program and see it as an important step toward strengthening the internationalization of the University.
- c) On the recommendation of the Dean of the Graduate School, Associate Dean Henry Frierson is a Co-Principle Investigator with UDLP Director of a research proposal for evaluating the modular structure of the Executive Program for South Asia.
- d) the Vice Chancellor for Graduate Studies and Research is one of the two UNC-CH representatives on the ICAC; the other representative is the UDLP Director.

IHMR: Both the Governing Board and the Administrative Board have been briefed about the Program and both have approved it. The progress reports are made to each every six months. The member faculty and key faculty committees have also been briefed. The Director of the IHMR serves on the ICAC with UDLP Co-Director, and he is actively involved in all major operational decisions about the Program.

Countries: Secretaries of Health in all seven countries have been personally briefed and progress reports are sent to them on a regular basis. Countries are represented through their high level officials on the ICAC.

Donors and other International Stakeholders: All major donors in India, Bangladesh, Pakistan, Nepal and Sri Lanka have been briefed personally. WHO-SEARO and SAARC are now formal observers at the ICAC meetings, and other donors have also been invited to join. Donor representatives are given progress reports regularly through visits and mail.

Program Faculty: Only those willing to make a long term commitment have been selected. They are consulted on all key issues and briefed regularly. Funds permitting, we hope to institutionalize an annual workshop of the faculty.

- iii. **Competition for Resources:** The Program should not have to compete for critical resources with other well established and powerful programs.

The Executive Program for South Asia needs two kinds of critical resources: financial and faculty. Beyond the UDLP match by the UNC-CH, little reliance is placed on institutional funds in either the developmental (first two years) or the operational phase of the Program. As noted in an earlier section, most of the needed developmental funds have already been secured from donor organizations. The operational phase will be funded from the tuition's to be deposited in a receipt-supported account (a special kind of trust account) so that these funds

can be used only for the benefit of the Program. Successful outcome of negotiations with several major donors will ensure long-term funds for traineeships.

- iv. Perceptions of saliency, relevance and quality: The Program should meet a strong-felt need, and should produce a high quality and useful product of which one could truly be proud.

The UNC-CH needs a strong and effective international presence to further its internationalization process. The IIHMR has a strong need to improve its institutional capability for excellence in teaching and research, and to increase its international visibility and reputation. The countries need a cost-effective, high quality and custom-designed program for training the next generation of their health leadership. The donors have been concerned about the high cost and significant degree of non-applicability of overseas training and constantly worry about brain-drain. The Executive Program for South Asia is designed to respond to all these concerns, and by making an absolute commitment to quality and relevance (and delivering on it) it should make all of them proud.

- v. Affordability: It should be cost-effective and affordable without sacrificing high quality and relevance.

The total per student cost of the Executive Program for South Asia will be almost half the cost of sending students to the U.S. for those degrees, and our degrees will be custom designed for the region. Since countries will be able to utilize the funds currently available to them for overseas training for sending students to the Executive Program for South Asia, the participation in this Program will not only not place any additional burden on them, but in fact such participation will allow them to buy a higher quality training for larger number of persons.

- vi. Attractiveness: The Program should not only be useful, affordable and high quality, but it should also be attractive.

The UNC-CH places primacy on research, and it gets excited about teaching if it holds promise for research. The cash-cow of the IIHMR is contract-research which depends on its reputation for high quality. Countries cherish progress toward self-sufficiency. Donors give support for overseas training but clearly prefer in-country institutional development. Students from developing countries desire high quality and relevant education, but they are very conscious of the market value of the U.S. degrees and U.S. experience. Faculty tend to consider overseas experience an important element in their own personal and professional development.

The Executive Program for South Asia is designed to be attractive to all of them. For UNC-CH, the mid-career students in the Program should be valuable contacts for the development of research. The Program will contribute handsomely toward the improvement of IIHMR's faculty, curricula, administration, and support services. The Program will serve not only as a prototype of a high quality/relevant training program for other new and existing executive programs, but will also foster direct linkages with selected institutions in participating countries with a view to transferring its know-how. This should help the countries move toward self-sufficiency. The donors should find it attractive because of its emphasis on institutional development. Students should like it for its convenience, high quality and relevance, US credentials and the one term at UNC-CH. The faculty are attracted to it for providing low-risk

and high potential opportunities for exposure to a part of the world which houses one-fifth of the human race.

- vii High Quality Management: For a program to take deep roots it must be very well managed from day one.

Sound management is not only technical know-how, but also political competence, commitment, leadership and appropriate staffing for backstopping. This awareness is a central consideration in the development and management of this Program.

5. QUANTITATIVE OUTPUTS OF THE LINKAGE ACTIVITIES

Activities listed above under (1) and (2) do not lend themselves to meaningful quantification.

6. INTERNATIONALIZATION

The Executive Program for South Asia is receiving attention from and generating participation of many, from departmental faculty up to the Office of the President of the University, and many others in between. Department of Health Policy and Administration, School of Public Health, and Graduate School have shown very proactive interest and an advocacy level involvement with it.

7. IMPACT ON THE LINKAGE PARTNER

The IIHMR is actively helped in improving its institutional capability, especially its concept of sound training; (sound training requires high degree of empathy with learners, constituency cultivation, state-of-the-art pedagogy and facilities, superior management, and above all, strong commitment); know-how of its faculty (CASIM, case methods, curriculum design) project management system, (record keeping, budgeting, and reporting) library (adding books) and computer facilities (updating equipment). The Institute is also experiencing a significant increase in its national and international visibility. These and other related steps would prepare the IIHMR for a more effective role in addressing the health issues of India and South Asia.

8. USE OF UNITED STATES FUNDS

AID-Washington funds have been used as outlined in the original proposal. Salaries have been paid to both UNC-CH and IIHMR personnel; in addition, costs were incurred for travel, communication, and supplies. No equipment was purchased.

United States funds were not utilized for any testing or breeding feasibility study, variety improvement or introduction, consultancy, publication, conference or training in connection with the growth or production in countries other than the United States of an agricultural commodity for export which would compete with a similar commodity grown or produced in the United States.

Executive Program For South Asia

List of courses

<u>Courses</u>	<u>Proposed Faculty</u>	<u>Affiliation</u>
1. Principles of Epidemiology (EPID 160)	Philip Brachman	Emory Univ./CDC
2. Principles of Statistical Inference (BIOS 110)	Prem Talwar	NIHFW (UNC-Bios Ph.D.)
3. Demographic Techniques I (HPAA 170)	K. Srinivasan	Intl.Inst. for Population Sci., India/UNC-CH
4. International and Comparative Health Systems (HPAA 110)	Sagar Jain	UNC CH
5. Management of Human Resources in Health Organizations (HPAA 230)	Udai Pareek	IHMR
6. Health Administration and Planning I (HPAA 240)	Rahim Talukdar	Dhaka Univ. (UNC-HPAA Ph.D.)
7. Introduction to Healthcare Financial Management (HPAA 250)	William Zelman	UNC-CH
8. Health Economics for Policy and Administration (HPAA 270)	John Akin	UNC-CH
9. Intro. to Management Information Systems in Healthcare (HPAA 155)	G. Giridhar	IHMR
10. Concurrent Field Training in Health Policy and Admin. (HPAA 109)	Sagar Jain & Others	UNC-CH
11. Methods for Health Planning and Programming (HPAA 248)	Alfred Neumann	UCLA/UNC-CH
12. Leadership and Supervision (HPAA 234)	Sagar Jain	UNC-CH
13. Application of Health Management Methods I (HPAA 207)	Sagar Jain & Others	UNC-CH
14. Application of Health Management Methods II (HPAA 208)	Sagar Jain & Others	UNC-CH
15. Master's Paper (HPAA 392)	Sagar Jain & Others	UNC-CH
16. Quality of Care (HPAA 263)	Susan DesHarnais	UNC-CH
17. Population Policy and Program Development (HPAA 211)	Moye Freymann	UNC-CH
18. Health Administration and Planning II (HPAA 247)	Curt McLaughlin	UNC-CH
19. Program Evaluation (HPAA 245)	James Veney	UNC-CH
20. Health Manpower Planning (HPAA 235)	Thomas Hall	UCSF
21. Selected Topics in Health Policy and Administration (HPAA 305)	Harcharan Singh	WHO

Courses 1 - 15 for both MPH and MHA

Courses 16 - 21 MHA only

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