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**ROMANIA CHILD HEALTH PROJECT**  
*Expanding the Pharmacists' Role in Primary Health Care*

(February 1998-June 1999)

**FINAL REPORT**

A PROJECT OF HOWARD UNIVERSITY CONTINUING EDUCATION'S PACE CENTER  
(HUCE/PACE) IN COLLABORATION WITH THE "IULIU HATIEGANU" UNIVERSITY OF  
MEDICINE AND PHARMACY (UMF-CLUJ)

Submitted to USAID/Romania Program Office  
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MISSION TO ROMANIA**

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## ACRONYMS

|               |   |
|---------------|---|
| <b>AACP</b>   | <b>American Association of Colleges of Pharmacy</b>               |
| <b>CE</b>     | <b>Continuing Education</b>                                       |
| <b>DE</b>     | <b>Distance Education</b>   |
| <b>FP/RH</b>  | <b>Family Planning, Reproductive Health</b>                       |
| <b>GoR</b>    | <b>Government of Romania</b>                                      |
| <b>GP</b>     | <b>General Practitioner</b>                                       |
| <b>HU</b>     | <b>Howard University</b>  |
| <b>HUCE</b>   | <b>Howard University Continuing Education</b>                     |
| <b>IEC</b>    | <b>Information, Education, Communication</b>                      |
| <b>MoH</b>    | <b>Ministry of Health</b>   |
| <b>NGOS</b>   | <b>Non Governmental Organizations</b>                             |
| <b>OIP</b>    | <b>Office of International Programs</b>                           |
| <b>PACE</b>   | <b>Pharmacists and Continuing Education</b>                       |
| <b>PHC</b>    | <b>Primary Health Care</b>  |
| <b>PROFIT</b> | <b>The Investments' Promotion and Financial Transfers Project</b> |
| <b>PSI</b>    | <b>Population Services International</b>                          |
| <b>SO</b>     | <b>Strategic Objective</b>  |
| <b>UMF</b>    | <b>University of Medicine and Pharmacy</b>                        |
| <b>UNFPA</b>  | <b>United Nations Population Fund</b>                             |
| <b>UNICEF</b> | <b>United Nations Children's Fund</b>                             |
| <b>USAID</b>  | <b>United States Agency for International Development</b>         |
| <b>USPVOS</b> | <b>United States Private Voluntary Organizations</b>              |
| <b>WVRD</b>   | <b>World Vision Relief and Development</b>                        |

## ACKNOWLEDGEMENTS

Many colleagues contributed to the work of this project, we express our appreciation to all who participated in and contributed to the project especially to our colleagues at UMF-Cluj for their strong collaboration and friendship that bolstered and kept the project on the right track throughout its term. Special thanks to Vice-Rector Dr. Marius Bojita and International Affairs Coordinator, Dr. Felicia Login and all of the faculty, staff and students at UMF-Cluj and their practitioner colleagues in the judet of Cluj who made this project the success that it is.

We are grateful to Ms. Randal Thompson and her staff at USAID/Bucharest for their invaluable insight and support for the project and their sustained collaboration in ensuring that the project met its stated objectives, congruent with the Mission's strategic objectives (SO).

Many thanks to the director and staff of Howard University Continuing Education and the staff of the PACE Center/Office of International Programs for their tireless assistance and engagement in the project implementation process.

May God bless you all in your continued good works.

## **I. INTRODUCTION**

The Romania Child Health Project began in February 1998 as a collaborative project between Howard University Continuing Education's (HUCE) PACE Center and the "Iuliu Hatieganu" University of Medicine and Pharmacy (UMF-Cluj) in Cluj, Romania. Through its collaborative activities with UMF-Cluj, the PACE Center is working towards meeting selected health sector goals of the USAID/Romania Mission and thereby seeks to contribute to the achievement of the health sector reform goals of the Government of Romania (GoR).

A key feature of the GoR's reform activities is the promotion of a decentralized health sector where county judets will implement the concept of sustainability in PHC delivery. The USAID/Romania Mission's Strategic Objective (SO) 3.2 seeks to identify, develop and implement sustainable interventions that will lead to the "Improved Welfare of Women and Children in Romania" at the judet county level with a special focus on the three county judets of Cluj, Iasi and Constanta.

The focus of the PACE Center/UMF-Cluj collaboration – begun in 1996 – is the ongoing expansion of the pharmacist's role in primary health care (PHC) delivery in Romania through the introduction of sustainable training interventions to complement an already strong pharmacy curriculum for on-campus students and off-site practitioners. It is anticipated that these efforts will provide long-term support and will serve as catalysts for meeting the objectives of both USAID/Romania and the GoR. This can be achieved by incorporating the valuable interventions of the pharmacist – who serves as the first point of contact for many patients at the judet level in Romania – into the PHC management and delivery process.

## **II. BACKGROUND & OBJECTIVES**

This project was the culmination of consultant services conducted by the PACE Center director with World Vision Relief and Development (WVRD) on its USAID-funded Primary Health Care Project II. The goal of the WVRD project was to improve PHC delivery in Romania through a mutual partnership with UMF-Cluj and the Ministry of Health (MOH) with a focus on revising the conceptual approaches and curricula. An emphasis was placed on designing a conceptual approach to broaden the role of the pharmacist in PHC based on current and projected realities within the Romanian health care system. Through the work of the PHC Project (I & II), UMF-Cluj was sensitized to the important role that it could play in PHC and expressed an interest in strengthening this role with the help of U.S.-based institutions like the PACE Center.

The specific objectives of the Romanian Child Health Project were to

- conduct of a post-1989 survey of activities in the public and private sector involving pharmacists and their role in health care,
- prepare a document which gives a panoramic summary of the nature, scope, accomplishments and lessons learned from these activities,
- advise USAID/Bucharest and UMF-Cluj on the potential importance of these activities on health care at the rural/county level and the implications for pharmacy activities,
- draft components of a detailed curriculum with UMF-Cluj for training on-campus students and off-site practitioners, and
- assess the potential for distance education through the use of telecommunications linkages.

## **III. INTENDED OUTPUTS**

There were three intended outputs:

- The PACE Center and UMF-Cluj will have developed a detailed model for a Faculty of Pharmacy course on PHC that complements the health services and reforms in the Romanian system and which speaks to the wise use of pharmaceuticals for PHC.

- The partners will have produced an outline of a process for continuing education via telecommunications for faculty, professionals in the workforce and undergraduate and graduate students so that they may over the long-term increase or maintain their effective role in PHC delivery
- An overview of Romania's pharmacy sector will have been developed

The next section provides detail on planned activities and results achieved

**IV PLANNED ACTIVITIES AND RESULTS ACHIEVED**

**PROJECT PURPOSE** The purpose of the grant is to support USAID/Romania's Strategic Objective 3.2 the "Improved Welfare of Women and Children in Romania" by expanding the role of pharmacists in primary healthcare delivery, especially services to women and children. This purpose is to be achieved in collaboration with the "Iuliu Hatieganu" University of Medicine and Pharmacy, Cluj-Napoca (UMF-Cluj)

**PROJECT OUTPUTS** (1) Report on the Romanian pharmacy sector, (2) University-level course on primary health care for pharmacy students, and (3) a document which outlines the process for distance education, via telecommunication, from/to Cluj

| Phase I<br>FIRST QUARTER<br>March—May 1998      | PLANNED ACTIVITIES  | RESULTS ACHIEVED  |
|---|---|---|
|   | Put in place necessary management and administrative structure necessary for successful project implementation  | Notice of award received mid-February. A project manager and an editor were hired in March to begin project implementation. A project intern was recruited, selected and hired to serve as a data collection assistant to conduct literature searches.  |
|   | Notify Romanian collaborators of award and prepare for travel to Romania. Travel objectives: (a) obtain concurrence on work of the collaboration, proposed course framework and topic and (b) conduct field data collection on pharmacy sector. | Project manager issued notification of award to OIP PACE Center's Romanian collaborator UMF-Cluj, and visited Romania April 7-22, 1998. Collaboration discussion held in Cluj April 14-15, 1998. Work of the collaboration reviewed and concurrence obtained. Work to include development of PHC course. Data collected from project reports on Romania's pharmacy sector and interviews with USAID/Romania staff, the Vice-Rector at UMF-Cluj, faculty, students and pharmacy practitioners and other stakeholders such as the World Bank, UNFPA, UNICEF, PSI and former PROFIT project staff. Data collated and review initiated. |
| Phase I<br>SECOND QUARTER<br>June - August 1998 | PLANNED ACTIVITIES  | RESULTS ACHIEVED  |
|   | Review materials collated and prepare report on trip and on Romanian Pharmacy sector.   | Trip report, including overview of pharmacy sector and recommendations on developing institutional capacity and sustainability for expanding pharmacist training, was submitted for distribution clearance. *Please see Attachment A – Romania Child Health Project Trip Report (April 1998).   |
|   | Distribute report to SO team members and others, per USAID guidance when clearance obtained.  | Distribution clearance not obtained, new USAID personnel settling-in.   |

|   |   |  |
|---|---|--|
|   |   | Responded affirmatively to invitation of Dean, Faculty of Pharmacy, Iasi to participate as session presenter in 11 <sup>th</sup> National Congress of Pharmacy in Iasi   |
| <b>Phase II<br/>THIRD QUARTER<br/>September - December<br/>1998</b>     | <b>PLANNED ACTIVITIES</b>   | <b>RESULTS ACHIEVED</b>  |
|   | Schedule October visit to Cluj (include debriefing visit to USAID/Bucharest)  | Collaborative meetings held in Cluj, October 6-13, PACE Center invited to continue collaboration under Memorandum of Agreement. * <b>Please see Attachment B – MOA</b><br>Debriefing meeting with Drs Monaghan and Arghusan at USAID October 14, 1998, project status reviewed<br><b>ISSUES</b> Project Quarterly Reports going to Budapest only Need for increased interaction with SO 3 2 team |
|   | Prepare and transmit draft of PHC course description  | Course description prepared and transmitted for discussion with Mission during October visit   |
|   | Review comments on PHC course description from Cluj and conduct joint determination of timing, faculty, curriculum placement, etc | Meetings held with UMF-Cluj Vice-Rector for Academic Development to determine appropriateness of course description, goal, learning objectives suggested references, etc Agreement reached on selected faculty, number of sessions, hours per session and date of course   |
|   | Explore distance education potential via use of structured data collection instrument   | Data collection instrument used to interview informatics personnel at UMF-Cluj   |
|   | Prepare and deliver presentations (plenary component and session) at 11 <sup>th</sup> National Congress of Pharmacy               | Comments given within plenary presentation of Vice-Rector Dr Marius Bojita ("Realities and Perspectives on Pharmaceutical Education), a separate session was delivered "Organizing Courses for Distance Education Some Key Considerations " * <b>Please see Attachment C – DE Slide Outline – "The Potential for Distance Education through the Use of Telecommunications "</b>                  |
|   | Preparation of draft of full course outline   | Drafted full course outline, based on input from Cluj * <b>Please see Attachment D – Course Outline.</b>   |
|   | Compile literature references for course  | Literature searches of U S and International Pharmaceutical Abstract Databases completed   |
|   | Draft outline for DE process  | Activity delayed until after joint meeting in fourth quarter with UMF-Cluj   |
|   | Write and edit final draft of PHC course  | Activity delayed until after joint meeting in fourth quarter with UMF-Cluj   |
| <b>Phase II<br/>FOURTH QUARTER<br/>December 1998-<br/>February 1999</b> | <b>PLANNED ACTIVITIES</b>   | <b>RESULTS ACHIEVED</b>  |

|   |   |   |
|---|---|---|
|   | Organize and schedule logistics for UMF-Cluj visit to HUCE Travel objectives (1) to obtain first hand view of pharmacist roles in PHC in United States, (2) obtain greater understanding of University-based distance education process | UMF-Cluj Vice Rector for Academic Affairs, Dr Marius Bojita and UMF Cluj Department of Pharmacy International Affairs Coordinator, Dr Felicia Loghin, visited Washington on an Observation Study Tour in February During their visit the following were accomplished <ul style="list-style-type: none"> <li>• they obtained a first hand view of pharmacists' activities in U S PHC,</li> <li>• they observed and experienced the wide range of technical resources available at HU that can be tapped for further collaboration,</li> <li>• they were engaged in consultation to obtain a greater understanding of a university-based distance education process,</li> <li>• and they attended a special program segment of the American Association of Colleges of Pharmacy on pharmaceutical education in the United States and opportunities for PHC *Please see <b>Attachment E – UMF Observation Study Tour Report</b></li> </ul> |
|   | Solicit lecturers at UMF-Cluj for PHC Course  | Drs Bojita and Loghin agreed to conduct lectures for PHC course in country  |
|   | Prepare and finalize draft of lectures and handout materials for PHC course   | Completed and edited final draft of lectures and handout materials for 12-hour PHC course with input from visiting experts from Romania *Please see <b>Attachment F – Course Syllabus</b>   |
|   | Select community pharmacies for course practicum  | <b>ISSUE</b> Due to increased class size (60 plus), the planned practicum would appear unrealistic Process underway to developing alternatives for class practicum  |
|   | Draft outline of DE process   | Following productions and submissions of DE survey in-country (2-3-98) and DE conceptual framework (10-98), a preliminary draft of a DE module was developed and demonstrated for Romanian participants in Washington, modifications and final touches are being put in place for trial run in-country during delivery of PHC course  |
| <b>Phase II<br/>FIFTH<br/>QUARTER<br/>March – June 1999</b> | <b>PLANNED ACTIVITIES</b>   | <b>RESULTS ACHIEVED</b>   |
|   | Translate and produce all lecture materials in Romanian with UMF-Cluj assistance  | Lecture and handout materials for 12-hr PHC course were developed collaboratively and translated both in Washington and in Cluj with UMF-Cluj assistance  |

|  |   |   |
|--|---|---|
|  | Conduct PHC Course at UMF-Cluj, including the DE module, "Monitoring Drug Therapy I " | Facilitated by the project director and senior UMF-Cluj faculty, the PHC course was delivered to 115 pharmacy students practitioners and residents at Cluj in April Joint certificates were awarded to practitioners and residents whilst fifth-year students received diplomas * <b>Please see Attachment G – Diplomas and Certificates (Sample)</b> The course received an HUCE/PACE Center continuing education course number The DE module was tested and delivered at UMF-Cluj for pharmacy students and residents |
|  | Assess results of PHC course and evaluate the progress made                           | Scores and session feedback provide an evaluation of the course Fifth-year students received scores and academic credits while residents and practitioners received only scores * <b>Attachment H provides feedback on three sessions</b>   |
|  | Assist UMF-Cluj in production of CE content for a potential UMF pilot CE course       | Through the delivery of the DE module in conjunction with the PHC course, participants and UMF-Cluj faculty developed a fuller appreciation of the long-term potential and implications for future training activities using DE linkages All planned project outputs were produced In addition, PACE Center and UMF-Cluj partnership has been strengthened  |

## V ADDITIONAL RESULTS

Below are several additional results that emerged from the yearlong slate of project activities beyond the expected outputs and results. They each contribute to the rationale that a more rigorous approach to the training process and the establishment of stronger collaborative relationships between foreign NGOs, USPVOs and institutions and their Romanian counterparts will significantly advance the human resource development component of the reform process and help to make Romanian PHC delivery more efficient and responsive.

- The PACE Center and UMF-Cluj signed a memorandum of agreement that specifically outlined the purpose of their collaboration in matters of continuing pharmacy education and training. It also stated a joint commitment to develop a PHC curriculum component for UMF-Cluj – a specific objective of the project – that would be used to train current and future pharmacists.
- The parties explored the potential for continuing education via distance learning linkages and developed an experimental pharmacy course module for online use in the United States which was delivered at UMF-Cluj for faculty, pharmacy professionals and undergraduate and graduate pharmacy students.
- The possibility of establishing a broader continuing education (CE) administrative structure at UMF-Cluj was explored.
- An Observation Study Tour of the United States by senior UMF-Cluj faculty to obtain a firsthand view of pharmacists' functions in PHC in America was conducted.
- PACE Center director was invited to participate as a session presenter in Romania's 11th National Pharmacy Congress.
- Students and faculty associated with the course "Role of the Pharmacist in Primary Health Care" provided positive feedback with regards to the type of instructional methods utilized (namely, role-playing, case analysis, group learning and skills practice) which were not in the mainstream of their general educational process.
- A four-hour community demonstration and skill practice on patient counseling and drug therapy monitoring was conducted by the project director at a local community pharmacy with students, faculty and community pharmacists and was captured and carried on local television.

## VI CONCLUSIONS

The project sought to build upon the initial work conducted under the WVRD Project, in projecting the concept of the pharmacist as a contributing member of the PHC delivery team, particularly where women and children's health are concerned. One issue that consistently emerged during implementation of the project was the seeming difficulty of health team members in grasping and embracing the concept of inclusion and partnership. Indeed, this was an attitude exhibited by pharmacists themselves, who defined their roles very narrowly within the PHC delivery process and were not accustomed to envisioning their responsibilities extending beyond the dispensing of medicines. It became increasingly clear that a culture of segmented contribution has developed under a highly centralized and hierarchical health care system prior to 1989; its attendant ill-effects still resonate throughout the system as Romania grapples with health reform. Greater emphasis must therefore be placed on professional behavior/attitude modification and team building.

While it is gratifying to know that the USAID/Romania Mission is now actively supporting information, education and communication (IEC) activities in addition to supporting ongoing health team training efforts, perhaps projects that specifically focus on integrating the membership of the health team might be necessary. According to available information from SECS Romania training initiatives, the family planning and reproductive health (FP/RH) teams are still mostly comprised of general practitioners and nurses. Other health professionals find themselves locked out by default because most of the FP/RH training activities still almost exclusively target GPs and nurses. For example, according to the Mission Performance Plan Monthly Report for July 1999, "Women's Health Strategy," the Ministry of Health's (MoH) recently established a Reproductive Health Committee, ostensibly to serve as a key driver for health reform. However, no mention is made of the National Pharmacists' Association as a partner in this team that includes the College of Physicians, the Institute of Health Management, SECS National Health Insurance Houses and donor agencies. The reality on the ground is that pharmacists are on the frontline in health care delivery. They

can serve as important FP/RH advocates and PHC information resource for rural and urban-based citizens if permitted and fully integrated into the various PHC teams currently being set up

A key strategic thrust of the project was to help ensure a measure of sustainability in the training process so that UMF-Cluj would have the capacity to develop and implement new training approaches and methodologies that can be replicated throughout Romania. Not only was the developed course adopted for fifth-year pharmacy students (the course accounted for five out of 30 credit units) in the 1998 academic year, it will for the foreseeable future be included in the overall pharmacy curriculum. The UMF-Cluj also built, equipped and is funding a DE facility to enable permanent learning linkages between UMF-Cluj and its sister institutions within Romania and with external collaborating institutions. This development will contribute to the overall legacy that the Mission will leave in country as the end of its activities in Romania draws near.

Another constant throughout the project was the overall dearth of information regarding the pharmacy sector in Romania. More effort should go into researching and compiling developments in the overall health sector, particularly relating to pharmacists and their practice pre and post-1989. A product of this grant, "An Overview of the Pharmacy Sector on Romania, 1999," should help to maximize information available on this topic.

Overall impressions are that UMF-Cluj has in place the basic infrastructure to serve as an important fulcrum in helping to advance the reform process at the local level, particularly where pharmacy training is concerned and with the continued collaboration of their partner institutions.

**ATTACHMENT A**

**ROMANIA CHILD HEALTH PROJECT  
TRIP REPORT (APRIL 1998)**

**TRIP REPORT**

**ROMANIA  
APRIL 7-22, 1998**

**ROSALYN C KING  
HOWARD UNIVERSITY CONTINUING EDUCATION (HUCE)  
OFFICE OF INTERNATIONAL PROGRAMS (OIP)  
PHARMACISTS AND CONTINUING EDUCATION (PACE) PROJECT**

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**Submitted TO  
USAID/BUCHAREST  
PROGRAM OFFICE**

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## ACRONYMS

|                        |   |
|------------------------|---|
| <b>CT</b>              | <b>Contraceptive Technology</b>   |
| <b>FP</b>              | <b>Family Planning</b>  |
| <b>GMP</b>             | <b>Good Manufacturing Practice</b>                                      |
| <b>GOR</b>             | <b>Government of Romania</b>  |
| <b>GPP</b>             | <b>Good Pharmacy Practice</b>   |
| <b>HUCE</b>            | <b>Howard University Continuing Education</b>                           |
| <b>IMAS</b>            | <b>Institute of Marketing and Survey</b>                                |
| <b>ISCDPR</b>          | <b>Institute for State Control of Drugs and Pharmaceutical Research</b> |
| <b>IR</b>              | <b>Intermediate Result</b>  |
| <b>MOE</b>             | <b>Ministry of Education</b>  |
| <b>MOH</b>             | <b>Ministry of Health</b>   |
| <b>NPA</b>             | <b>National Pharmacists Association</b>                                 |
| <b>OIP</b>             | <b>Office of International Programs</b>                                 |
| <b>PACE</b>            | <b>Pharmacists and Continuing Education</b>                             |
| <b>PHC</b>             | <b>Primary Health Care</b>  |
| <b>QS</b>              | <b>Quality Service</b>  |
| <b>RH</b>              | <b>Reproductive Health</b>  |
| <b>SOE</b>             | <b>State Owned Enterprises</b>  |
| <b>SO</b>              | <b>Strategic Objective</b>  |
| <b>TOT</b>             | <b>Trainer of Trainers</b>  |
| <b>UMP-Cluj/Napoca</b> | <b>University of Medicine and Pharmacy-Cluj/Napoca</b>                  |
| <b>USAID</b>           | <b>United States Agency for International Development</b>               |

## ACKNOWLEDGMENTS

There were many colleagues who facilitated and contributed to the work outlined in this Trip Report, some of whom played a special role in its compilation. I express my appreciation to all, but especially to the following persons:

I thank my colleagues at the University of Medicine and Pharmacy who made certain that my trip this time round was especially fruitful. I am indebted especially to the Vice-Rectors, Dr Marius Bojita and Dr Ioan Bocsan, to the International Affairs Director, Dr Felicia Loghin, and all of the faculty members and staff of the University of Medicine and Pharmacy.

I am grateful to Randal Thompson and her staff at USAID/Bucharest for their invaluable insight and support.

And, many thanks to my staff at the Howard University Continuing Education, Office of International Programs, for all of their assistance.

God bless you all as you continue on your important work.

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## 1 0 INTRODUCTION

This reports on a visit to Bucharest, Romania between April 6 and April 21, 1998 under the United States Agency for International Development (USAID) award to Howard University Continuing Education, Office of International Programs (HUCE/OIP) USAID has awarded a grant to HUCE's Pharmacist and Continuing Education Project (PACE) in support of its collaborative efforts with the Faculty of Pharmacy at "Iulu Hatieganu" University of Medicine and Pharmacy (UMP), Cluj/Napoca, Romania

The focus of this collaboration—began in 1996—is the expansion of the pharmacist's role in primary health care (PHC) in Romania through the introduction of sustainable training interventions to complement an already strong curriculum for on-campus students and off-site practitioners

The intended result of the award is twofold

- Collaboration on the development of a detailed model for a faculty Pharmacy PHC curriculum which complements the health services and supports the ongoing reforms in the Romanian system and which speaks to the wise use of pharmaceuticals for PHC, and
- An outline of a process for the continuing education, via telecommunications, for faculty, professionals in the workforce, students, graduates and postgraduates so that they may, over the long-term, increase or maintain their effective role in Romanian health care

Results of this award are also intended to support the current strategic objectives of USAID's Mission to improve women's and children's welfare by advancing institutional and human capacity development for the training of pharmacists in support of their role in primary health care

## 1 1 PURPOSE

The purpose of the trip was to collect data that could serve as background and summary on activities and projects in the Pharmacy Sector of Romania, post-1989 Further, this report responds to the questions of USAID's Program Development Office that were presented and agreed upon in-country Ordinarily, a set of questions of this magnitude requires a two-person team with a six-to-eight week total level of effort The approach used by this one-person team was to conduct as many key interviews as possible, collect as much documented data as possible and review them upon return to the United States The USAID reports, government documents, World Bank reports and other published literature that were collected, served as source documents

## 2 0 FINDINGS

### 2 1 PHARMACY SECTOR

#### 2 1 1 *National Context*

After Poland, Romania is Central and Eastern Europe's most populated state with some 23 million people. It is also larger than 10 of the present 15 members of the European Union. The capital, Bucharest [2.4 million pop.], and the next 25 most populated judets including, Constanta [350,000 pop.], Iasi [345,000 pop.] and Cluj [330,000 pop.] make up about 30 percent of the total population (1. **Tarus in Ionescu & Mitchell, p 2**). As a result of pronatalist policies, Romania's population has a large proportion of both young and elderly people. In 1990, 10.1 percent of the population was age 65 or older and 23.5 percent were under the age of 15 (2. **Nat. Pub. Health and Hosp. Inst, p 4**). The Romanian infant mortality rate is 24 infant deaths per 1000 births compared to 8 per 1000 in the Czech Republic (3. **Cohen, p 1**).

Despite its land and population advantages, Romania is ranked as a lower middle-income country. In 1996, Romania's GNP per capita [\$1510] (4. **MTEEP Monitoring and Evaluating Report, p 165**) was less than half that of the neighboring Czech Republic whose population stands at 10 million (5. **Polsey Project, p 5**). As with most of its neighbors comprising the New Independent States (NIS), Romania's present difficulties emanate from socialist policies enacted during the post-World War II era.

Following the popular 1989 revolution that toppled the communist regime, Romanians chose the path toward multi-party democracy and economic liberalization. However, politico-economic exigencies contributed to official adoption of a halting and parsimonious approach to the process of market reform. Disenchantment by the electorate with the slow pace of economic restructuring led in November 1996 to the election of a government committed to a strong program of reform (6. **World Bank Country Overview, p 1**).

A number of fiscal regimes and legislative measures have been put in place since the last election to promote macroeconomic stability (*Ibid*, p 1). The long-drawn out process of privatizing state-owned pharmacies still on the divestiture list is proceeding briskly. This facility will promote the inflow of much needed foreign direct investment (FDI). Romania's FDI inflow continues to lag significantly behind neighbors Hungary and the Czech Republic (Cohen, 1).

The pharmaceutical sector is a complex component of the Romania health system (see Appendix A) Although the Government of Romania (GOR) retains organizational and financial control of the Romanian health system [5.6 percent of GNP in 1994] (**Op-Cit Nat Pub Health & Hosp Inst , p 2**), the pharmaceutical sector is experiencing a rapid rate of privatization, particularly in the areas of distribution However, in the area of pharmaceutical production, there has been limited private sector activity This area is still dominated by state-owned enterprises (SOEs) with a 42 percent market share Despite being poorly managed, heavily in debt, and producing drugs of varying standards, these SOEs continue to enjoy state protectionism (**Cohen, Introduction**)

Nevertheless, privatization efforts have contributed to an overall accelerated growth in the pharmaceutical market—it was in 1995 valued at a wholesale price of US\$275 million, representing 23 percent growth over 1994 figures (**Ibid, 1**) Just prior to the visit, an approved list of subsidized drugs was published However, the Chief of the Pharmaceutical Department in the Ministry of Health (MOH) authorized one list but another was published This discrepancy was publicized and contributed to the change in leadership within the Ministry of Health and its Pharmaceutical Department Even with repeated requests, USAID personnel were not able to obtain an official list of approved drugs on the market

In 1996, Romania had 3,603 private (2,680) and public (923) pharmacies, and 539 pharmacy points and 376 warehouses, according to the records of the MOH Center for Statistics (see Appendices C & D) Of the private sector pharmacies, 2,060 were urban and 620 were in the rural area Of the 923 public sector pharmacies in 1996, 675 were in urban areas and 248 were in rural areas (see Appendix E)

While the MOH continues to encourage privatization in the pharmaceutical sector, structural and financial problems abound and act as constraints upon the sustained growth of private pharmacies (**7 Ionescu & Mitchell, p 9**) For example, there are only 6,800 pharmacists in Romania serving a population of 23 million versus 64 per 100,000 in the United States (**8 King in WV PHC II Report, p 4**) Moreover, pharmaceutical expenditure is estimated at \$12 per capita compared to \$292 for North America and US\$172 for Western Europe (**Cohen, p 2**). A bright spot, however, in the Pharmacy sector is that the vast majority of public sector pharmacists are women—88 percent (see Appendix B)

From an economic perspective, high inflationary rates, artificial pricing mechanisms, high taxation, and slow reimbursements by government all contribute to cash flow problems for private pharmacies and their ability to expand (**Ionescu & Mitchell, p.13**) For example, most small inchoate pharmacies face major budgetary problems with the three-month lag time it takes for them to be reimbursed by government for services rendered (**9 Weinman & Ionescu, Attachment 1**) Also, the lack of adequate credit facilities for the purchase of drugs as well as uncertainty about the stability of retail store leases are all symptomatic of the routine challenges which face private pharmacies in Romania (**10 Mitchell & Feeley, Appendix 9**)

However, these problems illustrate the challenges facing economies in transition and do not necessarily reflect a lack of political will or commitment on the part of government. The new government has indicated a desire to further the privatization and overall reform process. Although Romania is struggling to develop and implement a National Drug Policy, some steps have recently been taken toward passing regulations on Good Pharmacy Practice (GPP) and Good Manufacturing Practices (GMP) (Cohen, Introduction)

Recently, a law was passed which devolved much regulatory authority to the National Pharmacists Association (NPA), also called the College of Pharmacists. Under this law, the NPA is government-mandated as an equal partner with the Ministry of Health on crafting pharmacy policy. With the appropriate levels of funding and technical assistance, the NPA will be able to address many of the fundamental issues afflicting private and public pharmacies (Ionescu & Mitchell, p 13).

### 2.1.3 *Rules and Regulations Regarding Pharmacies*

The staffing, size, location, stock, supply system and pricing issues regarding pharmacies in Romania are regulated by the Law on the Organization and Function of Pharmacy (11 Annex to Ordinul M S nr 2234/1994 in King, Appendix C, v)

The government's "Certificate of Need" regulation attempts to control the number of private pharmacists by designating one private pharmacy per every 7,000 citizens. A gray area of the law can be found with respect to rural areas where the 7,000-population requirement is not enforced. Another stipulation is that applicants seeking private pharmacy licenses must be first approved by the College of Pharmacy. While these laws may appear restrictive to pharmacists seeking entry into the market, for those already established it is a reprieve from the threat of further competition (Mitchell & Feeley, Appendix 9)

Private pharmacies in Romania are established either as completely new businesses or as privatized SOEs. Those businesses located in densely populated areas—particularly in the cities—are more likely to be new than a privatized SOEs. A 1996 sample survey by the Institute of Marketing and Survey (IMAS) of 597 pharmacists showed that 71.9 percent of them cited a desire for ownership and independence as motivation for working in a private pharmacy. In reality though, at least half of the new pharmacy facilities [50.2 percent] were established under the ownership of a large company. About 29.2 percent rented space from the state, and 20.6 percent rented space from a private individual (12 Sherpick & Hopstock, p 7)

To some, these facts are bothersome. For example, in 1994 the President of the NPA expressed his concern about the potential chain operations that privatized state distributors could create by evicting private pharmacists who lease their retail site from the distributor, or contract manage a pharmacy owned by the distributor (Mitchell & Feeley, Appendix 9)

Like all health care facilities, private pharmacies fall under the ambit of the MOH and as such require an MOH license and local Sanitary Commission approval (**Ibid, Appendix 9**) Staff size in the IMAS survey was closely associated with a pharmacy's location—those in rural areas tended to have a staff of no more than three while pharmacies in cities with populations of 50,000 or more were likely to have four or more full-time staff (**Sherpick & Hopstock, p 8**)

All staff members are required to have specialized and officially accredited studies in the field, corresponding to their jobs The private pharmacist and the assistant must each have a license of "free practice" (**King in WV PHC II, Appendix C**), and the former is required by law to have a graduate degree in pharmacy (**Sherpick & Hopstock, p 8**) Furthermore, the law forbids that a pharmacy function in the absence of a pharmacist

The physical facility regulations governing private pharmacies in Romania are similar to U S or Western European standards These include separation and control of narcotics, retaining a copy of the official price list, enforcing prescription requirements, and keeping a record of prescriptions, no sale of unregistered drugs, reporting of drug reactions, and appropriate labeling of containers (**Mitchell & Feeley, Appendix 9**)

Requirements for the location and size of pharmacies are quite specific If the pharmacist's living quarters is located in the same building as the pharmacy, it must be completely separate Except for balneary hospitals that are permitted to have their pharmacies on the first floor, all urban and rural-based pharmacies will restrict their pharmacies to the ground floor Urban pharmacies will be approximately 50 sq meters area with rooms of the pharmacy at least 2.5m in height and separated by no other structures but built walls (**King in WV PHC II Project, Appendix C**)

All pharmacies are required to be open every working day excluding Sundays and legal holidays Their hours of operations are regulated by the County College of Pharmacists or by the Bucharest College of Pharmacists in agreement with the Health Department—the Board of Pharmacy and Medical Apparatuses (**Ibid, Appendix C**)

Although products are available, pharmacists tend to keep their inventories low for two main reasons the lack of credit facilities for drug purchases and cash flow constraints resulting from slow reimbursement for state-subsidized products When stock-outs occur they seem to be caused by both cash flow constraints and poor inventory management systems (**Mitchell & Feeley, p 8**) The preservation, storage, labeling and release of medicines are to be preserved under the guidelines of the Romanian Pharmacopoeia and international standards—GPP (**King in WV PHC II Project, Appendix C**)

Regulatory barriers to the establishment of private sector drug distributorships are minimal—the warehouse must be supervised by a licensed pharmacist and meet the minimal physical standards Moreover, there also appears to be no regulatory barrier to the importation of drugs either by public or private distributors A US\$1,000 fee is required to license any new drug before entry into the market, and usually takes three to six months from date of filing for

registration to occur. Basic chemical and therapeutic data and clinical trials are also required prior to approval of registration by the MOH upon receipt of the Drug Commission's recommendation (Mitchell & Feeley, Appendix 4)

Government regulations limit the total wholesale and retail profit margins on products, preventing pharmacists from increasing prices to generate greater revenue. The allowable markup in 1997 depended on import prices and ranged from between 14 to 25 percent (Mitchell & Ionescu, p 4). The lack of hard currency also means that both private and public wholesale distributors face difficulty guaranteeing essential drug stocks at competitive prices. The prices on all imported drugs must be negotiated with the MOH [based on market entry time] (Cohen, p 3-4)

#### 2 1 4 *Practice of Pharmacy*

In Romania, the pharmacy is regarded as a health facility that has as its object the preparation, preservation, and dispensing of pharmaceutical products. There are two types of pharmacies: open-circuit and closed-circuit. Open circuit pharmacies—urban and rural—assure the population access to ambulatory services. Closed-circuit pharmacies are in hospitals and other institutions to which patients are admitted.

All pharmacies, closed or open, must operate under the authority of a pharmacist in charge—a master pharmacist—who may also hire accountant, clerks, caretakers, etc as auxiliary personnel. By law, the general responsibilities of the pharmacist include

- the overall supervision of the activities and function of the pharmacy
- the relationship between the patient and the pharmacy with a view toward patient education on the wise use of medicines
- establishing good relations and cooperation with physicians
- pharmaco-vigilance
- maintaining professional and scientific currency
- keeping current copies of the Romanian Pharmacopoeia and other appropriate literature on hand in the pharmacy
- supervision of residents and students in the pharmacy
- representing and defending the principles of the profession

Pharmacy assistants work under the direct supervision of the pharmacist, are non-degreed, and perform those functions that do not imply a professional responsibility on the preparation, dispensing and use of medicines.

Pharmacists are recognized as health specialists who help solve problems of “medicine assistance” and who are to collaborate in the medical management of the public's health [in the case of open circuit pharmacies] and in the institution [in the case of closed circuit pharmacies]

The pharmacy law is not only specific with regard to the above point but also requires that staff wear a white suit, which must be decent and clean

### 2 1 5 *Overview of Pre-Service Education and Training for Pharmacists*

Currently, there is a five-year curriculum in undergraduate pharmaceutical education. At the end of the course of studies and the successful defense of an undergraduate thesis, students are granted a diploma [There is a preliminary preparatory year for foreign citizens to enable them to learn Romanian. Those who pass this year are granted a certificate confirming their ability to enter the first academic year]. Successful completion of a competitive examination admits one to Pharmacy School. Those who do not pass may consider pursuing a two-year pharmacy assistant program at a local technical college.

After undergraduate training, students may elect to pursue a two to three-year residency in general pharmacy, clinical pharmacy, industrial pharmacy, or laboratory research. They may also elect to pursue the Doctor of Pharmacy degree. Students who pursue the Doctor of Pharmacy degree take may take up to six years to complete additional coursework, pass a theoretical exam, present and then defend a dissertation. Upon completion of postgraduate training, they receive either a residency certificate or a doctoral diploma that is validated by the Ministry of Education (MOE).

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Through the Institute for Post-Graduate Training and Consecutive Education of Physicians and Pharmacists, the MOH issued a draft program for specific medical training of physicians and pharmacists in FP (Mitchell & Freeley, Appendix 7)

The MOH controls and monitors all aspects of the pharmaceutical sector through a myriad of institutions (See Appendix A). The Drug Committee and its umbrella Institute for State Control of Drugs and Pharmaceutical Research "Petre Ionescu-Stoian" (ISCDPR), the Academy of Medical Sciences, the Ethics Committee and, the recently formed NPA all have a concern regarding the maintenance of a pharmacist's educational currency.

### 2 1 6 *Selected Projects Focusing on Pharmacist Training*

As of 1997 the MOH had not yet articulated a comprehensive Health Sector Reform Strategy with the input of the health sector constituency (Ionescu & Mitchell, Appendix VIII). It had, however established a list of goals. These include an overall improvement in Primary Health Care (PHC) and Family Planning services (FP) (Nat Pub Health & Hosp Inst, p.3)

A better-trained cadre of health care providers is a fundamental step toward improving PHC and FP delivery. To that end, the MOH has collaborated with World Bank and USAID projects, especially World Vision Relief and Development (WVRD) and Deloitte and Touche,

to improve, strengthen and sustain, at the highest level, the role of the pharmacist in the PHC/FP delivery process

The WVRD's Primary Health Care Projects I and II, Deloitte and Touche's Promoting Financial Investments and Transfers (PROFIT) project, the Environmental Health Project (EHP), and the World Bank's Health and Rehabilitation Project (HRP) have all stressed the importance of training in the health reform process (**King in WVRD PHC II p.1**)

The two projects that have had the greatest focus on the training of pharmacists were the WVRD's PHC II project and the PROFIT Project

The goal of the WVRD project was to improve the responsiveness, sustainability and effectiveness in the delivery of PHC through a mutual partnership between the MOH and the UMP- Cluj-Napoca Under the PHC II Project, a PHC framework for the School of Pharmacy was to be detailed As a result of this framework, pharmacist students would be better able to recognize their roles as providers of PHC, would focus on preventive as well as curative care and communities would benefit from a more comprehensive and integrated health care package

At project's end, a framework was in place but a full undergraduate curriculum was yet to be developed

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### *2 1 7 The PROFIT Training Project*

In October 1995, The Division of Population of the Office of Population, Health and Nutrition in the Global Bureau of USAID obligated US \$1 1 million from USAID/Romania funds to implement a project under the PROFIT umbrella that was aimed at increasing use of modern contraceptives through the commercial sector, with a specific emphasis on pharmacies Following an August, 1994 assessment of opportunities to expand usage of modern contraceptives through Romania's private sector, a subproject was initiated under USAID's sponsorship the following year to Improve family planning knowledge and business skills of pharmacists The project had two objectives The first objective was to increase the knowledge and use of modern contraceptive methods among young adults [ages 15-24] who use private pharmacies as a product source The second was to increase the use of private pharmacies as a source for modern contraceptive methods (**13. Weinman, Introduction, V**)

To achieve its first objective, PROFIT planned

- 3 waves of audience research,
- 78 media appearances (TV, radio, Print media),
- Printed Materials (flyers, brochures, posters, newsletters, t-shirts),
- special events, and
- direct mailings

To accomplish the second objective, PROFIT planned to

- Conduct market research,
- Select and train five trainers,
- Engage in curriculum-based training,
- Organize seminars in towns,
- Train 100 pharmacists, and
- Develop and distribute 2,000 copies of a Contraceptive Technology Guide for Pharmacies

The project worked in partnership with the NPA to provide training to private pharmacists in Contraceptive Technology (CT) and Quality Service (QS) The latter included a focus on communication and business principles

During Phase I, training of trainers (TOT), October-November 1996, PROFIT developed a cadre of 14 trainers (**14 PROFIT Project Activities, p 7**) They comprised a mix of pharmacists from the private and academic sectors as well as physicians from the NGO sector There were 6 pharmacists in the group and all were well versed in the content, principles and skills to be covered in the training (**15 Cogswell, p 3**) The PROFIT group had initially planned to select only five trainers (**Profit Project Activities, p 4**).

Phase II involved the training of pharmacists (TOP) in CT and QS, and ran from December 1996 through February 1997 It was initially planned that 10 training workshops in five major towns—Bucharest, Iasi, Cluj, Timisoara and Targu Mures—would be conducted to train 100 pharmacists (**Cogswell, p 3**) There were actually 11 workshops held in eight towns Furthermore, 195 pharmacists from 15 different counties were trained, each of whom received a certificate signed by the NPA president (**16 Ionescu, Memorandum, p.2**).

The third phase involved the distribution of a “Pharmacist’s Guide in Contraceptive Technology and Quality Service” based on the original training materials (**Ibid, Memorandum p 2**) Some 2,000 copies were slated for distribution to private pharmacies In fact, 5,000 copies were distributed (**PROFIT Project Activities, p.7**)

Phase IV involved monitoring and evaluation from March to May 1997 to assess the impact of the training as well as the materials and handbook (**Cogswell, p 3**) Project activities were evaluated using a telephone interview of 169 pharmacists Of these, 67 were trained through the project and 102 were not Areas of evaluation included

- use of knowledge gained and its effect on performance,
- receipt and use of the PHARMACIST’S GUIDE,
- stock level of contraceptives,
- stock and availability of educational leaflets,
- the pharmacists’ attitude toward providing contraceptive information, and
- the pharmacists’ knowledge (i e accuracy of information provided)

The final assessment of the project indicated that 1) about 97 percent of pharmacists in the trained group used daily the new knowledge gained, 2) some 88 percent of trained pharmacists improved the quality of their work as a direct result of the PROFIT project’s

training program 3) sales of contraceptives, condoms and spermicides were 9 percent, 12 percent and 15 percent respectively higher for the trained pharmacists than non-participants in the PROFIT project seminars (**PROFIT Project Activities, p 7**)

Results were reported in all areas except stock and availability of educational leaflets. Results of this evaluation with regard to pharmacist training indicate that when compared to the control group, sales growth of oral contraceptives [nine percent], condoms [12 percent] and spermicides [15 percent] were respectively higher in the trained group than in the control group.

The PROFIT Project's activity in the Romanian pharmaceutical sector has served to highlight additional needs in the system. These included training of pharmacists has to extend over a critical mass number, and the training curricula for practitioner pharmacists has to be adapted to an academic course. However, one of the issues with the training was that pharmacists were being trained by primarily a non-pharmacist group. In Romania, as in most countries, peer education is preferred.

Yet, the project's activities did highlight the need for key structural changes at the level of the MOH and NPA to help create a more competitive environment for pharmacists. The project evaluation recommended that for PHC/FP services, key structural reform should also ensure that an estimated 25 percent of the total number of pharmacists [1,500 - 1,700] be trained in not only the principles of CT/QS, but also in business and communications (**Ibid, p 7**). This approach would enable them to improve how they manage and market their pharmacies.

Overall, the PROFIT project

- developed a small core group of trainers familiar with the pharmacist's situation,
- developed a curriculum which can be used and/or modified for continuing education of workforce,
- developed a curriculum which can be used as a reference in future training,
- raised awareness of the potential role pharmacists can play in PHC/FP, and
- established a group of pharmacists across the country who have been equipped with CT information and have been trained to improve the quality of their patient interactions especially around contraceptive counseling.

## 2.2 ISSUES REGARDING DRUGS

### 2.2.1 *Decision Making Apparatus*

The MOH's Pharmaceutical Directorate regulates Romania's entire pharmaceutical sector. The Directorate is divided into three divisions:

- Inspection and Organization,

- Programs with World Bank and PHARE on Drug Distribution (for these specific programs), and,
- Registration, Drug Distribution, Pricing and Narcotics

The latter division is responsible for formulating and implementing all aspects of pharmacy policy. The Pharmaceutical Directorate collaborates with all other Directorates, the ISCDPR and the central state warehouse, UNIFARM (Cohen, p 2). The ISCDPR is responsible for undertaking quality assessments and registering all drugs that enter the Romanian market. The Drug Commission, which is under the authority of the ISCDPR, is responsible for the pre-selection process of drugs that will be registered on the market (Ibid, p 5).

Fulfillment of documentation requirements and positive laboratory analyses by the ISCDPR are decisive for the judgment of the Drug Commission on the granting or rejection of registration of a drug. The final data presented by the Drug Commission will determine whether or not the MOH will release a registration certificate for the respective drug (Ionescu & Mitchell, Appendix X, 10-11).

Responsibility for the formulation of the National Drug Policy (NDP) has been largely limited to staff in the Pharmaceutical Directorate. Although there has recently been the development of regulations for Good Manufacturing Practices (GMP) and Good Pharmacy Practice (GPP), political and financial investments are needed to enforce them. There have been limited efforts to promote the rational use of essential generic drugs. Moreover, this weakness is contributing to the uncontrolled supply of drugs [over-the-counter drugs and prescriptions] at pharmacies (Cohen, p 17).

Although regulations on advertising exist, impartial drug information is not being disseminated, and education [formal and informal] and widespread communication on drugs, particularly contraceptives, are also urgently needed (Ibid, p 17). The greatest obstacle to the use of modern contraceptive methods available through commercial channels was the lack of correct information (Ionescu & Mitchell, p 1).

### 2.2.2 *Distribution of Drugs*

Regulatory barriers to the establishment of private sector drug distributorships are low. According to MOH data, licenses have been granted to 340 private wholesalers in Romania (Cohen, p 4). A May 1993 MOH Report showed 52 private drug warehouses or distributors, 13 of which are in Bucharest. The national drug distributor, UNIFARM—which is scheduled to remain a parastatal corporation—competes for business by taking a lower share of the authorized wholesale/retail market (Mitchell & Feeley, Appendix 3). It was documented in 1996 that private wholesalers supplied 58 percent of the total pharmaceutical market and UNIFARM and the 17 regional wholesalers accounted for the remaining 42 percent (Cohen, p 2).

The 17 wholesalers—referred to as “commercial companies” since the transition towards a market economy—are generally 51 percent state-owned and 49 percent privately owned, although the figures may vary. These commercial companies, together with hospitals, public and private wholesalers, hospitals, public and private pharmacies are supplied with drugs imported by UNIFARM under the World Bank/Ministry of Health Reproductive Health Loan (**Ibid, p 3**). The majority of products destined for the private pharmacies are imported through a large network of private distributors (**Ionescu & Mitchell, p 2**).

The public pharmaceutical production industry was developed solely to supply the major needs of the population and to be wholly self-sufficient. However, during the pre-'89 era, public pharmaceutical production was always subordinated by the priority placed on heavy industry, energy and investment sectors. Isolation from international innovations in pharmaceutical development, high debt, mismanagement and low quality standards led to an overall structural weakness. Protectionist policies have typified the GOR's response to the problems afflicting the public pharmacy sector (**Cohen, p 4**). Recent privatization of the pharmaceutical sector also encompassed the production area. Some drug producers, such as Eurofarm [which has American investors], are comparatively better off financially and operating under more efficient systems (**Ibid, p 4**).

There appears to be minimal regulatory barriers to importation of drugs by either the public or private distributors (**Mitchell & Feeley, Appendix 3**). The central public warehouse and parastatal, UNIFARM—which until 1989 enjoyed a monopoly on drug imports into Romania—is facing competition from private importers. International producers have also entered the Romanian market heavily through imports and also by way of licensing their products for local production. Some of these international producers have quickly penetrated the market through a variety of marketing strategies (**Cohen, p 3**).

Many private distributors and importers had until recently placed limits on the quantity of imported essential drugs due to the instability of the Romanian currency, lei. The recurrent instability of the lei led in January/February 1997 to a halt by importers of all shipments in protest at price controls that were crippling. In response to that development, new regulations were adopted by the MOH to overcome this problem. They permitted importers to charge up to a 20 percent commission above the fixed import price to offset the exchange rate risk. Once the currency is stabilized, the premium is to be either lowered or lifted (**Ionescu & Mitchell, p 3**).

Part of government's health policy is to subsidize health care for the average Romanian. In the pharmaceutical sector this is done through the Drug Fund. Government reimbursements to private pharmacies for drugs issued to the public is mainly drawn from a two percent payroll tax from commercial companies, one to 10 percent through 'sin' taxes, with the remainder provided by the general budget [30 percent]. However, reimbursements to private pharmacies have been late due to the inability of the MOH to promptly collect payments from commercial companies. A new regulation enacted in 1996 made it mandatory for commercial companies to pay the tax, and a punitive 0.13 percent interest per day charge was imposed on

the delinquent tax. However, enforcement of the tax is unlikely due to potential political fall-out that could be brought about by the powerful commercial companies (Cohen, p 7)

### 2 2 3 *Profit Margins*

Previous regulations limited the combined wholesaler/retailer markup to 12 to 33 percent of the import price. Later, it was changed slightly to between 14 to 25 percent of the import price of which the distributor can receive from 4 percent to 9 percent (Ibid, p 7). However, it is the retail pharmacist who has minimal control over his selling price, he must settle for whatever margin is left after paying the distributor (Mitchell & Feeley, Appendix 6)

Despite the distortions in the pharmaceutical market brought on by price restrictions, high inflation, high taxation and government delinquency in reimbursements (Ionescu & Mitchell, Conclusions), pharmacists seem to accept the rules governing profit margins. In fact, they are concerned about enforcement actions for violation of the rules (Mitchell & Feeley, Appendix 6). This pervasive attitude negates the reality that government controls on sales margins limit potential profits for private pharmacists, and it may stem from the fact that private pharmacists view themselves as health care professionals rather than as business people. Moreover, they do not see themselves as being in competition with each other (Sherpick & Hopstock, p 27). Yet, the shortcomings of the system and the concomitant cash flow constraints do incur a detrimental impact on the ability of most private pharmacies to improve their management systems, reinvest in and expand their businesses

### 3 0 PHARMACISTS & USAID STRATEGIC OBJECTIVES

This section contains responses to USAID questions on the wider role pharmacists can play in support of USAID objectives

The current strategy of the USAID Romania Mission is designed to achieve specific results related to quality partnerships which facilitates local action, encourages local advocacy for development and fosters synergy at local levels through increased community organization. The following recommendation builds on the USAID strategy and proposes an approach which seeks to integrate pharmacists in their pharmacies as partners in this progress and reform effort

The framework for the USAID/Romania health strategy is Strategic Objective 3.2 "Improved Welfare of Children and Women". This objective seeks to achieve two intermediate results (IRs)

- decreased dependency on institutions for children and
- increased use of women's health services

This strategy supports health sector reforms in Romania and builds a basis for sustainable services. Under this strategy, USAID intends to build models of service in three target judets

Iasi, Cluj and Constanta USAID will work with judet leaders and organizations, and use lessons learned from past projects

### 3.1 AN APPROACH TO INTERVENTIONS

As in most countries, sizable numbers of populations flow through pharmacies each day that are open, one does not need to set an appointment or pay a fee to receive information from a pharmacist. However, it is true that many pharmacists focus on the entrepreneurial side of their practice and less on the professional, and use this access for financial gain, primarily

In the recent past, USAID has supported several projects that acknowledge the health service role of pharmacists with emphases on family planning (FP) and improved management of the pharmacy. This was a focus of the PROFIT project. The WVRD PHC II project also acknowledged a broader PHC role that pharmacists could play. However, while achieving their stated goals and objectives neither of these projects focused on vertical and/or horizontal integration of pharmacist's services.

Given the realities described above and the lessons learned from past USAID projects, it would be prudent for USAID to suggest to the GOR that it consider supporting interventions that maximize the GOR's investment in these professionals. Such support will benefit the local populace, improve the delivery of local services for the benefit of the country as a whole, and give greater emphasis to the professional aspect of the pharmacist's contribution to the country's health and welfare.

In concert with its focus on three judets and as a part of achieving objectives in child welfare and women's health, USAID projects should

- enhance recognition of the role that pharmacists and pharmacies play in projects,
- specify activities that pharmacists can perform to enhance their recognition in their pharmacy site, be acknowledged within the wider community, and serve as a vital resource and component of an integrated child welfare and women's health model,
- focus assistance on education and training in support of these designated activities

Attachment G identifies the current USAID Strategic Objective (SO) and IRs. An asterisk is placed by each intermediate result to which an intervention under this approach can make a contribution. In general, the intervention would use *the pharmacy as a health message, information and referral center*, as well as *a source of pharmaceutical products*. Pharmacists and their staff would promote healthy behaviors and healthy solutions to priority health problems. The pharmacy is viewed as a community service facility, and with minimal training its pharmacists can participate in and/or lead efforts designed to achieve specific IRs. In addition to having a role as disseminators of medicines, pharmacists could also disseminate information on steps that the populace can take to address health problems or efficient ways

to utilize local health facilities and programs. In some communities, pharmacists also serve as business and community leaders. In this way, pharmacists can be highly committed health service delivery collaborators in building sustained community-based programs. This approach is discussed below according to USAID IRs.

### 3.2 DECREASED DEPENDENCY ON INSTITUTIONS FOR CHILDREN (IR 1)

Activities would focus on reducing the institutionalization of children, and pharmacists/pharmacies would be viewed as a part of the continuum of care within the community. The pharmacist, as a professional and community leader, could be integrated into the policy and reform process within a judet. The purpose would be to help improve child welfare policies and administrative procedures (IR1.1). Also, the pharmacy could be a place where brochures and other general information literature can be obtained on child welfare issues (family support, parent education, family preservation, parental assistance, temporary care facilities, appeals for foster care and adoption).

Further, when pharmacists participate in innovative training such as, case-finding and referral techniques, IR 1.2 [increased number of professionals helping to improve the quality of child welfare services] is achieved. It also lends itself to a wider number of citizens participating in child welfare activities [IR 1.3].

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### 3.3 INCREASED USE OF WOMEN'S HEALTH SERVICES (IR2)

Since research in Romania has shown that 54 percent of contraceptives used in selected geographic areas are purchased in pharmacies, steps to increase the access, quality and demand of women's health should include a role for pharmacists in their pharmacies. Pharmacists could refer women to local facilities that provide FP services as well as pregnancy counseling, and assistance in addressing the issue of domestic abuse leading to an increased number of women using women's health [IR 2]. An larger number of pharmacists in community practice could have their knowledge of contraceptive products updated. If they were then trained in the application of that knowledge in their communications with patients and other health professionals, this would help to increase both the number of pharmacies providing contraceptive products [IR 2.2] as well as the number of professionals trained in counseling women on their use [IR 2.3]. With minimal effort, an intervention could be structured to encourage and use pharmacists who were trained to use the syndromic approach to counsel women who seek to purchase drugs to deal with HIV/AIDS prevention and sexually transmitted diseases. Pharmacists so trained could also apply the same techniques toward the appropriate use of prescribed drugs or for self-medication. This entire intervention should take into consideration a natural coincidence—that most pharmacists in Romania are women.

### 3 4 RECOMMENDATION

To ensure the availability of the human resources needed to sustain this approach at the end of specific projects, it is recommended that USAID train current and future pharmacists to serve as partners under an integrated strategy

It is suggested that USAID establish centers for the training of pharmacists at the University Faculty of Pharmacy within the three target judets. While programs would be anchored in the University, the local College of Pharmacists and community pharmacists in the three judets would be called upon to be participants in this center. These centers would have goals to

- develop a program that focuses on the training needs and skills enhancement for current practitioners. These include pharmacists, pharmacist technicians and others who are working in pharmacies. For instance, improved management of pharmacies, family planning services [contraceptive products, counseling, referral, etc ], and recognizing and handling the presentation of adverse drug events,
- develop and integrate PHC modules and topics—especially on children's and women's health—into the curriculum for undergraduate and graduate pharmacy students, and
- document the process so that it may serve as a reference point should other institutions of higher learning seek to replicate the process

Education and training interventions should build upon available resources, benefit from lessons learned in other projects and seek to increase the potential for sustainability

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Implications for achieving IRs could include

- contribution to integration and partnering for long-term consistency, and
- laying the foundation for the integration of new initiatives as they come on-line

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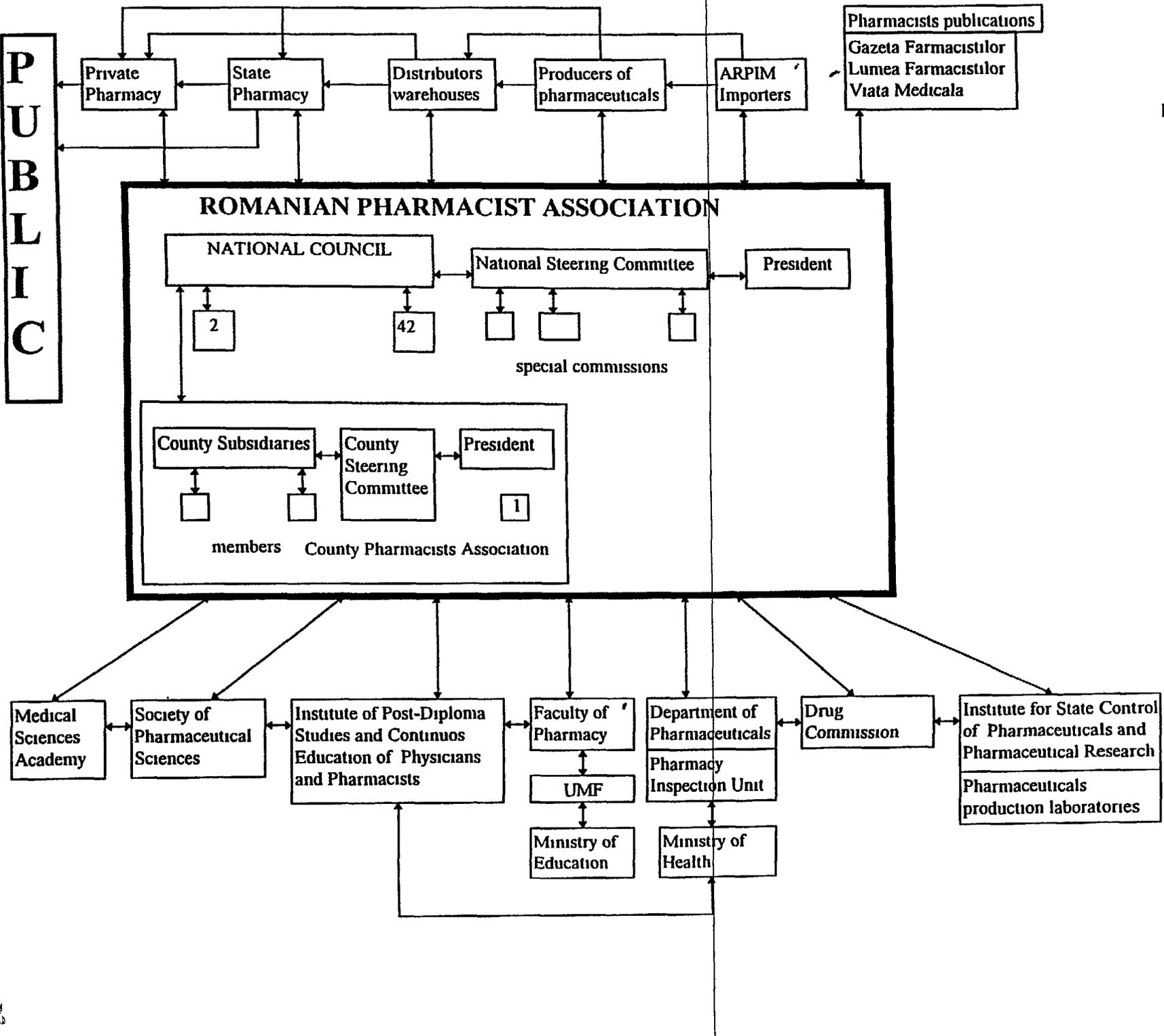
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PUBLIC



ANNEX 1  
ROMANIAN  
PHARMACEUTICAL  
SECTOR  
STRUCTURE

APPENDIX A

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## APPENDIX B

### NUMBER OF PUBLIC SECTOR PHARMACISTS BY SEX - 1996

|               | NUMBER      | PERCENTAGE   |
|---------------|-------------|--------------|
| <b>Female</b> | 2259        | 87.6         |
| <b>Male</b>   | 321         | 12.4         |
| <b>TOTAL</b>  | <b>2580</b> | <b>100.0</b> |

Source Ministry of Health, Center for Statistics Reteaua, S1 Activitatea Unitatilor Sanitare in Anul, 1996, pg II, 1997

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## APPENDIX C

### NUMBER OF PUBLIC AND PRIVATE PHARMACIES, PHARMACY POINTS AND KEY HEALTH UNITS - 1996

|                      | PRIVATE | PUBLIC | TOTAL |
|----------------------|---------|--------|-------|
| Pharmacies           | 2680    | 923    | 3603  |
| Pharmacy Points      | 348     | 191    | 539   |
| Hospitals            | 1       | 414    | 415   |
| Polyclinics          | 74      | 516    | 590   |
| Medical Dispensaries | 3347    | 6058   | 9405  |

Source Ministry of Health, Center for Statistics, Reteaua, Si Activitatea  
Unitatilor Sanitare in Anul, 1996, pg I, III, 1997

**APPENDIX D**

**PRIVATE SECTOR PHARMACEUTICAL  
DISTRIBUTION UNITS – 1995-1996**

|                 | <b>1995</b> | <b>1996</b> |
|-----------------|-------------|-------------|
| Pharmacies      | 2360        | 2680        |
| Pharmacy Points | 288         | 348         |
| Warehouses      | 295         | 376         |
| <b>TOTAL</b>    | <b>2943</b> | <b>3404</b> |

Source Ministry of Health, Center for Statistics, Reteaua, Si Activitatea  
Unitatilor Sanitare in Anul, 1996, pg III

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## APPENDIX E

### URBAN AND RURAL DISTRIBUTION OF PUBLIC & PRIVATE PHARMACIES AND PHARMACY POINTS, 1996

|                       | TOTAL | URBAN  |            | RURAL  |            |
|-----------------------|-------|--------|------------|--------|------------|
|                       |       | Number | Percentage | Number | Percentage |
| <b>Public Sector</b>  |       |        |            |        |            |
| Pharmacies            | 923   | 675    | 73.1       | 248    | 26.9       |
| Pharmacy Points       | 191   | -      | -          | -      | -          |
|                       |       |        |            |        |            |
| <b>Private Sector</b> |       |        |            |        |            |
| Pharmacies            | 2680  | 2060   | 76.9       | 620    | 23.1       |
| Pharmacy Points       | 348   | 193    | 55.5       | 155    | 44.5       |

Source Ministry of Health, Center for Statistics Reteaua, S1 Activitatea Unitatilor Sanitare  
in Anul, 1996, pg 55, 1997

## APPENDIX F

### PERSONS CONTACTED

#### BUCHAREST

Randal Thompson  
Ecaterina Vasile  
William Sauer  
Elizabeth DuVerlie

USAID Program Development Officer  
USAID Program Development Specialist  
USAID Human Development Officer  
USAID WID Fellow & Communications Advisor

Louise Peloquin  
Carmen Zaman

Private Services Contractor (PSC)  
Special Inspector—Directorate of  
Pharmacy, Ministry of Health

Ulteru Otilia  
Dr Dan Farcas

Pharmacist—Ministry of Health  
Director—Center for Computing, Health Statistics and  
Medical Documentation

Dr Victor Voicu

Professor of Pharmacy, UMP-Bucharest—"Carol Davila "

Gabriel Ionescu  
~~Michael Holscher~~

Former Project Officer—PROFIT Project  
~~Romania Rep—Population Services International~~

Richard Florescu  
Dr Kati Schroff  
Imelda Feranil  
Becky Davis  
Horea Bucur

Health Officer—World Bank  
Health Office Director—UNDP  
Policy Project  
Coordinator —Training for Europe, World Learning  
President, National Pharmacists Association and  
Administrator—S C Farma Bucur S R L  
Country Manager—Eli Lilly (Suisse) S A.

Dr Nicolae Voiculescu

#### CLUJ

Dr Marius Bojita  
Dr Ioan Bocsan  
Dr Felicia Loghin

Vice-Rector—UMP-Cluj  
Vice-Rector for Educational Programs—UMP-Cluj  
Coordinator of International Affairs—Faculty of  
Pharmacy, UMP

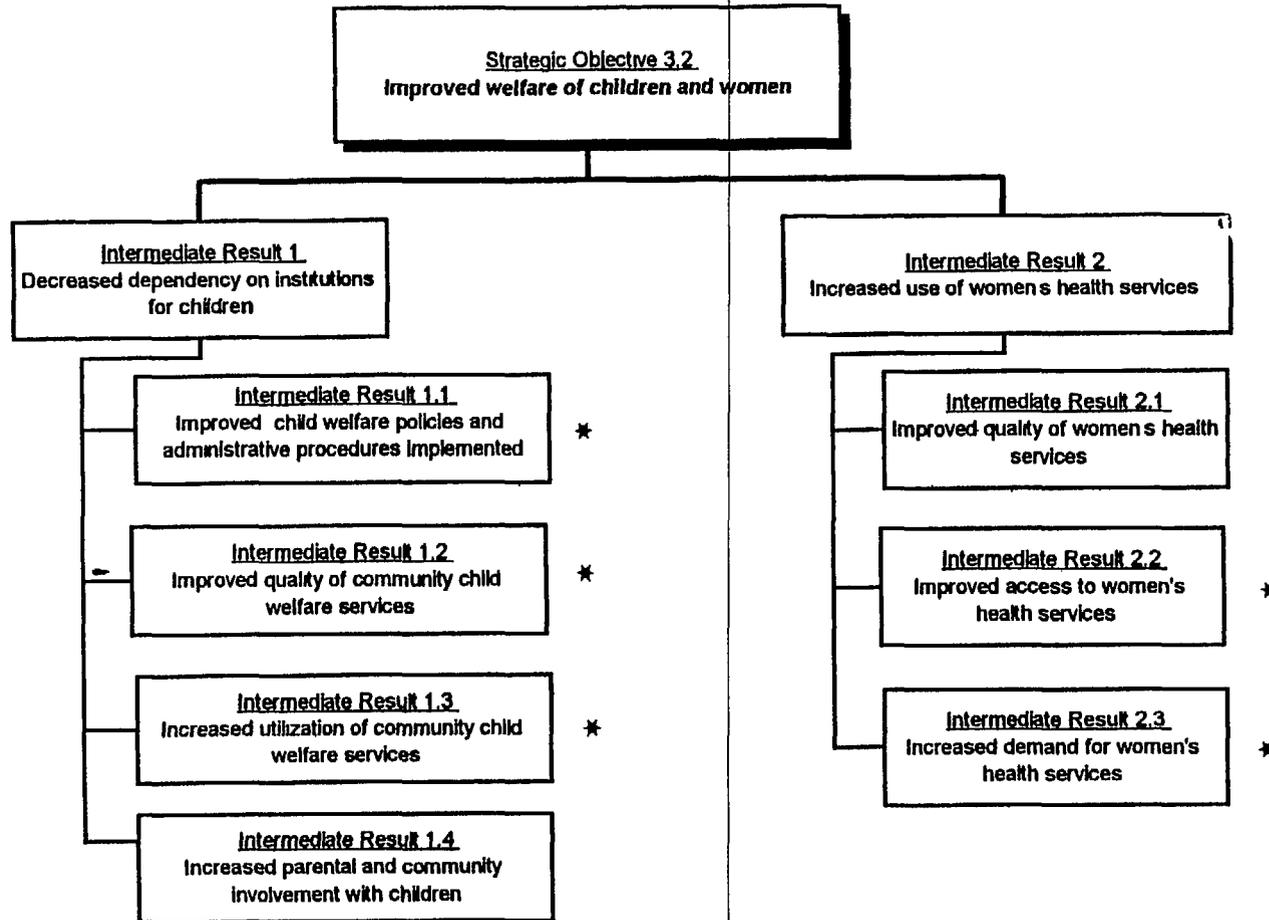
Dr Robert Sandulescu  
Dr A Achimas  
Augustine Prodan

PROFIT Project Trainer  
Coordinator of International Affairs—UMP-Cluj  
Informatics Coordinator—UMP-Cluj

APPENDIX G

(An asterisk denotes potential areas for pharmacist contribution)

Romania Strategic Framework  
Strategic Objective 3 2



9/19/97

6

**ATTACHMENT B**

**OIP/PACE CENTER-UMF/CLUJ  
MEMORANDUM OF AGREEMENT**

# HOWARD UNIVERSITY

CONTINUING EDUCATION

**MEMORANDUM OF AGREEMENT  
BETWEEN THE PACE CENTER, OFFICE OF INTERNATIONAL PROGRAMS,  
HOWARD UNIVERSITY CONTINUING EDUCATION  
AND  
"IULIU HATIEGANU" UNIVERSITY OF MEDICINE AND PHARMACY  
(UMF)-CLUJ/NAPOCA**

The "Iuliu Hatieganu" University of Medicine and Pharmacy (UMF)-Cluj/Napoca of Romania wishes to enter into an institutional agreement for cooperation and collaboration on matters of continuing pharmacy education and training with the PACE (Pharmacy and Continuing Education) Center, Howard University Continuing Education (HUCE), Silver Spring, Maryland, USA. This agreement will institutionalize and continue the initial work begun under the leadership of UMF Vice-Rectors and consultants from HUCE.

Operating under the rubric of HUCE's Office of International Programs, the PACE Center seeks to extend to UMF-Cluj-Napoca the vast educational resources of Howard University and its affiliate institutions. The PACE Center is expressly concerned with the strengthening, through continuing education and training, of the pharmacist's role in the primary health care (PHC) delivery process. A further goal is the recognition of the pharmacist as a vital member of the health care delivery team.

The PACE Center is committing itself to providing technical assistance to UMF-Cluj for the development of a PHC curriculum component that complements the health services and supports the ongoing reforms in the Romanian health system. This curriculum component will be used to train current and future pharmacists. This approach is expected to help improve the quality of health care received by patients, especially women and children, and contribute significantly to meeting the health reform goals set by the Government of Romania (GOR).

The UMF-Cluj's prime objective is to develop a sustainable and results-oriented PHC curriculum offering within an already strong pharmacy education system. Such a component combined with distance education methods, UMF-Cluj believes, can be replicated throughout Romania thereby contributing to the goals of health system reform.



# HOWARD UNIVERSITY

## CONTINUING EDUCATION

This agreement thus provides a vehicle for both parties to explore the range of technical cooperation activities to achieve the above objectives that will include

- \* the development and implementation of a primary health care course for undergraduate and graduate pharmacy students and professionals,
- \* the assessment of the potential for joint distance education efforts and the establishment of broader continuing education programs,
- \* the exchange of institutional faculty, conduct of joint research, and
- \* other projects of mutual interest.

The parties undertake to initiate and complete this technical cooperation under current funding, and to seek funds from international donors and other sources to expand the proposed work

We agree this date, 13 OCT., 1998

For UMF CLUJ-Napoca

Rector PROF DR OLIVIU PATRU

Vice-Rector PROF DR MARIUS BOJITA

For Howard University, Continuing Education,

Director,  
HUCE

Manager, OIP/PAGE  
Center





MINISTRY OF NATIONAL EDUCATION  
ROMANIA  
UNIVERSITY OF MEDICINE AND PHARMACY  
"IULIU HATIEGANU"  
RECTORAT

Emil Isac Street, no 13, 3400-CLUJ - NAPOCA, phone 40-064-195524, 195516, fax 40-064 - 197256, 430550

MEMORANDUM OF AGREEMENT  
BETWEEN THE PACE CENTER, OFFICE OF INTERNATIONAL  
PROGRAMS, HOWARD UNIVERSITY CONTINUING EDUCATION  
AND  
"IULIU HATIEGANU" UNIVERSITY OF MEDICINE AND  
PHARMACY  
(UMF)-CLUJ/NAPOCA

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- \* other projects of mutual interest

The parties undertake to initiate and complete this technical cooperation under current funding, and to seek funds from international donors and other sources to expand the proposed work.

We agree this date, 13 02, 1998

For UMF CLUJ-Napoca

Rector PROF DR. OLIVIA PATCU

Vice-Rector PROF DR. MARIUS BOBITA



For Howard University, Continuing Education,

Director,  
HUCE

Peggy A. Berry

Manager OIP/PACE  
Center

Rosalyn O'Keefe

**ATTACHMENT C**

**DE OUTLINE  
"THE POTENTIAL FOR DISTANCE EDUCATION THROUGH THE USE OF  
TELECOMMUNICATIONS"**

**ROMANIA CHILD HEALTH PROJECT**  
***EXPANDING THE PHARMACIST'S ROLE IN PRIMARY HEALTH CARE***

**A Project of Howard University Continuing Education's PACE Center  
(HUCE/PACE)**  
**In Collaboration with The "Iuliu Hatieganu" University Of Medicine And Pharmacy  
(UMF-Cluj)**

**THE POTENTIAL FOR DISTANCE EDUCATION  
THROUGH THE USE OF TELECOMMUNICATIONS**

**October, 1998**

**Submitted To**  
**USAID/ROMANIA PROGRAM OFFICE**

**Submitted By**  
**ROSALYN C KING, PHARM D, M P H**  
**Howard University Continuing Education (HUCE),**  
**PACE Center, Director**

Supported by USAID Grant No 186-0002-G-SS-8100-00  
**EXPANDING THE PHARMACIST'S ROLE IN PRIMARY HEALTH CARE  
THE POTENTIAL FOR DISTANCE EDUCATION  
THROUGH THE USE OF TELECOMMUNICATIONS**

## **INTRODUCTION AND BACKGROUND**

In 1998, United States Agency for International Development (USAID) Mission in Romania awarded Howard University Continuing Education, Office of International Programs (HUCE/OIP) a grant in support of collaborative activities between HUCE/OIP's PACE Center (Pharmacists and Continuing Education) and the Faculty of Pharmacy at "Iuliu Hatieganu" University of Medicine and Pharmacy (UMP), Cluj/Napoca, Romania

The focus of this institutional collaboration—began in 1996—is the expansion of the pharmacist's role in primary health care (PHC) in Romania through the introduction of sustainable, University-based training interventions that will complement an already strong pharmacy curriculum

One of the intended results of this award was to develop an outline of the process needed for the continuing education of faculty, professionals in the workforce, students, graduates and postgraduates via telecommunications so that they may over the long-term increase or maintain an effective role in Romanian health care

By helping to advance the institutional and human capacity development of pharmacists through training interventions, the project would be supporting the Mission's current strategic objectives (SOS) to improve women and children's welfare

Romania's Ministry of Education (MoE) has included the DE learning method in its strategy and UMF currently has two such programs. One is a telemedicine program in ultrasonography with the Thomas Jefferson Medical School in Philadelphia, PA. The other is in palliative care with an unnamed source. The latter apparently uses a multidisciplinary approach. The former is interactive. Neither telemedicine program was observed during the visit.

To that end, HUCE/OIP—with the guiding collaboration of Howard University's Telemedicine Suite – developed the following approach:

- Data gathering through a structured questionnaire
- Review resulting information
- Determine the feasibility of the concept
- Articulate the DE concept and plan
- Discuss the plan with colleagues

Each of these points is expanded upon below

## DATA GATHERING VIA STRUCTURED QUESTIONNAIRE

A survey was constructed and applied in two settings with colleagues at UMF/Cluj – both at the Faculty of Pharmacy and University levels. Results are summarized according to the category of questions in the survey. Responses and the questionnaire are in **Appendix A**.

## REVIEW RESULTING INFORMATION

*Telecommunications* The intended facility where the distance learning program will occur is at UMF-Cluj located in the major city of Cluj-Napoca which lies in the northern Romanian region of Transylvania. Accordingly, there is telephone service (local, long distance and international) through the Romania Telecommunication National Society located in Bucharest.

*Network* Additional telecommunications service is provided via the SOROS FOUNDATION and DYNAMIC NETWORK TECHNOLOGIES which each serve as internet service providers (ISPs). The former serves the educational and non-profit community while the latter, the for-profit community.

*Power And Engineering Systems* UMF has a power system that provides for Uninterrupted Power Supply (UPS) for up to three hours. The power system used is PAL-D (220V, 50Hz) with a backup power generator.

*Facilities* UMF is building a new communications site that will house a computer center and a videoconference room. These facilities will have appropriate audio and video components suitable for distance education. It should house about 80 persons and is scheduled to open in the fall of 1998.

*Personnel* There should be a conference coordinator for each course or series. When the UMF facility is opened, there is planned support to be provided by audio visual and computer technicians.

*Course Preferences* At the beginning, there should be a once a month conference to the site. As soon as this is established, multi-point conferencing is envisioned as a matter of course for continuing education for practitioners.

## DETERMINE THE FEASIBILITY OF THE CONCEPT

There were several determinants that led to the conclusion that a distance education course linked to Howard University was feasible.

- The current experience of UMF with DE from the United States,
- The plan of UMF to build an Informatics center and undertake DE,
- The MoE inclusion of DE in its recent pronouncements,

- The review of the experiences and data from other USAID-funded projects indicating, that pharmacists would be willing to pay for selected training, and
- The results obtained via the questionnaire

## DESCRIBE THE DE CONCEPT AND PLAN

The UMF/Cluj and HUCE will structure a University of Medicine and Pharmacy, Cluj-Napoca Romania Distance Learning Network composed of the two entities with on-site management at each component, connected via satellite and/or Internet UMF/Cluj would be the Romania hub to which remote sites (eg community and hospital pharmacies) could connect Howard University would be the primary Distance Learning Referral Site for UMF/Cluj The process can evolve from a basic to a more complex one where the first level is less costly and the fourth very costly

The levels could be

- 1 Storing and Forwarding of Information
- 2 Multipoint Conferencing Capabilities
- 3 Videoconferencing and Whiteboarding
- 4 Use of Wireless Technology in Video conferencing

Storing and Forwarding is based on simple Internet connectivity and allows efficient distribution of still images, data and text, audio conferencing and uses a bandwidth akin to the usual modem speed Multipoint conferencing often requires dialup connectivity to multiple sites and can handle from data conferencing to real-time video conferencing over a bandwidth that must be arranged for or present in ISDN connectivity Level three requires an even larger bandwidth for transmission usually found in a leased dedicated circuit Level four would require microwave transmission

It was decided to begin with the least costly, most available resource Store and Forwarding using Internet connection In order to develop content, the following would be the steps in the plan of action to develop and deliver a DE course

- 1 Identify the Course Curriculum
- 2 Develop the Course Curriculum
- 3 Develop the Script for the Curriculum
- 4 Add Images to Text Information (i e Slides, Photograph and Illustrative Contents)
- 5 Digitize the Images and Text Protocol
- 6 Add Audio and Video clips where appropriate (If a multimedia package is desired)
- 7 Insert Interactive Capabilities (including Audio and Video Conferencing & Whiteboarding)
- 8 Add Distributing Computing Capability

## DISCUSS THE PLAN WITH COLLEAGUES

The concept was presented and discussed by Dr Marius Bojita, UMF-Cluj Vice-Rector for Academic Development with the UMF/Cluj hierarchy who suggested that steps be taken to advance the actual course development. Dr Bojita arranged to have the concept presented during his plenary address "*Realities and Perspectives in Pharmaceutical Education*" to over 1,200 Romanian pharmacists who attended the 11<sup>th</sup> National Pharmacy Congress.

Further, the PACE Center and project director, Dr Rosalyn King prepared and presented a paper, "*Organizing A Course for Distance Education, Some Key Considerations*" at the same 11<sup>th</sup> National Pharmacy Congress Session on Pharmaceutical Education. The slides of this presentation are included in **Appendix B**.

## RESULTS

The award called for development of an outline of a process for continuing education via telecommunications. The above represents such an outline. However, an added result is that under the grant, the first three steps were taken. A DE course module, *Monitoring Drug Therapy*, was developed, scripted and tested during delivery of the April, 1999 UMF course "THE ROLE OF THE PHARMACIST IN PRIMARY HEALTH CARE," and was shown to Mission staff.

**Howard University Continuing Education Office of International Programs**

**TSI/Distance Learning Survey Romania 2/3/98**

**TELECOMMUNICATIONS INQUIRIES**

What is the name of the facility where the distance learning program will occur? *UMF*

Is the facility in an urban or rural setting? *Urban -- Cluj*

If rural what is its geographical location *N/A*

How far from an urban city is it? *N/A*

Does the facility currently have telecommunications services (PTT)? *Yes*

Where is the point of demarcation with the facility?

What is the name of the local telecommunications carrier? *Judet Telecommunication Dept Direction*

What is the telephone number of the local telecom? *931-4115115 info/ 921-arrangements*

Does the facility have long distance telecom service?

What is the name of the International telecom carrier? *Telecommunication National Society-Bucharest*

What is the name of the International telecom?

Does your telecommunications company offer other business services? *Mobil ROM Fax & Data*

ISDN BRI service-Yes Switch Service -- *Yes*

T1 service or higher - when the new facility is in place

Wireless service(s) - *CONNEX GSM*

**NETWORK INQUIRIES**

Does the facility currently have Internet service? *Yes*

If yes what is the name of the Internet Service Provider?  
Dynamic Network Technologies (DNT) & Soros Foundation (SOROS)

What is the telephone number of the ISP? *Soros - 064-420-006 420 480 420 470*

Describe the Internet connection to your facility

What is the backbone bandwidth of your Internet?

Where is the downlink of the service to the country?

Is the line dedicated?

Is the service a dial up or direct link *Dial Up*

If it is a dial up service does it support a 56Kbps or 28Kbps? *14 + 33k*

Does the Internet line terminate at your facility? *Yes*

Does the facility have a network? (Internal) LAN

What is the size of the network?

**POWER INQUIRIES (ENGINEERING/POWER SYSTEMS)**

Do you utilize an Uninterrupted Power Source (UPS) with 15 min of up time *For 3 hours*

If yes what is the maximum wattage of the UPS

What is the name of your current utilities company?

What power system are you currently on *Color System*  
 NTSC  PAL -- D  SECAM

If you are on the PAL system is the voltage 220V with a frequency of 50Hz

Does the facility have a backup power generator?

**FACILITIES SET UP INQUIRIES (UMF/HU)**

How many conferences per week will you be requiring? *To be determined*

Will you require multipoint conference capabilities? *Later not now*

Will the conferences occur in the same room? *Yes*

If no How many rooms needs to be prepared for conferencing

Where are the room(s) located? *New Building To be opened this fall*

Will the conferences be interactive?

Do you plan to perform presentations? *Yes*

Do you currently use slides for your presentations? *Yes*

Do you use a laptop for your presentations? *No*

Does your facility currently have a conference ready room?

Is the room equipped with audio and video capabilities? *Yes (Following applies to new building)*

Does the conference room have a video projection unit in it? *Yes*

Do you have microphones in the room? *Yes*

Is the conference room equipped with monitors? *Yes*

What is the maximum seating the room can hold? *About 50*

**PERSONNEL INQUIRIES (HU/UMF)**

Will you require a conference coordinator? *Yes*

Does your facility have an Audio/Visual department?

Does your facility have an Audio/Visual Engineer?

Does your facility have a Computer Engineer?

If no to all the above personnel question do you have access to these entities if needed?

For the following questions please circle the response that applies to your needs

Which of the following multimedia capabilities does your distance learning project require?

- a) A fully interactive live video conferencing (i.e. the ability to receive and send educational presentations from all sites with interactive audio and video)
- > b) Partially interactive live video conferencing (i.e. the ability to receive educational presentations with interactive audio but one-way video)
- > c) Non-interactive video conferencing (i.e. the ability to receive educational presentations and one way audio and video transmission)
- > d) Store and forward (i.e. data and video stored in a file and transmitted only)

Which of the following would you prefer for video conferencing?

- a) A 29 inch or greater monitor *monitors - or see below*
- b) A projected image *6 x 4 meters*

How important is the quality of the video image?

- a) Very important
- > b) Important
- b) Not important

During each distance learning session what types of information would need to be viewed remotely at your site? (Please check all that apply)

- > a) Overhead Transparencies
- > b) Slides
- > c) Video tapes
- > d) Documents
- e) Other video audio or data material (Please specify) \_\_\_\_\_

Would you need to tape any distance learning sessions?

- > a) Yes
- c) No

Which of the following describes your department communication capabilities?

(Check all that apply) Below applies to UMF

Personal computer     Internet     E-mail     Fax     Voice Mail

How many days per week would you like to participate in distance learning conferences? \_\_\_\_\_

What day(s) of the week do you prefer? \_\_\_\_\_

What are the length of time for your distance learning sessions? \_\_\_\_\_

What time of day will you hold your sessions? \_\_\_\_\_ *7 hours time difference* \_\_\_\_\_

Considering an eight-hour day how many hours of each of the following would you prefer?

|                      |                            |                            |                            |                            |                            |                            |                            |                            |
|----------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| Lectures             | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 | <input type="checkbox"/> 7 | <input type="checkbox"/> 8 |
| Small-group seminars | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 | <input type="checkbox"/> 7 | <input type="checkbox"/> 8 |
| Panel presentations  | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 | <input type="checkbox"/> 7 | <input type="checkbox"/> 8 |
| Case presentations   | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | <input type="checkbox"/> 5 | <input type="checkbox"/> 6 | <input type="checkbox"/> 7 | <input type="checkbox"/> 8 |

Are you familiar with Distance Learning and/or Telemedicine?

Comments Yes \_\_\_\_\_

# Organizing A Course for Distance Education: Some Key Considerations

Rosalyn C King, Pharm.D, MPH  
The PACE Center  
Howard University  
Continuing Education

# I. Introduction

## A. Purpose of Paper.

1. Explore concept, definition of Distance Education, Distance Learning and Distributed Education.
2. Discuss Key Planning Issues.
3. Review Selected Approaches & Tips for Success for Distance Education Courses.

## B. Distance Education Courses and Distance Learning Programs.



## II. Definitional Perspective

A. **Distance Education** -- Any formal approach to learning in which the majority of the instruction occurs while educator and learner are at a distance from each other (Bray, Dean, et. al).

1. **Distance Learning** - results from Distance Education
2. **Distributed Learning** - two or more institutions involved in distance education delivery; course originates at one institution and given at another

## B. Former Types

- Correspondence Courses & Schools
- Radio Schools
- Instructional TV (Sunrise Semester)
- Computer Assisted Instruction

## II. Definitional Perspective (cont'd)

### C. Key Features of Distance Education

1. Topic suitable to the method.

2. Central Instructional Process remains intact.

- » Content Presented

- » Interaction with faculty, other learners, resources

- » Practical application

- » Learning assessment

.

## II. Definitional Perspective (cont'd)

3. Two-way communication bridges gap between learner and instructor--often via telecommunications technology.

- Same Time - Same Place
- Same Time - Different Place
- Different Time - Same Place
- Different Time - Different Place
- Anytime - Anyplace

4. Advanced planning and administrative support required.



## II. Definitional Perspective (cont'd)

### D. Approaches and Formats

#### 1. Extension

- extending classroom to other locations; replicate known instructional program of campus classroom.
- often use videoconferencing, instructional TV, audioconferencing formats.

#### 2. Transformation

- more student focused and transforms classroom lectures and interactions into individualized learning materials.
- use pre-printed, self-paced learning packages, internet and other forms of computer conferencing

### III. Benefits and Constraints of Distance Education

- A. Tailoring: Instruction taken to the student rather than student coming for instruction.
- B. Reduced Time Constraints: Often geared to accommodate a busy professional work schedule.
- C. Cost-Effective: One course can be offered to many locations.
- D. Greater Student Access
- E. Faculty Transition
- F. Student Willingness
- G. Technology



## Comparing Distance Education with Traditional Instruction

| Components of Instruction        | Traditional   | Distance Education   |   |
|----------------------------------|---|--|---|
|                                  | Classroom   | Extension or Distributed   | Transformation  |
| <b>Course resources</b>          | texts and other reading material, library, reserve room, laboratories, film, video, and audio | texts, handouts of course outlines, study guides   | computer software, databases, on-line catalogs, video- and audio-tapes, course and study guides                                       |
| <b>Instructional strategies</b>  | lecture, discussion (usually)   | interactive activities, varied pacing and types of activities, extensive use of handouts and visuals | strategies embedded in material, one-on-one feedback focused on assignments, personalized instruction through letters and phone calls |
| <b>Teaching aids</b>             | chalkboard, overhead  | whiteboard, video- and audiotapes, fax   | computer conferencing, audioconferencing, mail, voice mail  |
| <b>Material distribution</b>     | instructor hands out in class   | courier, fax, mail   | mail, computer conferencing   |
| <b>Informal communication</b>    | takes place both after class and during office hours, usually initiated by student            | takes place among students at each site and by telephone with instructor                             | telephone, computer conferencing, and voice mail, initiated by both student and instructor  |
| <b>Practice</b>                  | laboratories, small group work, written assignments, fieldwork                                | small group work, interactive activities, written assignments, fieldwork                             | computer simulations, written assignments, fieldwork  |
| <b>Student motivation</b>        | peer pressure, relationship with other students and instructor                                | work related, relationship with students at site   | intrinsic, one-on-one relationship with instructor  |
| <b>Instructional orientation</b> | teacher-centered  | teacher-centered   | student-centered  |
| <b>Material development</b>      | instructor  | instructor, technical assistants, and site assistants  | instructional designer, instructor, video/print development team  |

SOURCE      DESIGNING COURSES FOR DISTANCE LEARNERS, 1997

# IV. Key Planning Considerations

- A. Policy and Program Directives
1. Institutional Educational Goals.
  2. Institutional Policies.
  3. Program Imperatives.
- B. Administrative and Logistical Support
1. Administrative Support Services.
    - a. Personal (site coordinator, technical support)
      - recruitment and training
      - orientation and training
    - b. Equipment (fax, copier, telephone, computers)
      - maintenance
      - repair
    - c. Costs and Financial Management
      - charge to student collection
      - financial aid

1. Administrative Support Services (cont'd)

d. General Management

BEFORE CLASS

(eg. enrollment, course selection advice)

DURING CLASS

(eg. student interaction, record-keeping)

AFTER CLASS

(eg. archiving records)

# IV. Key Planning Considerations

## B. Administrative and Logistical Support (cont'd)

### 2. Materials Distribution

- a. on and off-site mechanisms.
- b. supportive of assignments.

### 3. Access to Facilities

### 4. Examinations

- a. Security of Content.
- b. Off-Site.

### 5. Scheduling-Academic Calendar

### 6. Marketing and Promotion

- a. getting out course announcements to participants.
- b. articulation of benefits to participants.

## V. Faculty Readiness

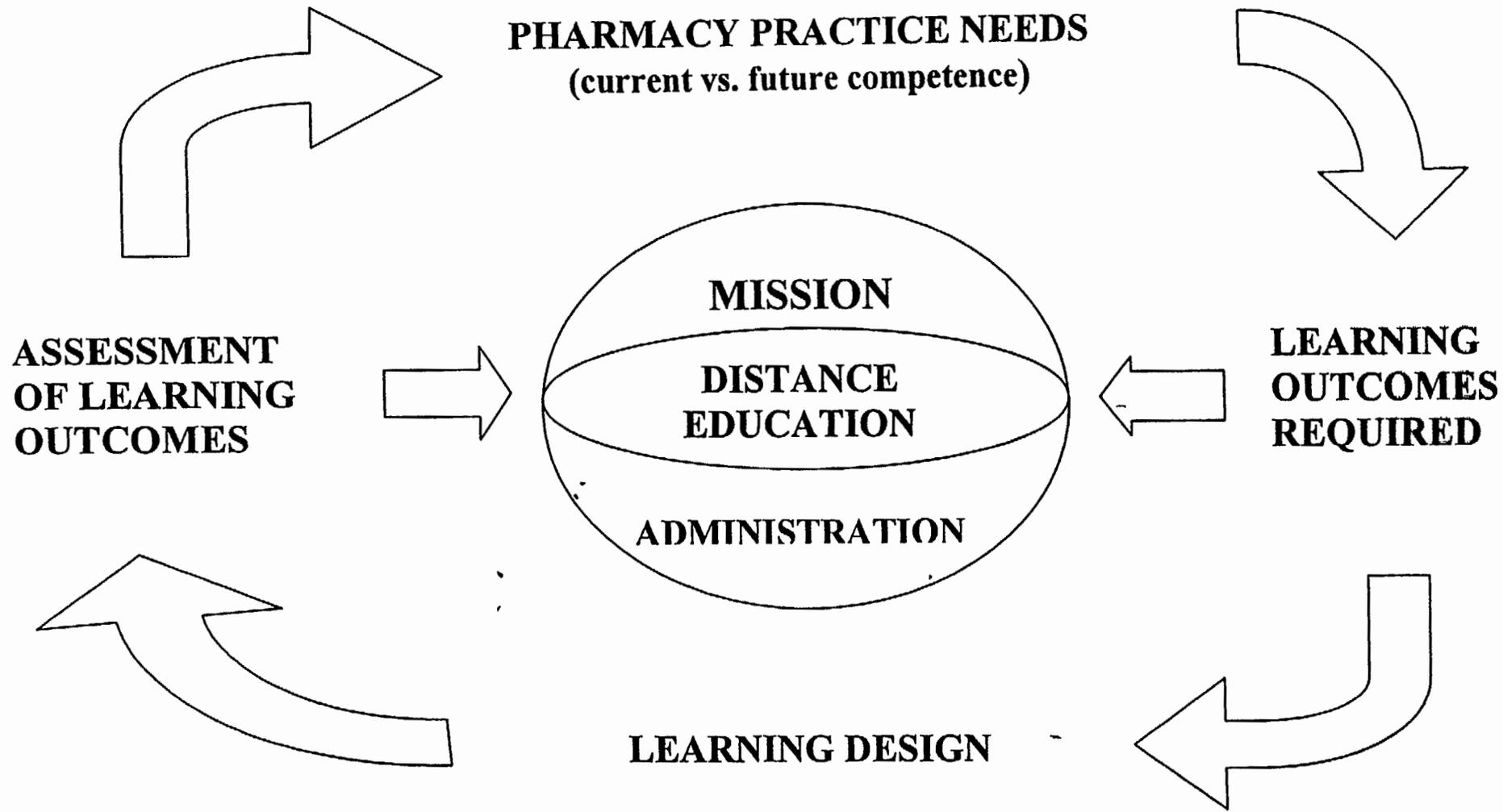
- A. Recruitment and Selection -- Faculty who are experienced in teaching the topic but who are also at ease with the technology to be used.
- B. Orientation and Training -- Faculty oriented to distance education and its benefits; to technology which is to be used; how to use the technology and to adapt classroom courses; how to establish "office hours."
- C. Appropriate Recognition and Incentives -- for planning and conducting DE course.
- D. Readiness and Performance Assessed Before, During, After Course.

## VI. Student Participation

- A. Assure Access to Identified Resources (articles, periodicals, texts, computers).
- B. Identify Authoritative Source of Information (who to go to for what).
- C. Assure Interaction with Faculty and Other Students

# VII Instructional Design

- Lectures or Content via Syllabus
- Interaction
  - Faculty (Mentor, Ask-An-Expert)
  - Student (Tutor Support, Peer Conversations)
- Access to needed technology resources



SOURCE ADAPTED FROM IACET GUIDELINES, 1997

# VIII Evaluating Distance Education

- A. Content and Design of Course
- B. Use of Technology
- C. Management of Instruction



# Tips For Success

- Focus on Learner
- Provide Solid Content
- Monitor Throughout
- Evaluate and Upgrade

# References

1. "What is Distance Learning," Thomas Bray, Judith Dean, Charles Dershimer, et al., University of Michigan, 1995.
2. Guidelines for Distance Education, International Association for Continuing Education and Training, 1997.
3. Michael P. Lambert, "Assuring Quality and Measuring Results in Distance Education," March 6, 1997. (Presentation to Association for Continuing Higher Education)
4. Designing Courses for Distance Learner; A Faculty Resource Guide, Office of Instructional Development, UMUC, 1994.
5. Don M. Coleman PhD, "Overview of Distance Education" Faculty Forum on Distance Education, Howard University
6. Gary L. Harris, "Web-Based Course Development" Faculty Forum on Distance Education" Howard University

**ATTACHMENT D**

**COURSE OUTLINE**

# COURSE SYLLABUS

"TULIU HATIEGANU"  
UNIVERSITY OF MEDICINE AND PHARMACY

*IN COLLABORATION WITH*

HOWARD UNIVERSITY CONTINUING EDUCATION  
THE PACE CENTER

## PRIMARY HEALTH CARE DELIVERY AND THE ROLE OF THE PHARMACIST

COURSE DATE April 20 – 30, 1999

Faculty Dr Marius Bojita, Dr Rosalyn C King, Dr Felicia Loghin,  
Class Dates & Hours (2 hours per session, 3 sessions per week, 12 hours )

### CONTENTS OF SYLLABUS

- Course Description and Goal
- Course Learning Objectives
- Core Competencies Stressed
- Instructional Strategies
- Required & Reference Texts and Periodical Readings
- Course Organization and Grading
- Study Hours
- Week and Topic Outline

### COURSE DESCRIPTION AND GOAL

This is an integration course for the senior pharmacy student. It provides students with the requisite knowledge and skills to understand the concepts of health care system delivery and facilities, health care service, health care policy, disease prevention, health promotion and health education, health care outcomes, the rational use of drugs in health care systems, communications with health professionals on drug therapy, communication with patients on the wise use of medicines, and operations research in health care delivery. Students will have the opportunity to explore the potential of the role of pharmacists in primary, secondary or hospital based care.

The goal of this course is to provide the student with knowledge of the structural features and operational characteristics of a dynamic health care system including key concepts in organized care, models, and jargon, along with relevant social, economic, cultural and historical contexts.

**ATTACHMENT E**

**UMF-CLUJ OBSERVATION STUDY TOUR  
REPORT**

HOWARD UNIVERSITY CONTINUING EDUCATION  
OFFICE OF INTERNATIONAL PROGRAMS

OBSERVATION STUDY TOUR  
"IULIU HATIEGANU" UNIVERSITY OF MEDICINE & PHARMACY (UMF-CLUJ) CLUJ-  
NAPOCA, ROMANIA  
COURSE NO 175-040-01

FEBRUARY 15 - MARCH 1, 1999

TRAINING REPORT

**OVERVIEW**

The Office of International Programs at Howard University Continuing Education (OIP/HUCE) recently conducted a customized observational tour for two senior faculty members from the "Iuliu Hatieganu" University of Medicine and Pharmacy (UMF-Cluj). The touring participants were Dr. Marius Bojita, Vice Rector for Academic Development and Chair of the Department of Medicine Control and Dr. Felicia Loghin, Coordinator of International Affairs for the Faculty of Pharmacy and Chair of the Department of Toxicology at UMF-Cluj.

The two-week Observation Study Tour for the two UMF-Cluj administrators was proportioned into two areas of concentration. The first area focused heavily on site visits to primary health care installations, meetings with key health personnel both in private and public sectors, a conference and roundtable discussions on health issues. Cultural and social events comprised the remaining activities.

The goal of the study tour was two-fold: a) to afford the UMF-Cluj administrators a general overview of the U.S. primary health care system (PHC) with a specific focus on pharmacy issues, and b) to allow the UMF-Cluj administrators to explore the full range of resources available at Howard University.

The training objectives were that at the end of the Observation Study Tour the participants would

1. obtain a first-hand view of pharmacist functions in primary health care (PHC) in the United States,
2. observe and experience the wide range of technical resources available at Howard University that can be tapped for further collaboration,
3. be engaged in consultation to obtain a greater understanding of a University-based distance education process, and
4. attend a special program segment of the American Association of Colleges of Pharmacy on pharmaceutical education in the United States and opportunities for primary care.

All of the above training objectives were met. (Please see Attachment A - Training Schedule) In their written evaluation, our visitors rated the study tour as "exceeding their objectives" (Please see Attachment B - Evaluation Summary Report). The closing ceremony for the two participants' study tour was held at the Embassy of Romania on Friday, February 26, 1999 (Please see Attachment C - Closing Ceremony flyer), where they were also awarded Continuing Education Units (CEUs).

The participants arrived in the United States on Monday 2/15/99 PM and began training the following day. After two weeks of intensive learning experiences through discussion of ideas and observational tours, they departed the United States for their home country on Monday 3/1/99 PM.

**PROJECT BACKGROUND**

Through its Pharmacists and Continuing Education (PACE) Center, Howard University Continuing Education's (HUCE) Office of International Programs has structured a collaboration with the "IULIU

HATIEGANU" UNIVERSITY OF MEDICINE AND PHARMACY, under the Romanian Child Health Project titled *EXPANDING PRIMARY HEALTH CARE IN THE PHARMACY CURRICULUM*

### **PROJECT PURPOSE**

The purpose of the project is to support the achievement of USAID/Romania's 1996-97 Strategic Objective 3.2 on improving the welfare of women and children

### **PROJECTED RESULTS**

The intended results of the project are

- To develop a detailed model for a faculty of Pharmacy Primary Health Care course curriculum that complements the health services and reforms in the Romanian system
- To develop with, and for, UMF-Cluj a detailed outline of a process for continuing education via telecommunications

*Project outputs are in two phases. During Phase I, March-September, 1998, an overview of the Romanian pharmaceutical sector was produced. Phase II comprises two approaches. The first approach involves the drafting of a university level primary health care course for UMF-Cluj pharmacy students to be inserted as an official part of the University curriculum. The second approach outlines a process for distance education based on an assessment of the potential for this educational method.*

### **FOLLOW ON**

As a follow on activity, Howard University was informally invited by UMF-Cluj Vice-Rector Dr. Bojita to attend a conference on higher education in Romania later in the year. Following the mock demonstration of distance learning applications, both Dr. Bojita and Loghin requested that the next demonstration should be a live, interactive distance learning linkup between Howard and UMF-Cluj. The participants gave assurances that some of the lessons learned and best practices would be shared with their colleagues, superiors and students upon their return home.

The PACE Center  
 Howard University Continuing Education  
 Office of International Programs  
 Dr Marius Bojita and Dr Felicia Loghin  
 University of Medicine and Pharmacy Cluj-Napoca

**OBSERVATION STUDY TOUR DAILY SCHEDULE**  
 February 15 - March 1, 1999

**OBSERVATION STUDY TOUR** Scheduled visits to one or more facilities to learn a process method or system through observation and discussion. Observation training emphasizes the acquisition of development ideas approaches and values

| DATE              | TIME  | SUBJECT  | CONTACT   | ORGANIZATION & ADDRESS  |
|-------------------|-------|--|---|---|
| Monday 2/15/99    | PM    | Arrive 2 20 PM NVV #37M<br>Airport Pick-up   | Rosalyn C King  |   |
| Tuesday 2/16/99   | AM    | Introductions at HUCE<br>Orientations (Administrative, Cultural Program)<br>Training Needs Clarification<br>Introduction to Action Planning & Follow- On | R C King PA Berry, OIP Team<br>Rosalyn C King<br>J R Washington   | HUCE/OIP - Room E<br>1100 Wayne Ave Silver Spring MD 20910  |
|                   | Lunch | Noon<br>Award of Joint Course Number - Dr Berry  |   |   |
|                   | PM    | TOUR OF SILVER SPRING<br>(Including location of chain community pharmacies)  | R C King  |   |
|                   | EVE   | RECEPTION AT HUCE 5 00 - 7 00 PM   |   | Room G - HUCE   |
| Wednesday 2/17/99 | AM    | Meeting<br>Overview of US Health Care Delivery Systems and Role of the Pharmacist in the Primary Health Care - Public Sector                             | Mary Louise Anderson<br>Deputy Director<br>Bureau of Primary Health Care<br>Dept of Health & Human Services |   |
|                   | Lunch |  |   |   |
|                   | PM    | TOUR OF HOWARD UNIVERSITY<br>Main Campus   | Victoria Littles Jim Washington<br>Charles Hamidu   | Howard University Main Campus<br>Admin Bldg   |
|                   | EVE   | 6 00 PM Dinner - George Bear, SOROS  | Rosalyn C King  | Holiday Inn Silver Spring   |
| Thursday 2/18/99  | AM    | Distance Education Demonstration<br>Telehealth Suite   | Lugi LeBlanc<br>Ken Dandurand   | Howard University Hospital<br>2041 Georgia Avenue<br>Washington DC  |
|                   | Lunch | Telehealth Suite   |   |   |
|                   | PM    | Howard University Hospital Tour - (including discussion on Clinical Pharmacy Role  | Martin Kelvas   | HU Hospital 2041 Georgia Ave  |
|                   | EVE   | FREE   |   |   |
| Friday 2/19/99    | AM    | Meeting<br>Review of collaboration with look to the future<br>Courtesy Visit<br>Discussion of Pharmacy Curriculum & text                                 | Antoine M Ganbaldi<br>Provost<br>Floyd J Malveaux<br>Interim VP - Health Affairs<br>R C King                | Howard University - Main Campus<br>Admin Bldg<br>Howard University Hospital Towers<br>Howard University Bookstore |

The PACE Center  
 Howard University Continuing Education  
 Office of International Programs  
 Dr. Marius Bojita and Dr. Felicia Loghin  
 University of Medicine and Pharmacy Cluj-Napoca

OBSERVATION STUDY TOUR DAILY SCHEDULE  
 February 15 - March 1, 1999

|                   |       |  |   |   |
|-------------------|-------|--|---|---|
|                   | Lunch | Hospital Cafeteria - OYO   |   |   |
|                   | PM    | Discussion The Distance Education Process<br>Training Monitoring Session                         | R C King<br>J R Washington  | HUCE/OIP  |
|                   | EVE   | FREE   |   |   |
| Saturday 2/20/99  |       | Experience America Trip to Ocean City, MD  |   |   |
| Sunday 2/21/99    |       | Experience America<br>National Gallery of Art Museum of Natural History<br>The Washington Mall   |   |   |
| Monday 2/22/99    | AM    | Discussion of Fundamentals of Training<br>The USAID Approach                                     | JRWashington  | HUCE Room E   |
|                   | Lunch |  |   |   |
|                   | PM    | Roundtable Discussion<br>"Realities and Perspectives in Pharmaceutical<br>Education in Romania"  | Dr. Marius Bojita<br>Dr. Felicia Loghin<br>Rosalyn C King<br>Ambassador Horace Dawson | Ralph J. Bunche Int'l Affairs Ctr   |
|                   | EVE   | FREE   |   |   |
| Tuesday 2/23/99   | AM    | Site visit Organized Health System<br>Clinical Pharmacy  | Ernest Johnson<br>Director of Pharmacy  | Provident Hospital Pharmacy<br>Varnum Street NE<br>Washington DC          |
|                   | Lunch | Hospital Cafeteria - OYO   |   |   |
|                   | PM    | Clinical Pharmacy - Community<br>Wellness Center Drug Information                                |   | Leesburg Pharmacy<br>36C Catocin Circle SE<br>Leesburg VA<br>703 777-5333 |
|                   | EVE   | FREE   |   |   |
| Wednesday 2/24/99 | AM    | Experience America<br>The National Cathedral   |   |   |
|                   | Lunch |  |   |   |
|                   | PM    | Meeting<br>Resources for Patient Education<br>and for Teaching Modules<br>Children and Medicines | Keith Johnson<br>Nancy Blum<br>Pat Bush<br>R C King                                   | United States Pharmacopela<br>12601 Twinbrook Parkway<br>Rockville MD     |
|                   | EVE   | FREE   |   |   |
| Thursday 2/25/99  | AM    | 8 15 AM WHITE HOUSE GUIDED TOUR<br>9 30 AM -- USAID Meeting                                      | Mary Jo Lazear, Kojo Busia Paul<br>Holmes, M McIntire, E Chang                        | RRB Building--Room 508104   |
|                   |       | 11 15 Meeting<br>Meeting to discuss research exchanges   | Dr. Pedro Lecca<br>Dean College of Pharmacy<br>Nursing and Allied Health              |   |
|                   | PM    | Pharmaceutical Text Acquisition  |   |   |

The PACE Center  
 Howard University Continuing Education  
 Office of International Programs  
 Dr. Marius Bojita and Dr. Felicia Loghin  
 University of Medicine and Pharmacy Cluj-Napoca

OBSERVATION STUDY TOUR DAILY SCHEDULE  
 February 15 - March 1, 1999

|                  |     |  |                                  |  |
|------------------|-----|--|----------------------------------|--|
|                  | EVE | Washington D C Monuments by night  |                                  |  |
| Friday 2/26/99   | AM  | Finalizing the PHC course  | Rosalyn C King                   |  |
|                  | PM  | Action Planing (cont d)<br>skills, tools and tips on structuring action<br>plans in order to use inforamtion gained<br>upon return home<br>Training Monitoring Session | Jim Washington                   | HUCE/OIP<br>1100 Wayne Ave Silver Spring MD                                    |
|                  |     | 4 30 -6 00 PM CLOSING CEREMONY   | Mr Stefan Maier<br>Press Attache | Romanian Embassy<br>1607 23rd Street NW<br>Washington DC 20008<br>202-332-4845 |
| Saturday 2/27/99 | EVE | Free<br>FREE DAY   |                                  |  |
| Sunday 2/28/99   |     | Conference Participation<br>AAPC   | Rosalyn C King                   | The Washington Monarch Hotel<br>2401 M Street NW<br>Washington, DC             |
| Monday 3/1/99    | AM  | Training Evaluation  | J R Washington                   |  |
|                  | PM  | DEPARTURE<br>HOLIDAY INN - 3 PM<br>Dulles Airport @ 6 15 PM NW # 36M   |                                  |  |

**ATTACHMENT F**

**COURSE SYLLABUS**

# COURSE SYLLABUS

“TULIU HATIEGANU”  
UNIVERSITY OF MEDICINE AND PHARMACY

*IN COLLABORATION WITH*

HOWARD UNIVERSITY CONTINUING EDUCATION  
THE PACE CENTER

**PRIMARY HEALTH CARE DELIVERY AND THE ROLE OF THE PHARMACIST**  
COURSE DATE April 20 – 30, 1999

Faculty Dr Marius Bojita, Dr Rosalyn C King, Dr Felicia Loghin,  
Class Dates & Hours (2 hours per session, 3 sessions per week, 12 hours)

## CONTENTS OF SYLLABUS

Course Description and Goal  
Course Learning Objectives  
Core Competencies Stressed  
Instructional Strategies  
Required & Reference Texts and Periodical Readings  
Course Organization and Grading  
Study Hours  
Week and Topic Outline

## COURSE DESCRIPTION AND GOAL

This is an integration course for the senior pharmacy student. It provides students with the requisite knowledge and skills to understand the concepts of health care system delivery and facilities, health care service, health care policy, disease prevention, health promotion and health education, health care outcomes, the rational use of drugs in health care systems, communications with health professionals on drug therapy, communication with patients on the wise use of medicines, and operations research in health care delivery. Students will have the opportunity to explore the potential of the role of pharmacists in primary, secondary or hospital based care.

The goal of this course is to provide the student with knowledge of the structural features and operational characteristics of a dynamic health care system including key concepts in organized care, models, and jargon, along with relevant social, economic, cultural and historical contexts.

## **COURSE OBJECTIVES**

At the end of this course, the student is expected to be able to

- 1 analyze the current services that pharmacists provide in health care delivery and health care facilities in Romania,
- 2 delineate the decision-making processes of health care organizations,
- 3 compare and contrast primary health care (PHC) approaches used in Romania to those of the World Health Organization (WHO), Western Europe, North America, and systems from various other regions of the world, including developing countries,
- 4 list the components and general themes of PHC (including health promotion, disease prevention and health education),
- 5 define the roles, responsibilities, and functions of the pharmacist in community pharmacies and organized health care delivery settings,
- 6 indicate skills that pharmacists need for selected PHC interventions,
- 7 define the terms "medication history," "monitoring drug therapy," "referral" and "drug information" and "rational drug use,"
- 8 develop a pharmacy-based, PHC intervention project for a community pharmacy or an organized health care setting,
- 9 structure medicine-related communications which are supportive of PHC goals (including drug-related health information) to individual patients, community groups and other members of the health team – especially, physicians and nurses,
- 10 outline how pharmacists can contribute to operations research via drug use investigations, data collection and analysis,
- 11 communicate health needs of patients – especially women and children – to other segments of the health delivery system via a referral process, and
- 12 discuss and rate interventions presented in class

## **CORE COMPETENCY STRESSED**

Knowledge and Understanding of the Dynamics of the Health Care Delivery Environment in Romania and Approaches for Greater Involvement of Pharmacy Personnel in Achieving Health Outcomes

## **INSTRUCTIONAL STRATEGIES**

This course is designed to enhance the development of strategic thinking skills by helping the student to understand the challenges and opportunities that pharmacists face in attempting to define and contribute to health care services and patient outcomes

The method of instruction for this class will be lecture, lecture-discussion, case analysis, role play and in-class student presentations. Students are encouraged to participate in all related classroom discussions and to be punctual in their regular class attendance. Each student is responsible for all required readings and other assignments.

## REQUIRED READING

- F Mullan, "The 'Mona Lisa' of Health Policy Primary Care At Home and Abroad," Health Affairs - Volume 17, Number 2
- V Moffat, "Health for All and The Pharmacist," International Pharmacy Journal vol 2, No 2, 1988
- Declaration of Alma-Ata, International Conference on Primary Health Care, Alma-Ata, USSR, 6-12 September 1978, World Health Organization
- (WHO TEXT ON PRIMARY HEALTH CARE - IN ROMANIAN)

## REFERENCE READINGS

- *(Insert here full title of proceedings from UMF- World Vision PHC Conference of 1996)*
- Additional Materials Will Be Given In Class As Handouts

## COURSE ORGANIZATION & GRADING

The course will be organized into 2 hour sessions which will be held 3 times per week. During the third session, the class will be divided into Project Groups. Each group will participate in preparing a pharmacy-based PHC intervention that will be presented in class during the fifth session.

The grade for this course will be based upon the following

|                                    |          |
|------------------------------------|----------|
| Class Participation                | 15%      |
| Examination                        | 50       |
| In-class group presentation        | 30       |
| Other Exercises (Written and Oral) | <u>5</u> |
| Total                              | 100%     |

The course examination will be given in class on the last session. The University plans to give credit to those students who successfully complete the course according to University policy. A joint certificate will be given to those non-students who complete all requirements including turning in assignments.

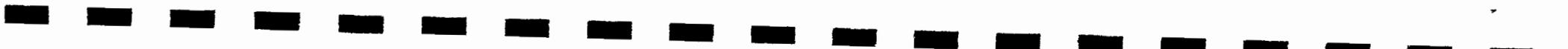
**STUDY HOURS** It is estimated that each student will spend a minimum of one to two hours of study time per class hour for this course.

UMF Course Number  
HUCE Course Number 175-040-01 SP 99

**PRIMARY HEALTH CARE (PHC) DELIVERY AND THE ROLE OF THE PHARMACIST**  
(April 20 - 30, 1999)

| SESSION # | TOPIC OUTLINE – <i>Perspectives on Primary Health Care</i> |  |
|-----------|--|--|
| 1 (2 Hrs) | <b>Bojita (1 Hr)</b>                                       | Introductions and Course Overview<br>Organization of Health Services in Romania<br>The System and its Policies<br>The Process  |
|           | <b>King (1 Hr)</b>   | Overview, Definitions and Approaches to Primary Health Care<br>The WHO View<br>Western Europe including EU and PHARE initiatives<br>North America (United States and Canada)<br>Other World Regions and Developing Countries |
| 2 (2 Hrs) | <b>King (2 Hrs)</b>  | Integrating the Knowledge and Functions of the PHC Team Members<br>Strategies and Approaches in Health Education<br>Strategies and Approaches in Health Promotion<br>Strategies and Approaches in Disease Prevention         |
|           |  | <i>Overview of Selected Tasks of the Pharmacist in PHC</i>   |
| 3 (2 Hrs) | <b>King (2 Hrs)</b>  | Medication History & Monitoring Drug Therapy,<br>Providing Drug Information to Patients via Counseling,<br>Providing Drug Information to Community Groups & to Other Health Professionals                                    |
| 4 (2 Hrs) | <b>Loghin (1.5 Hrs)</b>                                    | Drug Use Investigations, Data Collection and Analysis  |

|           |                             |   |
|-----------|-----------------------------|---|
|           | <b>King (0.5 Hr)</b>        | Referral Process<br>Developing Interventions  |
| 5 (3 Hrs) | <b>Bojita, King, Loghin</b> | In-class Presentation of Interventions (Community or Organized Health Care Pharmacy)<br>Monitoring Drug Therapy<br>Maternal and Child Health/Family Planning<br>Health Education, Health Promotion/Disease Prevention Campaign<br>Assuring Compliance in Chronic Disease Therapy<br>Drug Use Investigations |
| 6 (1 Hr)  | <b>Bojita, King, Loghin</b> | Examination and Closing   |

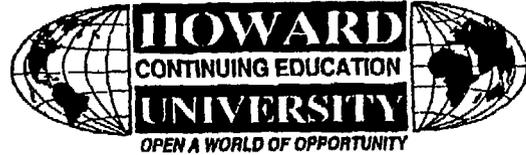


**ATTACHMENT G**

**DIPLOMAS & CERTIFICATES (SAMPLE)**



Romania  
Ministerul Educației Naționale  
Nr                      din



HOWARD UNIVERSITY  
CONTINUING EDUCATION  
THE PACE CENTER



UNIVERSITATEA  
DE MEDICINĂ ȘI FARMACIE  
IULIU HAȚIEGANU  
CLUJ NAPOCA

# DIPLOMA

*Se acordă D-lui/D-nei*

*HEALTH CARE DELIVERY AND THE ROLE OF THE PHARMACIST, organizat în perioada*

*de către U M F Cluj și Howard University Continuing Education - The Pace Center*

*Diploma de participare la cursul PRIMARY*

Director,  
Prof Dr Rosalyn KING

Rector,  
Prof Dr Oliviu Pascu

Prorector,  
Prof Dr Marius Bojiță

**ATTACHMENT H**

**SESSION FEEDBACK**

"TULIU HATIEGANU" UNIVERSITY OF MEDICINE AND PHARMACY  
IN COLLABORATION WITH

HOWARD UNIVERSITY CONTINUING EDUCATION  
THE PACE CENTER

PRIMARY HEALTH CARE DELIVERY AND THE ROLE OF THE PHARMACIST  
COURSE DATE April 20 – 30, 1999

Session Feedback  
Session Number

Date  
Time

By providing information requested below, you will help us strengthen future sessions  
Please circle one number in each question below Thank you

1 In general, I thought today's session was

|                   |                     |            |                            |                          |
|-------------------|---------------------|------------|----------------------------|--------------------------|
| Very<br>Dull<br>1 | Mostly<br>Dull<br>2 | So-So<br>3 | Mostly<br>Interesting<br>4 | Very<br>Interesting<br>5 |
|-------------------|---------------------|------------|----------------------------|--------------------------|

2 In regard to usefulness, now or in the future, the substance of today's session was

|                |                    |                  |                          |                       |
|----------------|--------------------|------------------|--------------------------|-----------------------|
| No<br>Use<br>1 | Little<br>Use<br>2 | Some<br>Use<br>3 | Considerable<br>Use<br>4 | Highly<br>Useful<br>5 |
|----------------|--------------------|------------------|--------------------------|-----------------------|

3 Please rate the learning methods used in today's session

|           |           |              |           |                |
|-----------|-----------|--------------|-----------|----------------|
| Poor<br>1 | Fair<br>2 | Average<br>3 | Good<br>4 | Excellent<br>5 |
|-----------|-----------|--------------|-----------|----------------|

4 Any suggestions or comments to make the course better? If so, please write them  
below

"IULIU HAȚIEGANU" UNIVERSITY OF MEDICINE AND PHARMACY - CLUJ-NAPOCA - ROMANIA  
 IN COLABORATION WITH  
 HOWARD UNIVERSITY - CONTINUING EDUCATION THE PACE CENTER WASHINGTON D C - U S A

**PRIMARY HEALTH CARE DELIVERY AND THE ROLE OF THE PHARMACIST**

Date of course 20 - 30 April 1999

SESSION FEEDBACK by student, resident or pharmacist category

| QUESTIONS     | PARTICIPANTS | SESSION 1 / 77 responses   |   |    |    |    | SESSION 2 / 70 responses<br>(S = 33, R = 28, F = 9)                                       |   |    |    |    | SESSION 3 / 75 responses<br>(S = 38, R = 27, F = 10)                              |   |    |    |    |
|---------------|--------------|--|---|----|----|----|---|---|----|----|----|---|---|----|----|----|
|               |              | 1  | 2 | 3  | 4  | 5  | 1   | 2 | 3  | 4  | 5  | 1   | 2 | 3  | 4  | 5  |
| QUESTION No 1 | Student      | -  | - | -  | -  | -  | -   | - | 2  | 27 | 4  | 2   | 2 | 15 | 18 | 1  |
|               | Resident     | -  | - | -  | -  | -  | -   | - | 1  | 18 | 9  | -   | 1 | 10 | 13 | 3  |
|               | Pharmacist   | -  | - | -  | -  | -  | -   | - | -  | 1  | 8  | 2   | - | 2  | 2  | 4  |
|               | <b>TOTAL</b> | -  | 1 | 9  | 57 | 10 | -   | - | 3  | 46 | 21 | 4   | 3 | 38 | 33 | 8  |
| QUESTION No 2 | Student      | -  | - | -  | -  | -  | -   | - | 7  | 19 | 7  | 1   | 5 | 15 | 16 | 1  |
|               | Resident     | -  | - | -  | -  | -  | -   | - | 4  | 15 | 9  | -   | - | 14 | 9  | 4  |
|               | Pharmacist   | -  | - | -  | -  | -  | -   | - | -  | -  | 9  | 2   | - | 3  | 1  | 4  |
|               | <b>TOTAL</b> | -  | 1 | 26 | 42 | 8  | -   | - | 11 | 34 | 25 | 3   | 5 | 32 | 26 | 9  |
| QUESTION No.3 | Student      | -  | - | -  | -  | -  | -   | 1 | 6  | 21 | 5  | 3   | 2 | 15 | 15 | 3  |
|               | Resident     | -  | - | -  | -  | -  | -   | - | 5  | 14 | 9  | -   | - | 10 | 13 | 4  |
|               | Pharmacist   | -  | - | -  | -  | -  | -   | 1 | -  | 1  | 7  | 2   | - | 2  | 3  | 3  |
|               | <b>TOTAL</b> | 1  | 3 | 26 | 35 | 12 | -   | 2 | 11 | 36 | 21 | 5   | 2 | 27 | 31 | 10 |
| COMMENTS      | Student      | - colouring images, funny suggestive<br>- more explications in Romanian language |   |    |    |    | - more examples for the presented subject   |   |    |    |    | - leaflets ( with the presentation of American pharmacies pharmacy presentation ) |   |    |    |    |
|               | Resident     | - simultaneous translation<br>- the brief of course                              |   |    |    |    | - information about screening programs<br>- leaflets about Primary Health care from U S A |   |    |    |    |   |   |    |    |    |
|               | Pharmacist   |  |   |    |    |    | - the course was very interesting   |   |    |    |    |   |   |    |    |    |