University of Iowa College of Medicine
University of Iowa Hospitals and Clinics

UNIVERSITY of IOWA HEALTH CARE

BRIEFING DOCUMENT
REGARDING THE
UNIVERSITY OF IOWA HOSPITALS AND CLINICS
AND THE CARE OF INMATES
FROM THE IOWA DEPARTMENT OF CORRECTIONS

OCTOBER 4, 1999

University of Iowa Hospitals and Clinics *Mission*

The UIHC, in compliance with the Code of Iowa, serves as the teaching hospital and comprehensive health care center for the State of Iowa, thereby promoting the health of the citizens of Iowa. The UIHC, in concert with the University of Iowa health science colleges, functions in support of health care professionals and organizations in Iowa and other states by:

1.) offering a broad spectrum of clinical services to all patients cared for within the Center and through its outreach programs;

2.) serving as the primary teaching hospital for the University; and,

3.) providing a base for innovative research to improve health care.

WORD•0218W 9/96
BOOK•0074•10/99

Today's Vision, Tomorrow's Legacy:

- **University of Iowa Health Care Vision for Continuing Excellence**

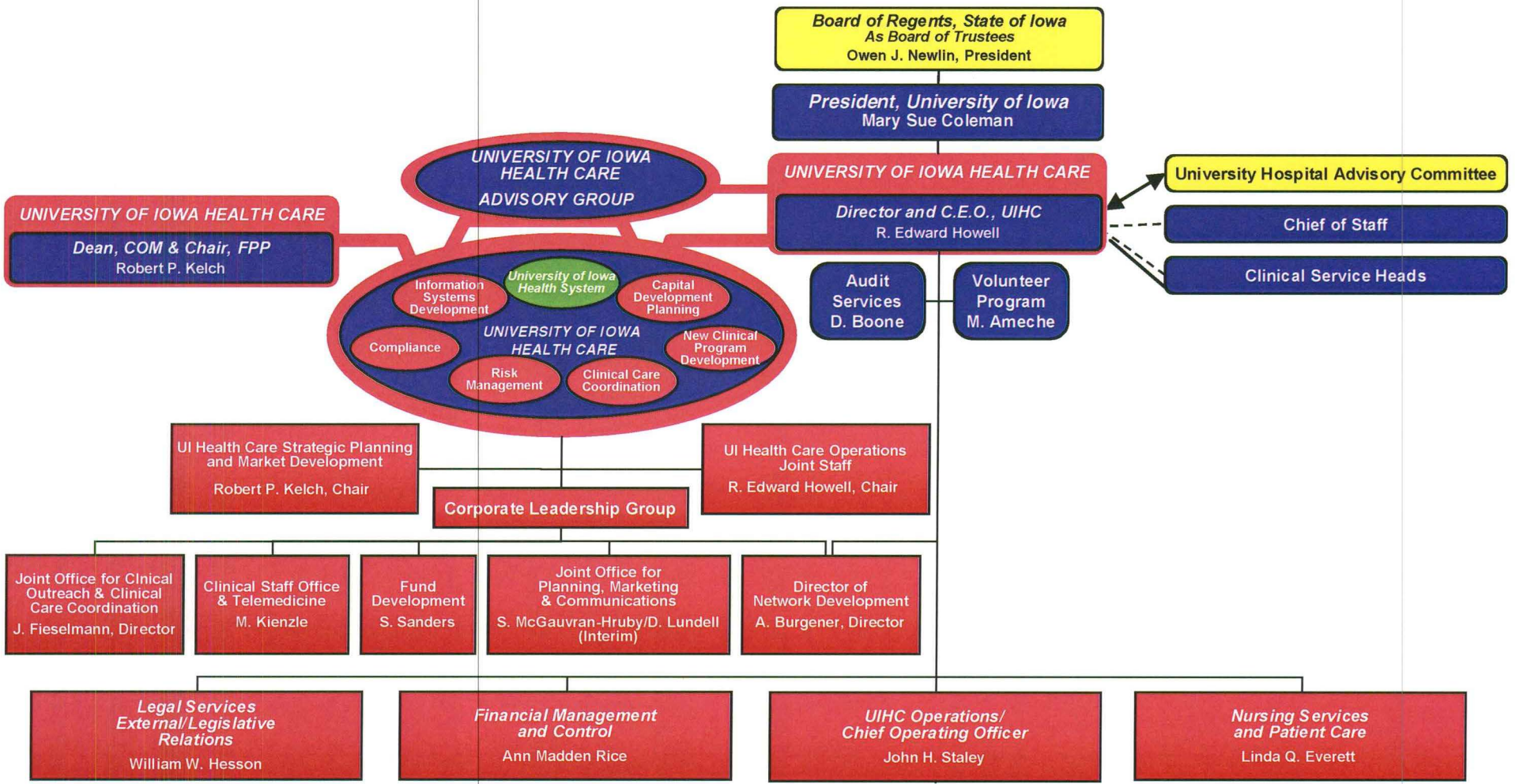
  The University of Iowa Hospitals and Clinics and the College of Medicine, working as partners to provide quality health care, share a clear vision for continuing excellence built around four key concepts:

  - **Tradition**
  - **Innovation**
  - **Adaptation**
  - **Collaboration**

  As a national leader, we are committed to progress through the next century, building on our TRADITIONAL *missions of patient care, education and research; creating* INNOVATIONS *in medical science and the delivery of health care;* ADAPTING *our organization to succeed in a changing environment; and working* COLLABORATIVELY *as partners with the people, the communities and the organizations we serve.*

WORD•1748 6/98
BOOK•0074•10/99

The University of Iowa Hospitals and Clinics
CHART OF ORGANIZATION



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UNIVERSITY of IOWA HEALTH CARE

The University of Iowa Hospitals and Clinics

SERVICE RECORD

July 1, 1998 to June 30, 1999

PRIMARY MEASURES

Bed Complement	843
Patient Admissions	41,692
Patient Days of Care	211,554
Clinic Patient Visits	584,472
Clinic Visits	545,496
Outreach Clinic Visits	38,976
Births	1,199
Operations and Transplants	17,537
Cardiac Operations	568
Heart Transplants	13
Cochlear Implants	42
Cornea Transplants	135
Kidney Transplants	97
Bone Marrow/Stem Cell Transplants	111
Pancreas Transplants	11
Liver Transplants	38
Minor Procedures	86,529
Laboratory Tests	4,139,297
Pharmacy Orders	1,448,400
Physical Therapy Time Units	134,233
Occupational Therapy Time Units	48,732

SPECIAL PROCEDURES

Renal Dialysis Treatments	8,414
Cardiac Catheterization Procedures	3,003
Cardiac Interventional Procedures	562
Cardiac Electrophysiology Studies	449
Radiographic Procedures	231,968
Diagnostic Examinations	164,978
Head & Whole Body Scans (CT)	18,669
PET Scans	932
Magnetic Resonance Imaging	8,452
Nuclear Medicine	6,561
Radiation Oncology Treatments	30,655
Blood and Component Transfusions	33,237
Electrocardiograms (ECG)	33,356
Electroencephalograms (EEG)	2,106

OTHER MEASURES

Social Service Consultations	39,053
Volunteer Service Hours	64,987
Patients by UIHC Transportation	12,023
Patients by Helicopter	915
Meals Served	2,051,039

STAFF COMPONENTS

Staff Physicians and Dentists	642
Resident Physicians and Dentists	455
Fellow Physicians and Dentists	125
SUBTOTAL DOCTORS	1,222
Professional Nurses	1,467
Other Professional Staff	1,393
Other Hospital Staff	3,031
TOTAL STAFF	7,113

HEALTH EDUCATION

UIHC Educational Programs	43
University Health Science College Students in Training	1,141
UIHC Residents & Fellow Physicians & Dentists in Training	580
Other Health Professions Students/ Staff from Statewide Communities	481
Total Students in Health Education at UIHC	2,202

SERVICE RECORD•0004/H 9/99
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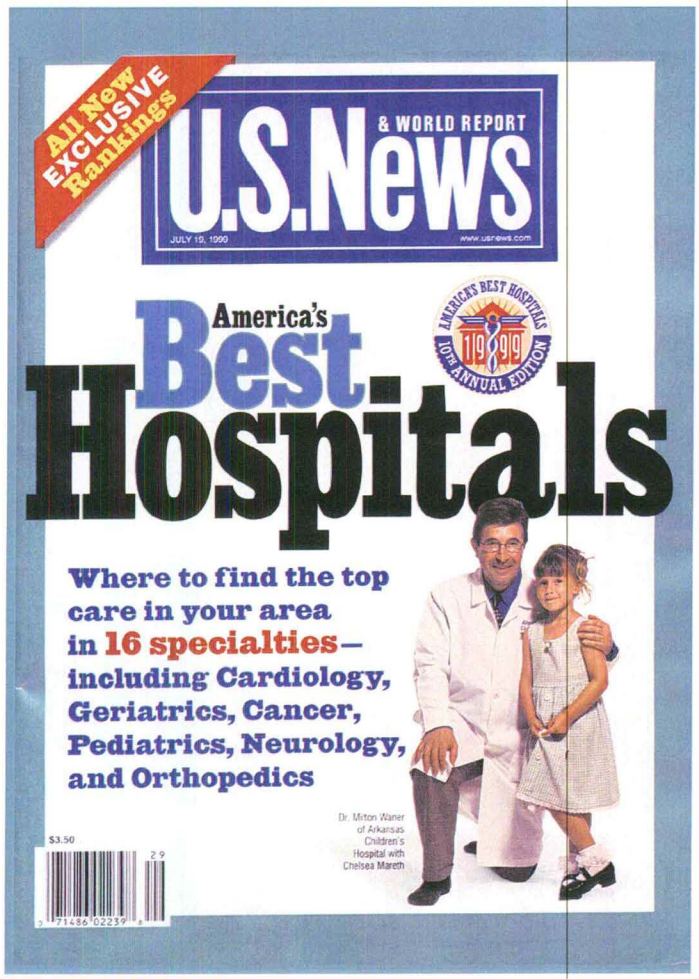
University of Iowa Health Care Recognized for Excellence



FOR THE TENTH CONSECUTIVE YEAR, UNIVERSITY OF IOWA HEALTH CARE SPECIALTIES EARNED HIGH RANKINGS FROM U.S. NEWS AND WORLD REPORT

2nd	Otolaryngology	27th	Rheumatology
6th	Ophthalmology	31ST	Gastroenterology
8th	Orthopaedics	32nd	Cancer
12th	Neurology & Neurosurgery	37th	Endocrinology
21ST	Geriatrics	48th	Gynecology

HEADLINE•0006E•7/99
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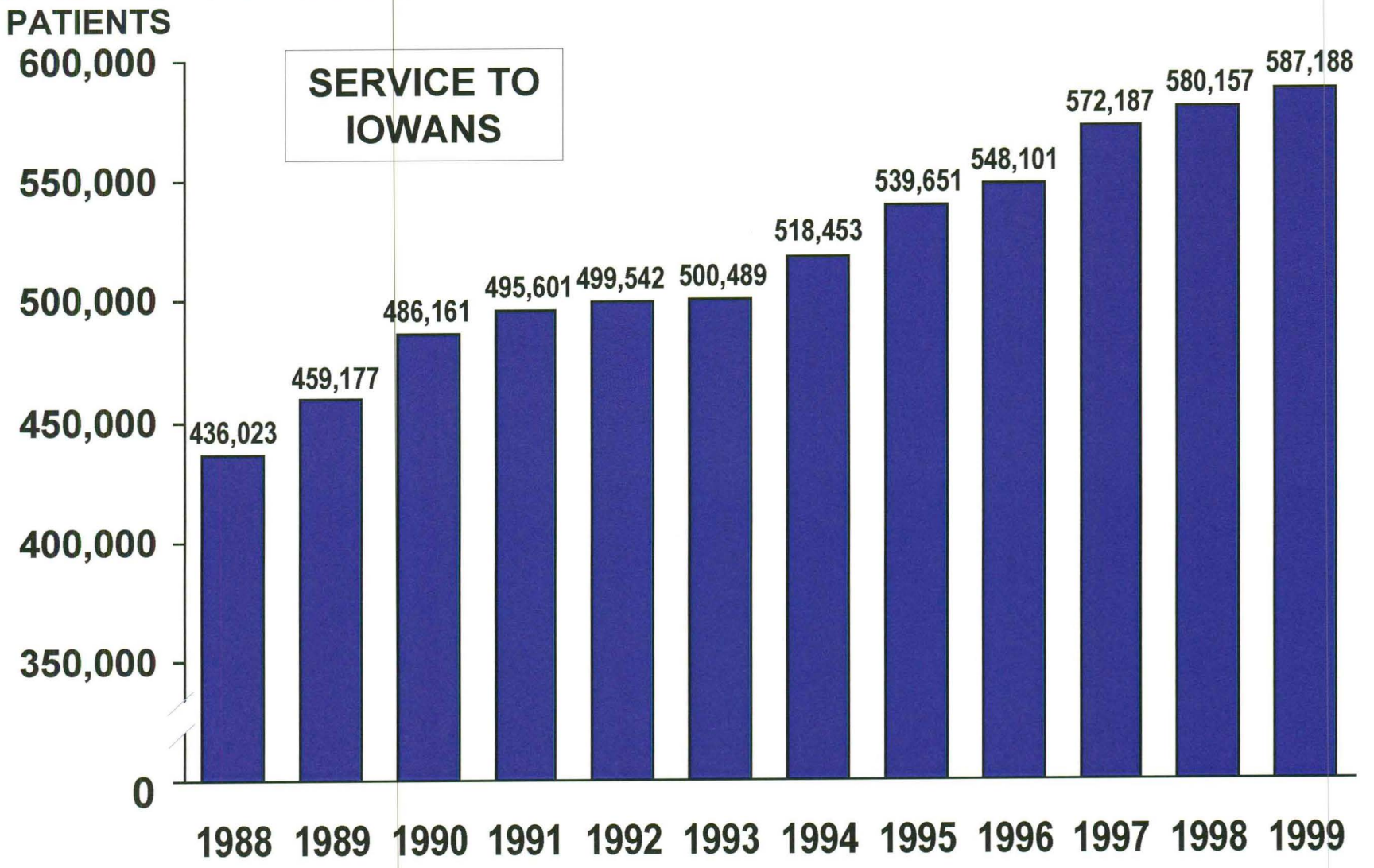
AGGREGATE PATIENTS SERVED

INPATIENTS AND AMBULATORY CLINIC PATIENTS



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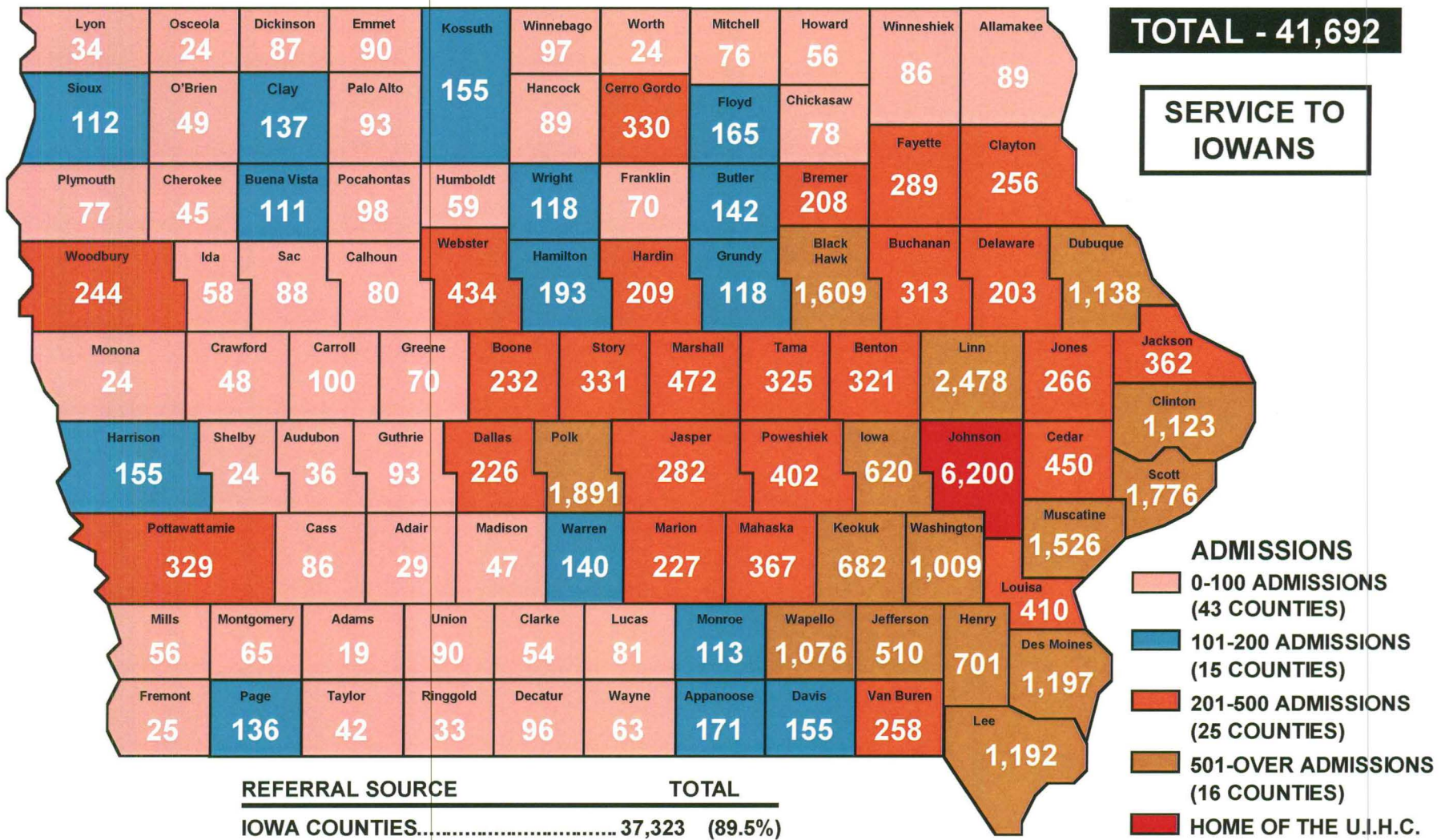
PATIENT ADMISSIONS BY COUNTY 1998-99



TOTAL - 41,692

SERVICE TO IOWANS

ADMISSIONS

- 0-100 ADMISSIONS (43 COUNTIES)
- 101-200 ADMISSIONS (15 COUNTIES)
- 201-500 ADMISSIONS (25 COUNTIES)
- 501-OVER ADMISSIONS (16 COUNTIES)
- HOME OF THE U.I.H.C.

REFERRAL SOURCE	TOTAL	
IOWA COUNTIES	37,323	(89.5%)
STATE INSTITUTIONS	646	(1.6%)
OUT OF STATE	3,723	(8.9%)
TOTAL	41,692	(100.0%)

MAP•1033W•7/99
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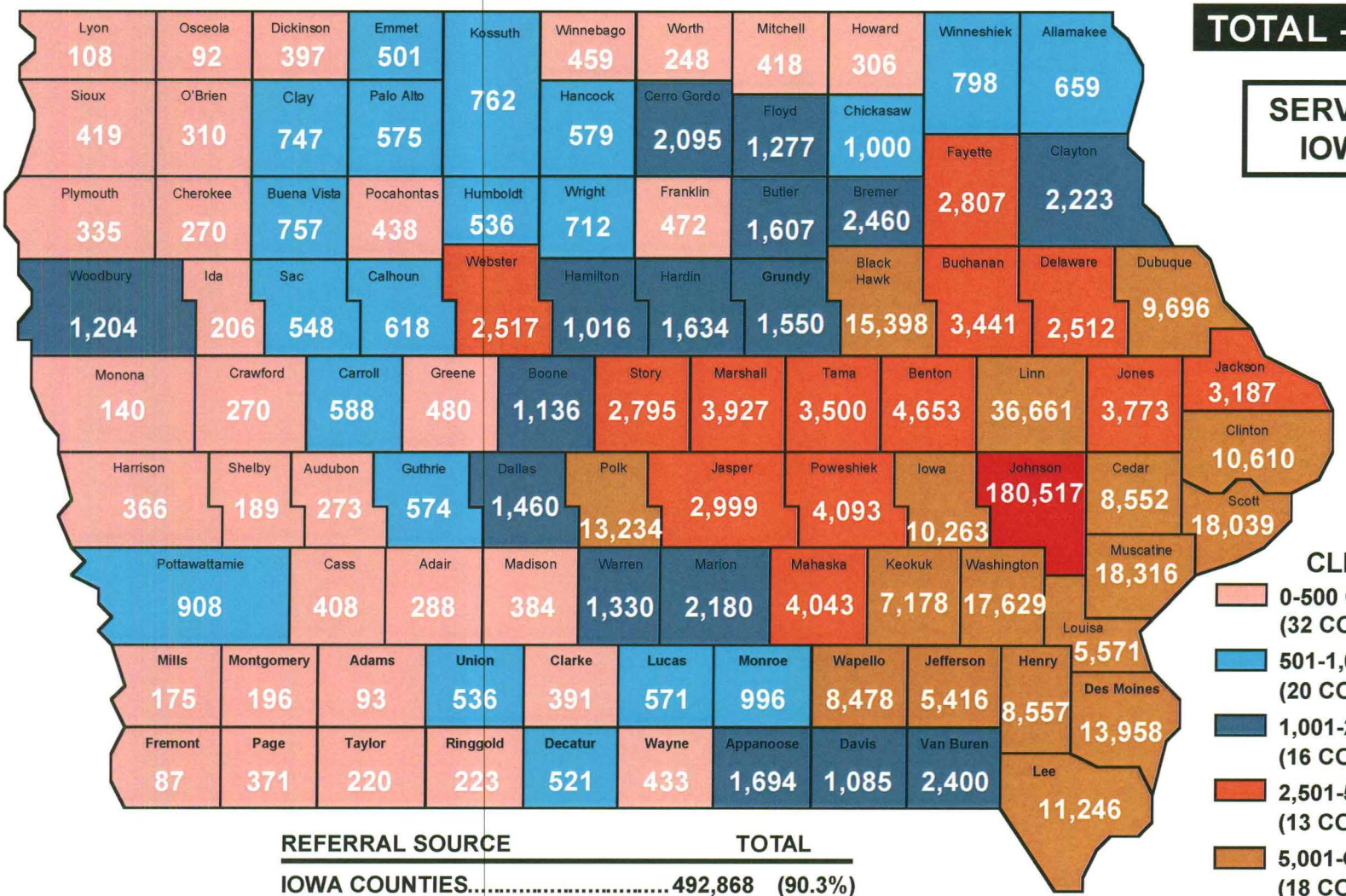
University of Iowa Hospitals and Clinics

UNIVERSITY of IOWA HEALTH CARE

PATIENT CLINIC VISITS BY COUNTY 1998-99



TOTAL - 545,496

SERVICE TO IOWANS

CLINIC VISITS

- 0-500 CLINIC VISITS (32 COUNTIES)
- 501-1,000 CLINIC VISITS (20 COUNTIES)
- 1,001-2,500 CLINIC VISITS (16 COUNTIES)
- 2,501-5,000 CLINIC VISITS (13 COUNTIES)
- 5,001-OVER CLINIC VISITS (18 COUNTIES)
- HOME OF THE U.I.H.C.

REFERRAL SOURCE	TOTAL	
IOWA COUNTIES	492,868	(90.3%)
STATE INSTITUTIONS	5,256	(1.0%)
OUT OF STATE	47,372	(8.7%)
TOTAL	545,496	(100.0%)

MAP•1036•7/99
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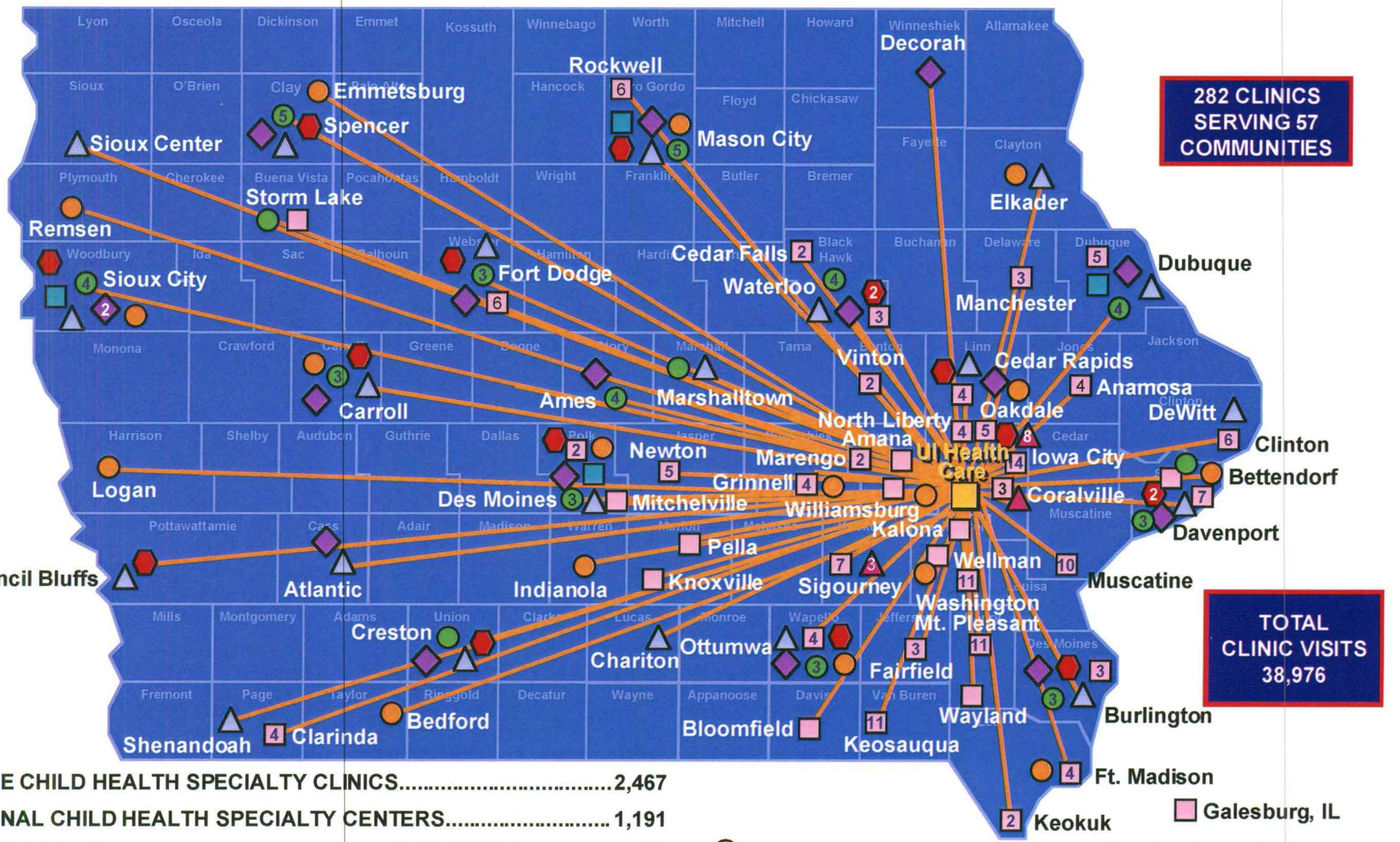
University of Iowa Hospitals and Clinics

UNIVERSITY of IOWA HEALTH CARE

PATIENT CARE OUTREACH TO IOWA COMMUNITIES, 1998-99



282 CLINICS SERVING 57 COMMUNITIES

TOTAL CLINIC VISITS 38,976

- MOBILE CHILD HEALTH SPECIALTY CLINICS.....2,467
- REGIONAL CHILD HEALTH SPECIALTY CENTERS.....1,191
- MUSCULAR DYSTROPHY & RELATED GENETIC DISEASE CLINICS.. 78
- HIGH RISK INFANT FOLLOW-UP PROGRAM..... 2,179
- REGIONAL GENETIC CONSULTATION SERVICE.....980
- COMMUNITY BASED PRENATAL HEALTH CLINICS.....205
- SPECIALTY CONSULTATION CLINICS..... 29,876
- FAMILY MEDICINE OUTREACH CLINICS.....2,000

MAP•1408•9/99
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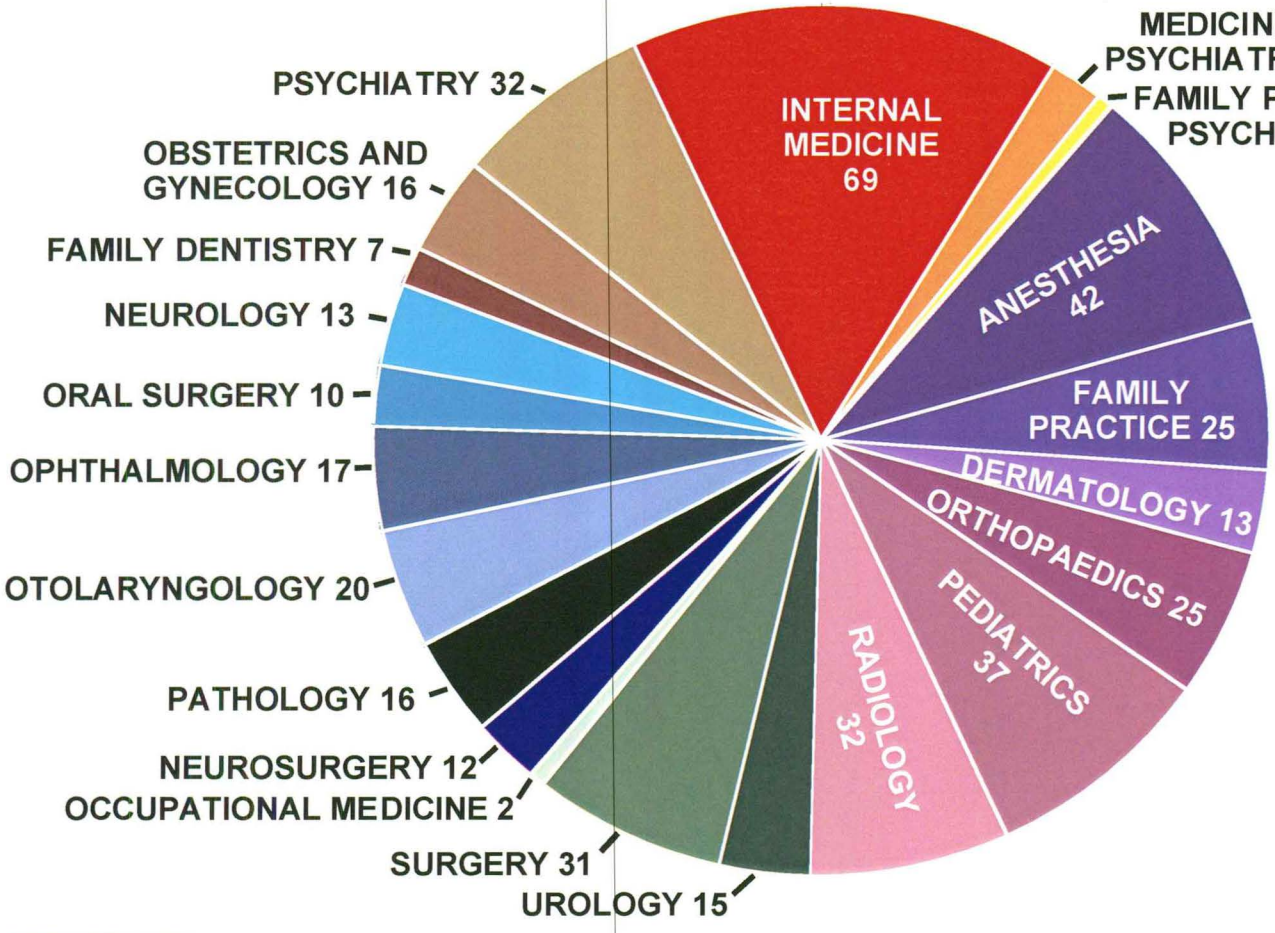
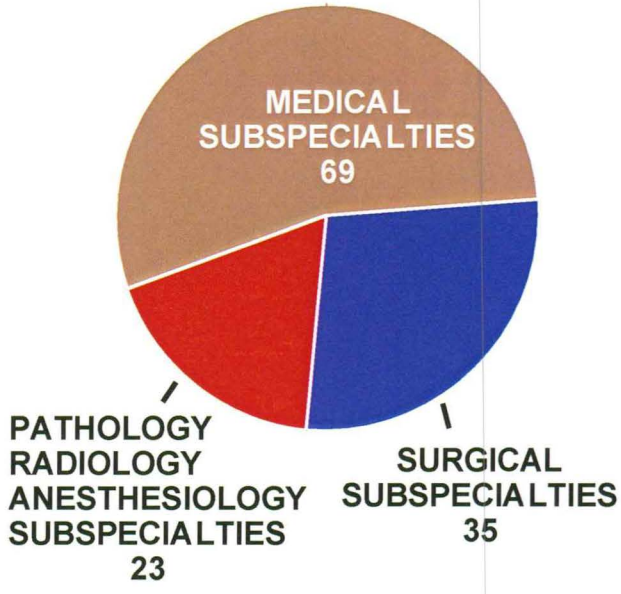
RESIDENCY AND FELLOWSHIP TRAINEES BY SPECIALTY 1999-2000

572 RESIDENT AND FELLOW DOCTORS IN TRAINING

445 RESIDENT DOCTORS



127 FELLOW DOCTORS



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HEALTH SCIENCE STUDENTS TRAINING WITHIN UNIVERSITY OF IOWA HOSPITALS AND CLINICS FY 1999 - 2000

UNIVERSITY OF IOWA HOSPITALS AND CLINICS PROGRAMS

- Graduate Medical and Dental Education Programs
- Cardiovascular Perfusion
- Dietetic Interns
- Health Management and Policy Interns, Residents and Fellows
- Emergency Medical Services Learning Resources Center
- Magnetic Resonance Imaging Trainees
- Nuclear Medicine Technology Certificate Students
- Orthoptic Training Students
- Pastoral Services Residents
- Pharmacy Residents
- Radiation Therapy Technology Students
- Radiologic Technology Students
- Ultrasound Technology Students
- Vascular Interventional Technology Students

UNIVERSITY OF IOWA HEALTH SCIENCE COLLEGE PROGRAMS

- Medical Undergraduates
- Dentistry Undergraduates
- Nursing Undergraduate, Graduate, Nurse Practitioner and Nurse Anesthetist Students
- Pharmacy Undergraduates and PHARM D Students
- Speech Pathology & Audiology Students
- Physical Therapy Students
- Health Management and Policy Students
- Physician Assistant Students
- Clinical Laboratory Science Students
- Nuclear Medicine Technology Students
- Computed Tomography Fellowship

COMMUNITY COLLEGE AND OTHER COLLEGE PROGRAMS

- Respiratory Therapy Students
- Electroneurodiagnostic Technology Students
- Health Information Management Interns
- Activities Therapy Interns
- Occupational Therapy Interns
- Physical Therapy Students
- Nursing Students

OTHER UNIVERSITY OF IOWA COLLEGE PROGRAMS

College of Education

- Education Service Interns

Liberal Arts

- Activities Therapy Students
- Social Work Students

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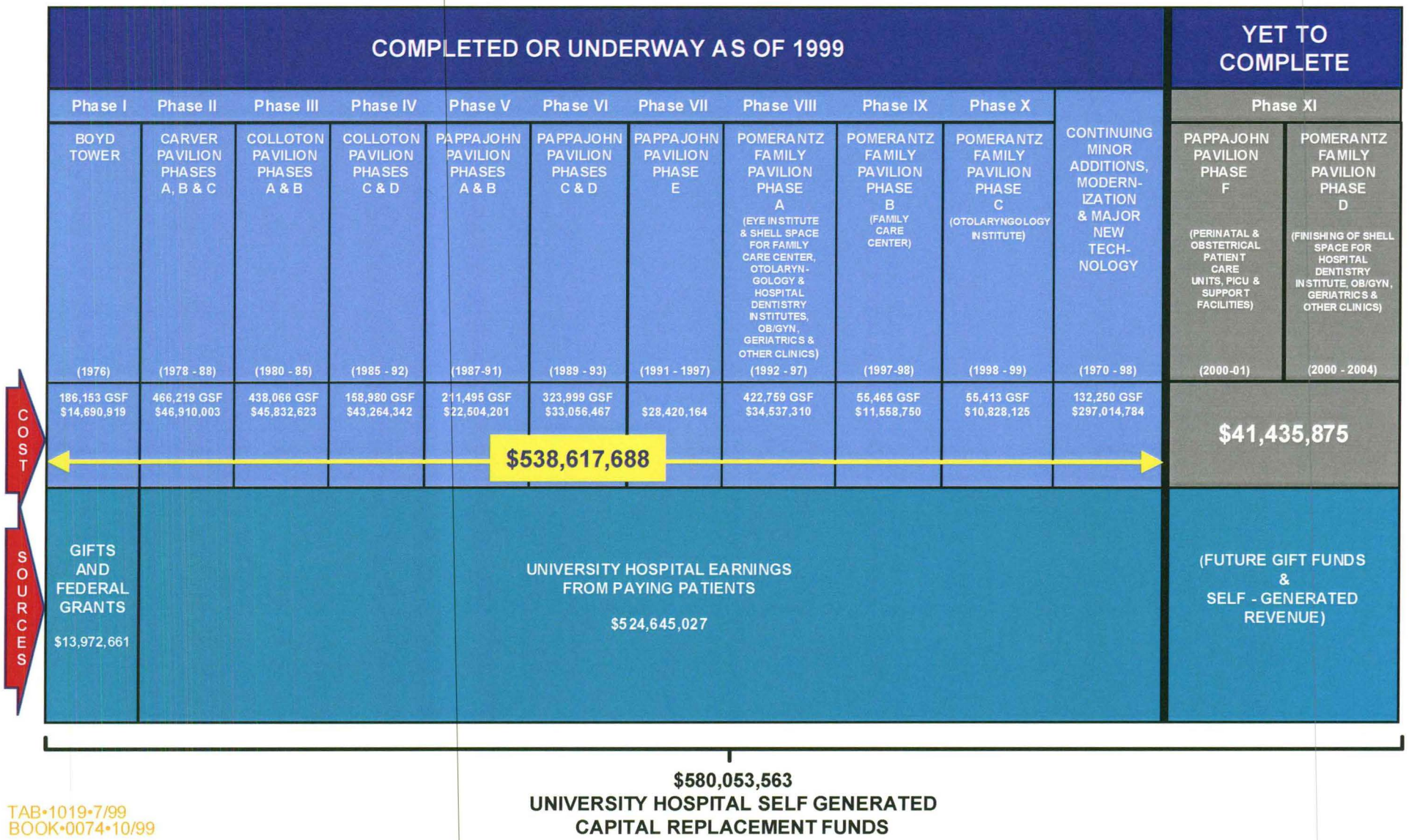
BOOK•0074•10/99

PHASED CAPITAL REPLACEMENT PLAN FINANCING SUMMARY
1970 - 2003



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SOURCES OF CAPITAL DEVELOPMENT FUNDS FOR MIDWEST STATE UNIVERSITY-OWNED TEACHING HOSPITALS 1970 THROUGH 1999 EXPENDITURES, ENCUMBRANCES & COMMITMENTS (In Thousands of Dollars)

SOURCES OF FUNDS	UNIVERSITY of IOWA HOSPITALS AND CLINICS		OHIO STATE UNIVERSITY HOSPITALS		U. of MICHIGAN HOSPITALS		U. of WISCONSIN HOSPITALS		U. of ILLINOIS HOSPITALS		INDIANA UNIVERSITY HOSPITALS		U. of MINNESOTA HOSPITAL	
Hospital Earnings[1]	$524,645	(97%)[2]	$490,339	(94%)	$831,770	(80%)[3]	$174,491	(80%)[5]	$155,682	(83%)	$238,105	(79%)[8]	$388,096	(87%)[9]
Gifts & Grants	13,973	(3%)	4,247	(1%)	23,665	(2%)	729	(0%)[6]	1,500	(1%)	43,967	(15%)	41,565	(9%)
State Capital Appropriations	----------	(0%)	24,799	(5%)	187,832	(18%)[4]	43,063	(20%)	30,688	(16%)	18,663	(6%)	16,856	(4%)
TOTAL	$538,618	(100%)	$519,385	(100%)	$1,043,267	(100%)	$218,283	(100%)	$187,870	(100%)[7]	$300,735	(100%)	$446,517	(100%)

[1] Includes Bonds and Other Borrowings to be Liquidated with Patient Revenues.

[2] Includes $10 million in 30 year 1973 Series Revenue Bonds at 5.7% Interest, $12 million in 25 year 1978 Series Revenue Bonds at 6.02% Interest, $18 million in 20 year 1980 Series Revenue Bonds at 8.34% Interest and $20 million in 20 year 1983 Series Revenue Bonds at 7.412% Interest.

[3] Includes University of Michigan General Obligation Revenue Bonds to be liquidated with Hospital Patient Revenues, including $100,000,000 bonds sold in FY 1995 for the construction of a Cancer and Geriatric Center.

[4] Includes $140,000,000 in Michigan Building Authority Bonds to be paid by state funds.

[5] Includes $20.3 million in 30 year Revenue Bonds at 6% Interest Rate and $8.5 million for a current capital development project which will be financed by $8 million in Revenue Bonds and $.5 million in Depreciation Reserves.

[6] There may be additional sources of funds not reflected here due to university reporting and accounting procedures.

[7] $60 million is for current capital development project which is being financed by bonds issued by the State Financing Authority. Bonds will be retired from hospital revenues (50%) and state tax revenues (50%).

[8] Includes $37,075,000 in revenue bonds.

[9] Includes $141,771,000 in revenue bonds secured by revenues of the University of Minnesota, including the revenues of the U. Hospital. The intent is to pay debt services from the revenues of the U. Hospital.

Source: Compiled by the U. of Iowa Hospitals Administration per Controllers of named U. Hospitals. Presently, the University of Wisconsin Hospitals, Indiana University Hospitals and University of Minnesota Hospital are no longer university-owned but are included in this comparison because of their relevance for the period being covered. Total for U. of Iowa Hospitals is as of 6/30/99. Totals are as of 6/30/97 for Ohio State University Hospitals and University of Michigan Hospitals; as of 6/30/96 for hospitals of the University of Wisconsin, Illinois and Minnesota; and as of 6/30/95 for Indiana University Hospitals.

Legislative Study Regarding Indigent Care, Inmates and Telemedicine

Prepared By:

Iowa Department of Corrections
and
University of Iowa Hospitals and Clinics

January 1, 1998

Legislative Study Regarding Indigent Care, Inmates & Telemedicine

Charge

Senate File 549, ultimately passed by the 77th Iowa General Assembly on April 29, 1997 (Senate vote 49-0, House vote 98-1) and signed by the Governor on May 27, 1997, included a provision [11(2)(c)] directing that

> The University of Iowa Hospitals and Clinics, the Iowa Department of Corrections, and the Association of Iowa Hospitals & Health Systems shall jointly develop and issue recommendations relating to localizing indigent health care services, including but not limited to health care services to inmates, the potential application of telemedicine in providing health care services to inmates, and the feasibility of establishing a corrections infirmary, in a report to be submitted to the General Assembly by January 1, 1998.

Report Organization

This report is divided into four major sections. The first section focuses on the Indigent Patient Care Program (IPCP) and provides background on and an overview of the IPCP in general, as well as justification for the recommendation made pertaining to retaining the provision of indigent patient care services as they currently are delivered. The second section of the report covers the provision of IPCP health care services to Iowa's inmate population, with the third section specifically addressing the potential application of telemedicine in providing health care services to inmates. A summary of all the recommendations made in the report comprises the fourth section.

Indigent Patient Care Program

For over eight decades the Indigent Patient Care Program has successfully served the needs of Iowa's indigent residents. The IPCP began with the passage of the Perkins Act of 1915. This Act provided for the delivery of health care to Iowa's indigent children and state institution population at University Hospital. In 1919 the Haskell Klauss Act extended the concept of centralizing health care delivery at University Hospital to Iowa's less fortunate adults. From its

inception, the IPCP was also an essential component of the State's effort to qualify its medical school to meet the standards for accredited medical education.

The IPCP, codified in Chapter 255 of the Iowa Code, enables state institutions and each of Iowa's 99 counties to refer indigent residents for care at the UIHC without cost to the institution, resident or the county. Counties know in advance each year how many indigent residents they may refer. While the size of the total quota was fixed at 5,084 in 1986 (this figure includes the additional 10 percent beyond the base allocation counties may refer to the UIHC without cost to themselves), it was the seventy-fourth General Assembly that decreed, "The total quota shall be allocated among counties on the basis of the 1990 census..." This allocation remains in place today. A map depicting the "quotas" for each county appears as Exhibit 1. In addition, there are "non-quota" patients who can be treated without charge at the UIHC without limitation. These patients include residents of state institutions, obstetrical patients and their newborns, and orthopaedic patients.

The IPCP meets the needs of poor Iowans who are not eligible for other medical assistance programs and who would otherwise "fall between the cracks." Before a patient is assigned a quota by a county, however, a thorough search is made to identify other potential sources of coverage, such a Medicaid or private insurance. Only after a county concludes that no other sources exist is the quota assigned. This helps to assure that these dollars are used only for

those people who truly have no other sources of support. The IPCP thus serves as a back up for the Medicaid program yet is more flexible because it is not subject to the federal restrictions of the Medicaid program.

The number of indigent patients treated at the UIHC increased significantly from the program's inception until the mid 1960s, when the federal Medicare and Medicaid programs went into effect. In 1966 approximately 19,700 indigent patient admissions and 65,000 indigent outpatient clinic visits occurred at the UIHC. These patients represented approximately one-third of the UIHC's patient volume. Since that time, the percentage of "paying" patients at the UIHC has increased while the overall number of indigent patient admissions and ambulatory visits has remained fairly steady in recent years. Exhibits 2 and 3 depict the changes at the UIHC in indigent, paying and total admissions and ambulatory clinic visits from 1960 through 1997. As can be seen from these exhibits, during fiscal year 1996-97 over 5,000 indigent patient admissions and over 30,000 indigent outpatient visits occurred as part of the IPCP.

The vast majority of indigent patients are referred to the UIHC by community physicians in recognition of the patients' undiagnosed complaint or state of disease process and the unique and highly specialized diagnostic and therapeutic capabilities available there, rather than for economic reasons alone (see Exhibit 4 for a breakdown of referral sources). More than 75 percent of the indigent patients admitted to the UIHC in fiscal year 1996-97 had two or more diagnoses (see Exhibit 5) and the case mix index for the acute care admissions was approximately equal to the overall case mix index for all UIHC patients. Diseases and disorders of the musculoskeletal, circulatory and digestive systems

were among the most frequently treated. These patients came from all 99 counties and from 16 state institutions or programs, as follows:

Cherokee Mental Health Institute [10 admissions, 23 clinic visits]
Clarinda Mental Health Institute [4 admissions, 27 clinic visits]
Independence Mental Health Institute [20 admissions, 145 clinic visits]
Mount Pleasant Mental Health Institute [5 admissions, 36 clinic visits]
Toledo Juvenile Home [5 admissions, 83 clinic visits]
Iowa Correctional Institution for Women at Mitchellville [30 admissions, 394 clinic visits]
Iowa State Penitentiary at Fort Madison [35 admissions, 482 clinic visits]
Anamosa State Penitentiary [77 admissions, 893 clinic visits]
Newton Correctional Facility [12 admissions, 116 clinic visits]
Mount Pleasant Correctional Facility [60 admissions, 751 clinic visits]
Clarinda Correctional Facility [31 admissions, 329 clinic visits]
North Central Correctional Facility at Rockwell City [16 admissions, 168 clinic visits]
Iowa Medical and Classification Center at Oakdale [100 admissions, 871 clinic visits]
Community Placement Office at the Iowa Medical and Classification Center [6 admissions, 53 clinic visits]
Eldora Training School for Boys [7 admissions, 71 clinic visits]
Marshalltown Iowa Veteran's Home [3 admissions, 71 clinic visits]

A map displaying the distribution of indigent patient admissions by county of origin appears as Exhibit 6 and a map displaying the distribution of indigent patient outpatient visits by county of origin appears as Exhibit 7. In many of the counties the number of admissions shown exceeds the number of quotas assigned to the county. This is because once the quota is assigned, all treatment required for that resident for the remainder of the year, both inpatient and outpatient, is provided under the quota, even if the care required is for unrelated conditions.

The indigent patients admitted to the UIHC in fiscal year 1996-97 were evenly split between males (2,716) and females (2,737). The majority of these patients (73.5%) were between the ages of 35 and 64. Only 2.3 percent of the indigent patients admitted were age 18 or less. On the outpatient side, the percentage of ambulatory patient clinic visits made by patients age 18 or less was 2.1 percent. The population served by the IPCP is thus significantly different than that which will be served under the proposed State Children's Health Insurance Program (SCHIP). Details on the age and sex distribution of the indigent patient population served last year are contained in Exhibit 8.

The number of indigent residents a county can refer under the IPCP to the UIHC has no direct relationship to the cost of care provided. Counties have the flexibility to allocate their quotas to those indigent residents likely to incur the greatest costs of treatment and to pay from county funds for the costs of indigent residents whose care requirements are less substantial. Thus wise management of the quota by a county can protect it from substantial outlays.

The State of Iowa also has a built-in cost control mechanism associated with the IPCP. The UIHC is compensated for the indigent care it delivers under the IPCP through an annual direct appropriation authorized by the Iowa Legislature

that is fixed in advance of the fiscal year. No matter how much the care of indigent patients costs the UIHC, the State obligation is limited to the amount of the appropriation. THIS TRANSFERS THE RISK AND RESPONSIBILITY OF FUNDING CARE COSTS FOR QUOTA AND NON-QUOTA INDIGENT PATIENTS IN EXCESS OF THE APPROPRIATION AMOUNT TO THE UIHC. This eight-decade-old structure has been, in effect, a precursor to recent Iowa Department of Human Services initiatives to capitate services under the Medicaid program.

The IPCP appropriation does not fully cover the value of hospital services provided to indigent Iowans at the UIHC and this has been true for a number of years. Data from fiscal year 1996-97 indicate that the value of UIHC hospital services rendered was $47.2 million while the appropriation totaled just $30.1 million. This means that the UIHC experienced a $17.1 million shortfall last year when only the hospital services it provided to IPCP referrals are considered. These services, however, represent only part of the picture. NO DOLLARS ARE PROVIDED TO REIMBURSE PHYSICIAN SERVICES AS PART OF THE IPCP APPROPRIATION. During fiscal year 1996-97, $20.3 million in professional fees for physician services provided to IPCP referrals were waived at the UIHC. Thus the combined value of services provided under the IPCP at the UIHC during fiscal year 1996-97 totals $67.5 million, or $37.4 million more than the appropriation (see Exhibit 9).

The financial benefit of the IPCP structure to the State of Iowa is even greater than the $37.4 million in indigent care costs assumed by the UIHC. Not only is the cost of administration minimized because the State is only required to deal with one entity, since fiscal year 1992-93 the Iowa General Assembly has provided for supplemental

disproportionate share and indirect medical education adjustments, comprised of state and federal matching Medicaid dollars, payable only to the UIHC (see S.F. 549, Sec. 15, for the most recent language). This adjustment was created to generate payments back to the State equal to its appropriation for the IPCP at the UIHC. As an entity of state government, the UIHC is required to transfer its supplemental payments to the Iowa Department of Human Services (DHS) such that the aggregate annual amount does not exceed its indigent patient care appropriation. DHS is required to deposit the portion of the supplemental appropriations comprised of state dollars (approximately 35 percent, or $10.5 million in fiscal year 1996-97) in its Medicaid account and the balance (approximately 65 percent, or $19.6 million) in the general fund of the state. THUS STATE MONEY OF APPROXIMATELY $10.5 MILLION IS ACTUALLY PURCHASING IPCP SERVICES AT THE UIHC VALUED AT $67.5 MILLION. THIS LEVERAGING MECHANISM WOULD BE LOST IF THE INDIGENT PATIENT CARE APPROPRIATION WERE DIRECTLY DISTRIBUTED TO OTHER NON-STATE-OWNED HOSPITALS.

It is worth noting that there have not been significant increases in the funds allocated for the IPCP by the Legislature, even given the continual "overearning" of the appropriation by the UIHC. As shown on Exhibit 10, during the past five years the dollars allocated to the IPCP have increased slightly more than 10 percent while the consumer price index for hospital and related services has increased nearly 30 percent.

Although a shortfall exists between the IPCP appropriation to the UIHC and the value of the services provided, the IPCP appropriation supports fixed costs at the UIHC that would not diminish if the IPCP were no longer based solely at

the UIHC. The average daily acute indigent patient census at the UIHC across its more than 50 nursing units was 45.6 patients in fiscal year 1996-97. Removal of an indigent patient or two from each of these units would not permit reductions in nursing or other patient care staff. Since 65 percent of the UIHC's costs are fixed, this implies that approximately $19.6 million of the appropriation is tied to fixed costs. Thus modification of the IPCP has the potential to cost the State $19.6 million since the federal match will be lost and to cause the UIHC to require an additional $19.6 million since it will still have fixed costs it must support. Of course, the issue of how the costs in excess of the appropriation amount previously assumed by the UIHC will be funded to maintain a similar level of service for the indigent population must also be dealt with by the State if the IPCP is not based solely at the UIHC.

The IPCP is also important to Iowa and the UIHC for other reasons. The availability of a sufficiently large patient base has permitted the UIHC to develop into a nationally recognized, full-scale comprehensive tertiary care center serving all Iowans. A critical element in Iowa's ability to nurture and preserve its successful stratified delivery system has been the presence of the patient base at the UIHC necessary to attract the complete range of specialty and subspecialty physicians to support education and research.

The UI health science education programs are dependent upon the entire "critical mass" of patients now referred to the UIHC, including the indigent patients who now comprise approximately 11 percent of total patient days. The increasing competitiveness of the health care system continues to have a significant impact on access to patients, which are critical to the patient care, teaching and research missions of the UIHC. At the same time, only a minuscule number

of patients would be made available to each of Iowa's 116 other general acute care hospitals if care was rendered there. Decentralization of indigent care would increase the average daily acute inpatient census at Iowa hospitals by only 0.39 patients per day and would place greater financial burden on already financially troubled hospitals due to the appropriation shortfall.

The State of Iowa has formally recognized the importance of the IPCP appropriation to the missions of the UIHC. In August of 1986, a Blue Ribbon Commission was appointed by Governor Terry Branstad to address "how to finance the educationally-related costs of the UIHC beyond basic patient care in an environment where public and private financing programs are cutting back on or eliminating their commitment to these programs through the traditional payment system." The Commission concluded, "At some point in the future, the State's appropriation to the UIHC should center on educationally-related expenses of UIHC..." and that "an appropriate transition must be developed to accomplish the phased transfer of UIHC's current State appropriation for the care of indigent patients to use for the support of educationally-related costs at the UIHC." With the support of Governor Branstad, in 1995 the Iowa General Assembly authorized expanded use of the indigent patient care appropriation by the UIHC. Reaffirmation of this authorization has occurred in each subsequent legislative session. Because of the continuing high demand for indigent patient care services, no funds have yet been used pursuant to this authorization, but its perpetuation is important to the UIHC's educational mission as the health care environment continues to evolve.

Data for county quota patients admitted to the UIHC between January and December of 1996 indicate high levels of satisfaction, which is consistent with that of other patients treated at the UIHC during this time. On a five point scale with 5 representing "excellent" and 1 representing "poor," indigent patient scores averaged 4.4 (n=187) regarding the inpatient care they received vs. an average of 4.4 (n=2,604) for the aggregate population. With respect to willingness to refer family and friends to the UIHC for a similar problem, the average indigent patient score was 4.7 vs. an average of 4.66 for the aggregate population. Thus, indigent patients are highly satisfied with the care they are receiving.

Numerous additional benefits to the State and its citizens derive from the IPCP as it is currently structured. For example, the statewide patient transportation service operated by the UIHC, consisting of a fleet of 17 vans operating Monday through Saturday, literally brings the vast resources of the UIHC to the doorstep of Iowa's medically indigent residents and thus precludes transportation barriers to care. Without this service, which has existed since 1932, many residents, particularly in rural areas, would experience significant difficulty in accessing care. Iowa's less fortunate citizens also find they have full access to the UIHC's vast array of patient care services via UIHC's one-class care policy. This includes a full range of clinical services in all specialties and subspecialties of medicine, related social services, pharmaceuticals, staff who represent a broad array of health professionals who are sensitive to the personal, as well as the physical, needs of all patients, and the latest in medical knowledge, technology and quality health services. Housing and dietary services are also made available to indigent ambulatory patients at no charge; these services would otherwise have to be obtained from commercial establishments at a cost to themselves or the State.

Innovations and enhancements in the IPCP are continually sought by the staff of the UIHC. For example, a special program, the Care Management Program of the University of Iowa (CMPUI), began serving the indigent population on February 10, 1997. This interdisciplinary program, to which patients have access via a toll-free number, provides two types of patient care resource management: care coordination and case management. Care coordination consists of such activities as appointment scheduling, medication assistance, and primary care physician assignment. Case management is utilized for high-risk, complex, or chronically ill individuals and seeks to achieve desired outcomes through efficient use of resources. The CMPUI is already being credited with reducing admissions and clinic visits. A second example, still in the development phases, is the possible utilization of telemedicine to serve indigent patients with chronic conditions requiring frequent visits in their homes.

The Iowa Medical Society (IMS) recently affirmed its support of the operation of the IPCP as it is currently structured. In an October 9, 1997 letter to Mr. R. Edward Howell, Director and CEO of the UIHC, Dr. Harold (Hal) Miller, President of the IMS, wrote:

> Please be advised that at its September 19, 1997 meeting, the Board voted to support the operations of the Indigent Patient Care (State Papers) Program as it currently exists. The Board is not unaware of the questions and concerns that have been raised regarding the centralized operation of the State Papers Program. The Board's vote of support, however, recognizes the unique, valuable and

intertwined roles of that program in providing a full range of quality, cost effective medical care services to the poor of this State while also providing essential opportunities for comprehensive medical education and training under the tutelage and supervision of highly competent medical educators.

Support of the IPCP as it currently operates was also recently endorsed by the Iowa State Association of Counties' Community Services Affiliate. In a December 3, 1997 letter to Mr. R. Edward Howell, Ms. Barbara Martley, President of Community Service Affiliate, wrote:

> The Iowa State Association of Counties' Community Services Affiliate commends the University of Iowa Hospitals and Clinics for its provision of quality care to the State of Iowa's medically indigent population.
>
> The UIHC has maintained excellent communication with our individual offices and continues to provide services effectively and efficiently through the Care Management Program.

As discussed at the last ISAC Community Service Affiliate meeting on November 21, 1997, we support the continuance of this much needed State Paper Program at University of Iowa Hospitals and Clinics.

The University of Iowa Hospitals and Clinics and the Iowa Department of Corrections recommend that the operational aspects of the Indigent Patient Care Program be retained as they currently exist.

Provision of Health Care Services to the Iowa Department of Corrections

The average daily population of each DOC institution in calendar year 1996 is depicted in Exhibit 11. As of late November 1997, Iowa had 6,880 inmates behind bars in a system designed to hold only 4,951. This number is projected to increase to over 8,000 within the next three years. Several options, including a re-examination of criminal sentencing policies and expansion of prison beds, are being explored to address this situation. As the prison population increases and ages, health care needs can be expected to increase.

During fiscal year 1996-97, there were 367 indigent patient admissions and 4,057 indigent patient clinic visits at the UIHC from Department of Corrections (DOC) facilities. The aggregate charges for the hospital services provided, not

including physician services, would have been $3,951,894. However, no charges for the care were made to the DOC because necessary medical and surgical procedures for DOC residents are provided under the IPCP. Exhibit 12 depicts the number of admissions, clinic visits and the value of services provided for each of the referring DOC facilities.

The DOC patient population treated at the UIHC is predominately males between the ages of twenty and fifty. Eighty-three percent of the admissions in fiscal year 1996-97 were males as were 86 percent of the patients making ambulatory clinic visits. Exhibits 13 and 14 show the age and sex distribution by DOC facility for admissions and clinic visits. Orthopaedics, internal medicine, ophthalmology, otolaryngology, and general surgery were among the specialties most frequently utilized.

A holding area has been constructed and special protocols have been developed by the UIHC to safely and securely treat patients from the DOC. For example, all penal institution patients who have appointments are to enter the UIHC through the doors southwest of the Emergency Treatment Center (ETC) and once inside, the correctional officer or designee must call the ETC registration area to verify patient information. Clinic staff have also been trained not to release information regarding future visit dates to state institution patients, their friends or families to minimize the possibility of unauthorized contacts or possible escape plans. These and other operating protocols have been honed over the years with state institutions to safely and securely accommodate the health needs of their unique populations. If the treatment of DOC patients were not provided at the UIHC, each facility would be required to develop its own unique

operating protocols. Facility and correctional staff likely would then be less familiar with the protocols due to less frequent contact, thus increasing the complexity of maintaining adequate security.

In January of 1996, then Director of the Iowa Department of Corrections, Ms. Sally Chandler Halford, submitted a report to the Iowa General Assembly on the establishment of a correctional infirmary within the UIHC. This report called for the construction for a 50-bed multi-functional infirmary for such purposes as: "1) Convalescing inmates who no longer require inpatient care but still require frequent follow up at UIHC. 2) Inmates with stable but serious conditions who no longer require hospitalization but can not tolerate significant travel. 3) Pregnant inmates who are near term or who are a high risk pregnancy. 4) Inmates receiving dialysis. 5) Inmates with significant drug/alcohol withdrawal symptoms. 6) Inmates with tuberculosis requiring isolation. 7) Inmates requiring observation because of seizures or spells. 8) A holding area for inmates with UIHC appointments. 9) Inmates scheduled for outpatient surgery. 10) Inmates requiring post-surgical observation. 11) Inmates requiring specialized treatment. 12) Inmates needing short term specialized nutritional support. 13) Inmates who require tertiary care who are also a security risk." The physical configuration was identified to include "eight 4-person rooms, nine single rooms, three respiratory isolation rooms, and three single rooms for high security inmates."

The proposed location of the 50-bed infirmary within the UIHC was and remains problematic for a number of reasons. Chief among them is the lack of available space at the UIHC. Commitments exist for all current and planned additions at the UIHC well into the next century. Quality issues also present barriers, such as the need for acute levels of

care for several of the potential patient types identified in the Halford report, as do security issues and the threat to the UIHC's ability to continue to attract paying patients and to obtain referrals and managed care contracts if a prison infirmary is developed within its facilities. Recent meetings between UIHC staff and Dr. Paul Loeffelholz, Medical Director for the Department of Corrections, have resulted in the shared conclusion that it is not appropriate to locate an infirmary within the confines of the UIHC. The DOC is proposing construction of a "special needs" unit at the DOC's Oakdale facility to serve handicapped and mentally challenged individuals, among others. The special needs unit at Oakdale would be designed to provide infirmary care to offenders.

The on-going relationship between the UIHC and the DOC has now evolved to discussions regarding treatment of Iowa's sex offender population. Specifically, the individuals being considered for treatment are those who have completed their prison sentence but who are found to still represent a danger to society. While no final agreement has been reached, there is consensus that the sex offenders should be housed and treated in a unit to be located on property owned and maintained by the State and that additional funding must be identified to support both the DOC's and the UIHC's costs associated with developing and operating such a program.

The University of Iowa Hospitals and Clinics and the Iowa Department of Corrections recommend the continued utilization of the University of Iowa Hospitals and Clinics for rendering IPCP services to Department of Corrections inmates, parolees and persons on work release. Further, it is recommended that support be provided for a "special needs" unit to be constructed at the Department of Correction's Oakdale facility. Finally, should it be decided by the

Legislature to create a sex offender program for people who have completed their prison sentence but who are still judged to be a danger to society, it is recommended that new sources of support be found for this program.

Telemedicine

Although there is no charge for the health care services rendered to prisoners by the UIHC, the Department of Corrections does incur costs when prisoners are transported to the UIHC for care. These costs include such items as escort time, replacement staff at the correctional facility, and vehicle-related costs. Estimates indicate it costs the DOC $200 to transport a prisoner from Anamosa to the UIHC and $400 to transport a prisoner to the UIHC from Fort Madison.

One way to reduce the costs for the DOC while maintaining access to the high quality services delivered at the UIHC is to utilize telemedicine. Telemedicine refers to the electronic transmission of medical information and services (voice, data, video) from one site to another using telecommunication technologies. Dr. Paul Loeffelholz, Medical Director for the Department of Corrections, believes that eventually one-third of the prisoner visits to the UIHC could be eliminated by telemedicine. This is particularly true for initial consultation and follow-up visits.

In addition to reducing transportation-related costs for the DOC, the use of telemedicine has additional benefits. For example, THE USE OF TELEMEDICINE HAS THE POTENTIAL TO REDUCE THE NUMBER OF TIMES DANGEROUS PRISONERS MUST BE TRANSPORTED OUTSIDE PRISON WALLS.

The DOC started using the fiber optic link between the Iowa Medical and Classification Center at Oakdale and the Iowa State Penitentiary at Fort Madison in November of 1996 for psychiatric consultations, therapeutic dietitian services, and reviews of prisoners sentenced to life imprisonment. On March 4, 1997 the University of Iowa Hospitals and Clinics started providing orthopaedic evaluations of prisoners via telemedicine with these facilities. Internal medicine evaluations became available on March 5, dermatology on March 7, cardiology on April 8, gastroenterology on July 31, surgery on September 15, and urology on September 16. Telemedicine units will be installed in other DOC facilities as funding becomes available.

The Joint Office for Clinical Outreach Services has added a telemedicine division to facilitate the addition of Clinical Telemedicine at the UIHC. The telemedicine consultation schedule is shown in Exhibit 15. The frequency of the clinics varies by area and ranges from weekly to monthly. Otolaryngology consultations will become available in the near future. Exhibit 16 shows a breakdown of the telemedicine consultations the UIHC has had with the DOC to date. A major benefit of using the UIHC as the telemedicine contact site is the potential availability of these specialties on a 24-hour basis.

NEC Corporation TeleDoc 5000 units are used at the prisons to enable these consultations to occur. Each TeleDoc unit costs approximately $76,000. These units are capable of transmitting images and sound in real time from the prison location to the UIHC. Special scopes are utilized by physicians to view a prisoner's ears, throat or skin or to hear the heart beat or listen to the lungs. X-ray images can also be transmitted. The two-way interaction allows parties on both ends to see and hear the other party.

Protocols have been developed with the DOC regarding the use of telemedicine with prisoners. For example, forms exist for medical or dental practitioners to refer inmates for telemedicine sessions at the UIHC. In addition, there are consent forms each prisoner must sign to participate in a clinical telemedicine examination and consultation. This form addresses the need to create a medical record and assures the prisoner that no videotape recording of the session will be made unless separate consent has been obtained.

The University of Iowa Hospitals and Clinics and the Iowa Department of Corrections RECOMMEND THAT THE UTILIZATION OF TELEMEDICINE SERVICES BETWEEN THE UIHC AND DEPARTMENT OF CORRECTIONS FACILITIES BE EXPANDED.

Summary of Recommendations

The Association of Iowa Hospitals and Health Systems (IH&HS) has historically been supportive of maintaining the operation of the IPCP as it currently functions. As it has done several times over the history of the program, however, IH&HS initiated its own study of the IPCP again this past Fall. A copy of this report has been shared with the leadership of IH&HS to facilitate its review. IH&HS expects to conclude its current study in the near future and to develop a position after its January 22, 1998 board meeting.

The University of Iowa Hospitals and Clinics and the Iowa Department of Corrections are unanimous in their agreement on the five major recommendations contained in this report. These recommendations are as follows:

- Retain the Indigent Patient Care Program based at the University of Iowa Hospitals and Clinics as it currently exists.

- Continue the utilization of the University of Iowa Hospitals and Clinics for rendering IPCP services to Department of Corrections inmates, parolees and persons on work release.

- Expand the utilization of telemedicine services between the University of Iowa Hospitals and Clinics and Department of Corrections facilities.

- Support the creation of a "special needs" unit at the Department of Correction's Oakdale facility.

- Find new sources of support if a sex offender program is to be created for people who have completed their prison sentence but who are still judged to be a danger to society.

Indigent Patient Care Program Quota Allocation By County

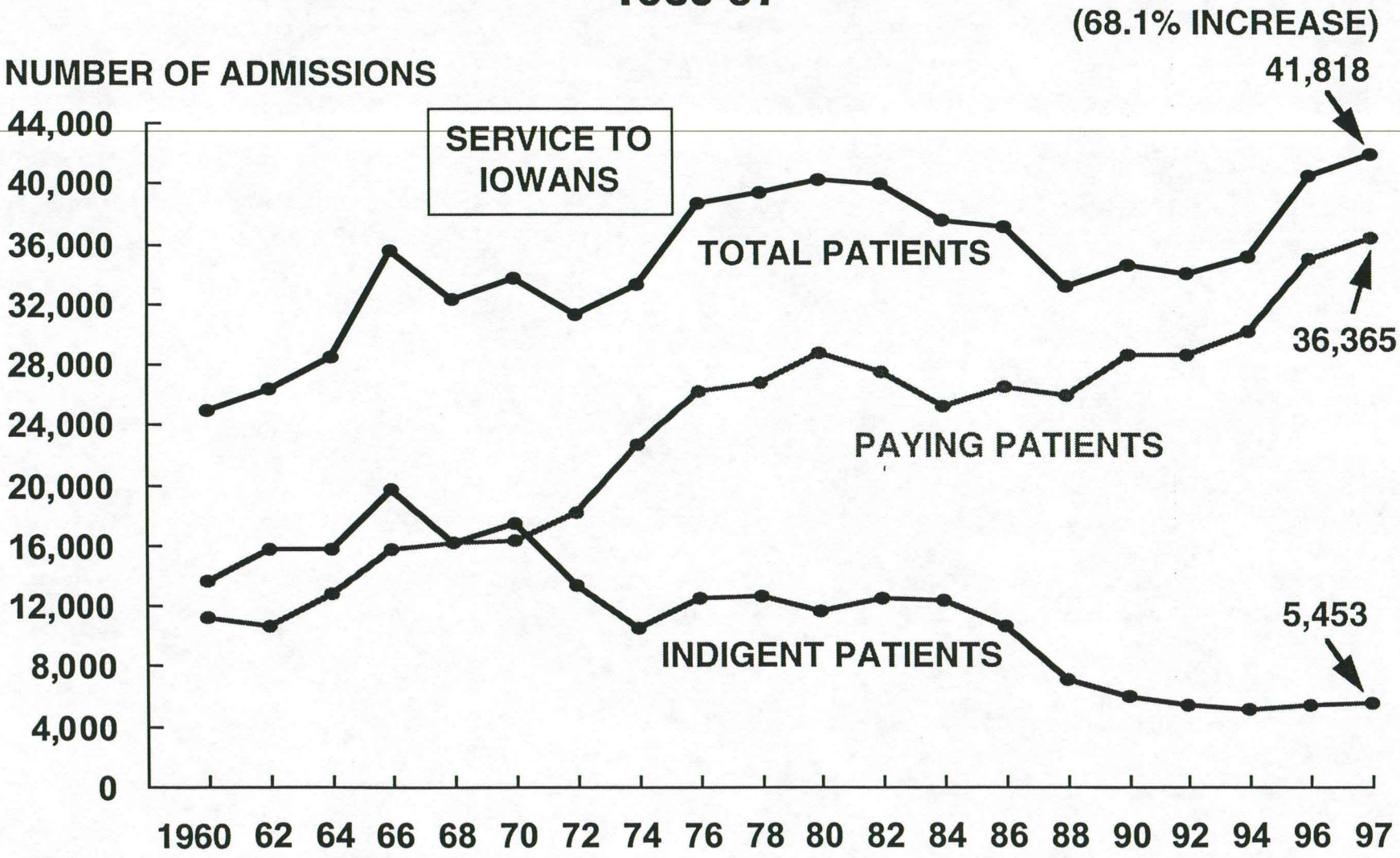
5,084

UIHC

Exhibit 1

THE UNIVERSITY OF IOWA HOSPITALS AND CLINICS

GROWTH IN NUMBER OF ADMISSIONS BY FINANCIAL CLASSIFICATION 1960-97



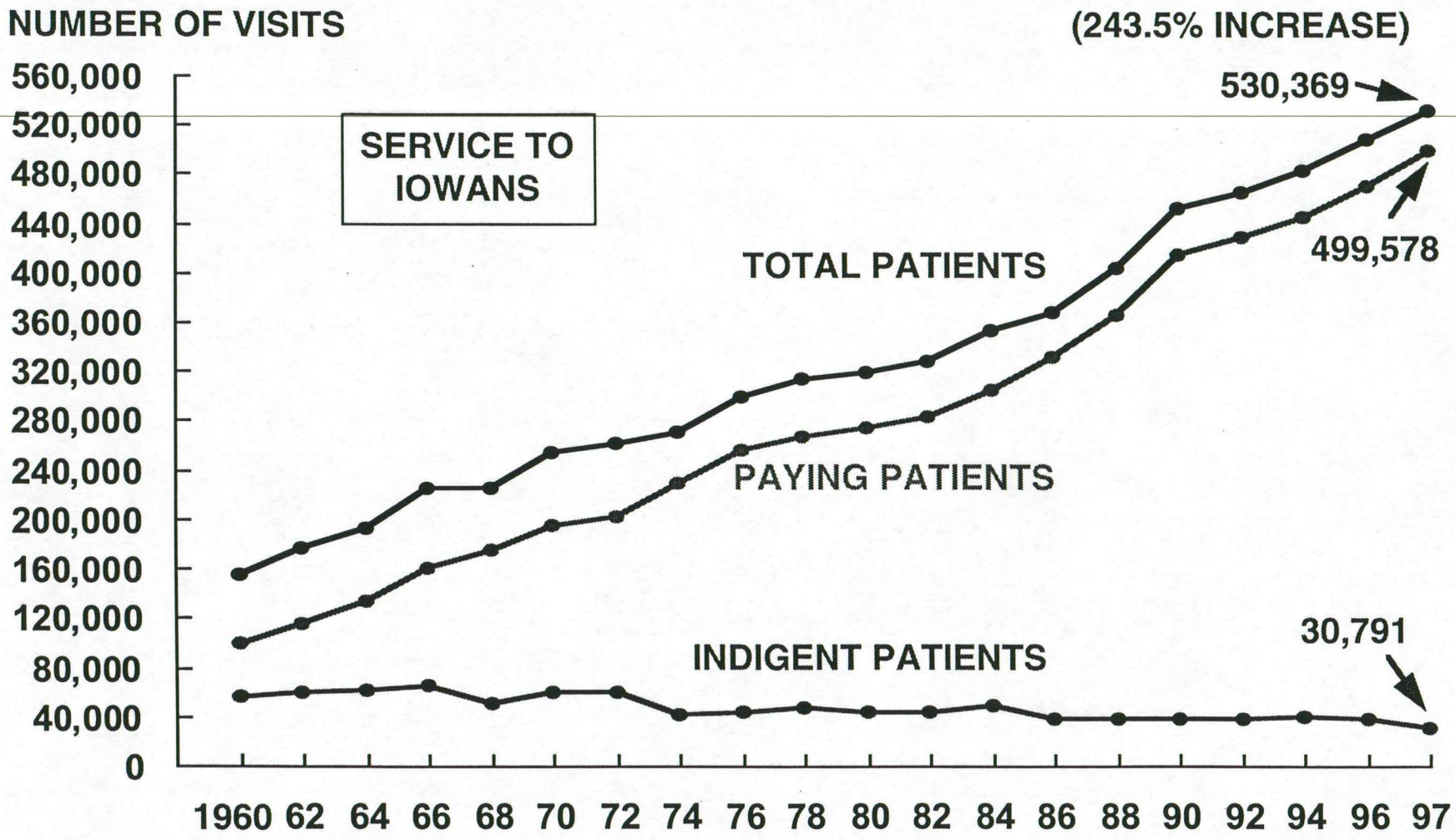
LINE•1117•10/97

UIHC

Exhibit 2

THE UNIVERSITY OF IOWA HOSPITALS AND CLINICS

GROWTH IN UIHC AMBULATORY CLINIC PATIENTS BY FINANCIAL CLASSIFICATION 1960-97



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UIHC

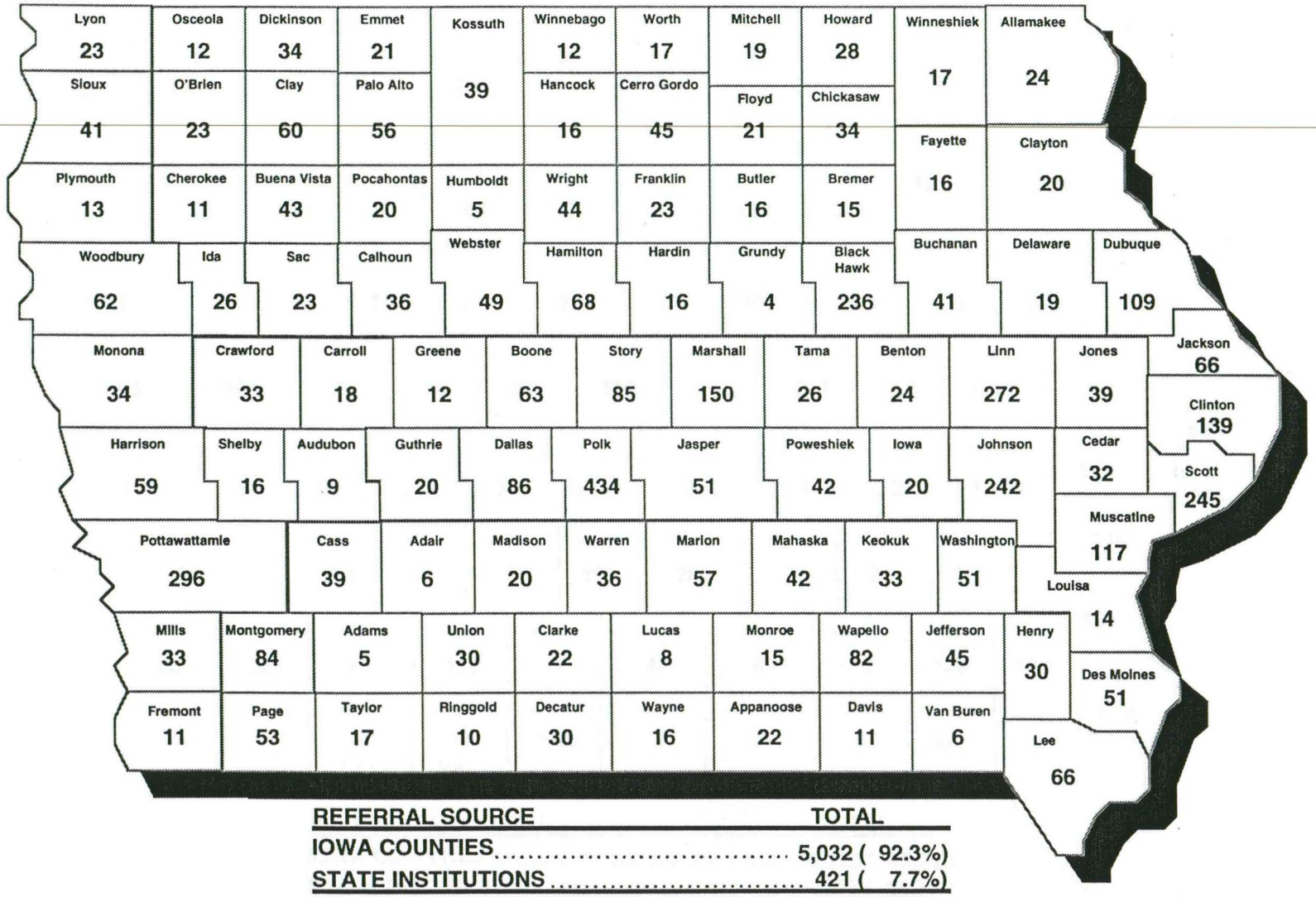
Exhibit 3

Source of Indigent Patient Care Program Admissions
Fiscal Year 1996-97

Referring Source	Number	Percentage of Total
Physician/Practitioner	4,489	82.3%
Hospital	79	1.5%
Clinic	13	0.2%
Community Service Organization	8	0.1%
Therapist	6	0.1%
Other	858	15.8%
	5,453	100.0%

Exhibit 4

Indigent Patient Admissions By County
1996-97



REFERRAL SOURCE	TOTAL
IOWA COUNTIES	5,032 (92.3%)
STATE INSTITUTIONS	421 (7.7%)
TOTAL	5,453 (100%)

Exhibit 6

Indigent Patient Age and Sex Distribution
7/1/96 - 6/30/97

	0 - 18		19 - 24		25 - 34		35 - 44		45 - 54		55 - 64		65 - 74		75 & Over		TOTAL	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Admissions	77	51	207	137	604	329	826	549	586	873	396	779	17	14	3	5	2,716	2,737
Clinic Visits*	377	260	1,358	1,124	3,448	2,143	4,077	3,554	3,101	4,808	2,103	4,108	123	76	20	33	14,607	16,106

* Age and sex associated with 78 clinic visits is unknown

Exhibit 8

Average Daily Population of Department of Corrections Institutions Calendar 1996

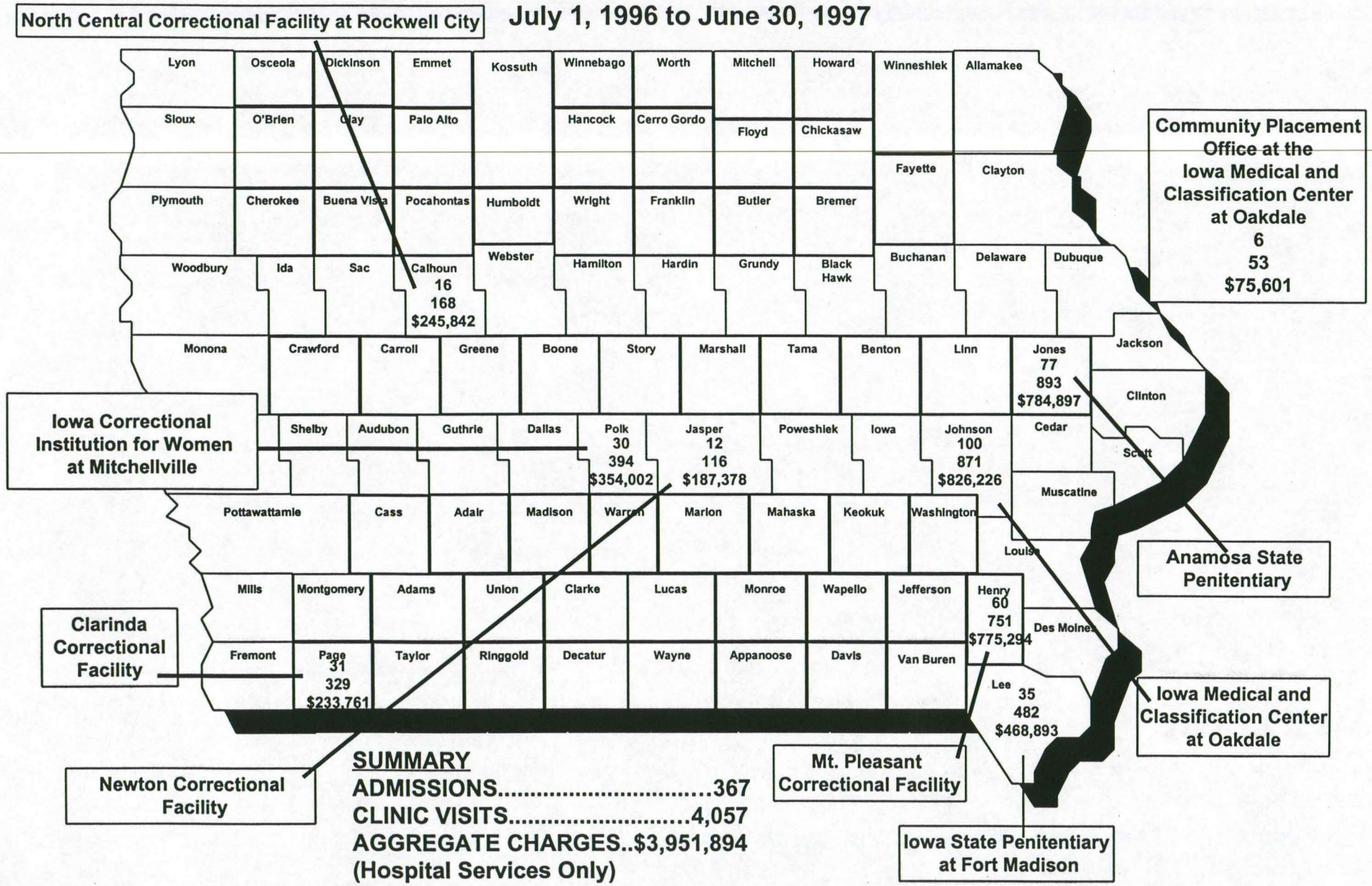
Clarinda Correctional Facility	668
Mount Pleasant Correctional Facility	955
Iowa Medical and Classification Center at Oakdale	1,045
Newton Correctional Facility	293
North Central Correctional Facility at Rockwell City	440
Anamosa State Penitentiary	1,470
Iowa State Penitentiary at Fort Madison	886
Iowa Correctional Institution for Women at Mitchellville	376
TOTAL	6,133

Exhibit 11

University of Iowa Hospitals and Clinics

DEPARTMENT OF CORRECTIONS INDIGENT PATIENT ADMISSIONS, CLINIC VISITS, AND AGGREGATE CHARGES

July 1, 1996 to June 30, 1997



SUMMARY

ADMISSIONS.....367
CLINIC VISITS.....4,057
AGGREGATE CHARGES..$3,951,894
(Hospital Services Only)

Exhibit 12

AGE AND SEX DISTRIBUTION OF DEPARTMENT OF CORRECTIONS PATIENTS ADMITTED TO THE UIHC
7/1/96-6/30/97

FACILITY	<10		10-19		20-29		30-39		40-49		≥50		TOTAL		COMBINED
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Clarinda Correctional Facility	0	0	1	0	10	0	14	0	3	0	3	0	**31**	**0**	**31**
Mt. Pleasant Correctional Facility	0	0	0	0	20	0	16	0	12	0	12	0	**60**	**0**	**60**
Iowa Medical and Classification Center at Oakdale	5	8	2	1	15	12	25	10	10	1	11	0	**68**	**32**	**100**
Newton Correctional Facility	0	0	0	0	0	0	2	0	7	0	3	0	**12**	**0**	**12**
North Central Correctional Facility at Rockwell City	0	0	0	0	7	0	5	0	2	0	2	0	**16**	**0**	**16**
Anamosa State Penitentiary	0	0	2	0	22	0	31	0	12	0	10	0	**77**	**0**	**77**
Iowa State Penitentiary at Fort Madison	0	0	0	0	6	0	14	0	6	0	9	0	**35**	**0**	**35**
Iowa Correctional Institution for Women at Mitchellville	1	0	0	1	0	5	0	11	0	8	0	4	**1**	**29**	**30**
Community Placement Office at the Iowa Medical and Classification Center at Oakdale	0	0	0	0	0	0	3	0	3	0	0	0	**6**	**0**	**6**
TOTAL	**6**	**8**	**5**	**2**	**80**	**17**	**110**	**21**	**55**	**9**	**50**	**4**	**306 (83%)**	**61 (17%)**	**367 (100%)**

Exhibit 13

AGE AND SEX DISTRIBUTION OF DEPARTMENT OF CORRECTIONS PATIENTS MAKING CLINIC VISITS TO THE UIHC
7/1/96-6/30/97

FACILITY	<10		10-19		20-29		30-39		40-49		≥50		TOTAL		COMBINED
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Clarinda Correctional Facility	0	0	12	0	109	0	123	0	60	0	25	0	**329**	**0**	**329**
Mt. Pleasant Correctional Facility	0	0	5	0	248	0	177	0	167	0	154	0	**751**	**0**	**751**
Iowa Medical and Classification Center at Oakdale	1	1	20	7	178	85	231	83	127	14	123	1	**680**	**191**	**871**
Newton Correctional Facility	0	0	0	0	11	0	35	0	56	0	14	0	**116**	**0**	**116**
North Central Correctional Facility at Rockwell City	0	0	1	0	40	0	60	0	51	0	16	0	**168**	**0**	**168**
Anamosa State Penitentiary	0	0	15	0	330	0	250	0	174	0	124	0	**893**	**0**	**893**
Iowa State Penitentiary at Fort Madison	0	0	0	0	113	0	200	0	90	0	79	0	**482**	**0**	**482**
Iowa Correctional Institution for Women at Mitchellville	1	0	0	19	0	88	0	159	0	98	0	29	**1**	**393**	**394**
Community Placement Office at the Iowa Medical and Classification Center at Oakdale	0	0	0	0	9	0	23	0	12	0	9	0	**0**	**53**	**53**
TOTAL	**2**	**1**	**53**	**26**	**1,038**	**173**	**1,099**	**242**	**737**	**112**	**544**	**30**	**3,473 (86%)**	**584 (14%)**	**4,057 (100%)**

Exhibit 14

UIHC Clinical Telemedicine Schedule
Room 1068 ETC

Revised October 1997

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	Surg Clinic EVERY Mon 9:00am-10:00am Oto Clinic 1st Mon of ea month 1:00PM-2:00 PM	Ortho Clinic EVERY OTHER Tue 11:30 am-12:30 PM Cardio Clinic 2nd Tue of ea month 2:00 PM-3:00 pm Urology Clinic 3rd Tues of ea month 2:00PM-3:00pm	Int Med Clinic EVERY Wed 9:00 am-12:00PM	GI Clinic EVERY Thurs 2:00PM-3:00pm	Van Buren Co. PSY 3rd Fri of ea month 9:00 am-12:30PM Derm Clinic 1st & 3rd Fri of ea month 1:00PM-2:00pm	

Exhibit 15

Clinical Telemedicine Encounters March - October 31, 1997
University of Iowa Hospitals and Clinics
Iowa Department of Corrections

Iowa Medical and Classification Center

Month	New Patients	Return Patients	Month Total
March	14	12	26
April	14	11	25
May	5	7	12
June	6	9	15
July	12	7	19
August	15	3	18
September	4	2	6
October	6	7	13
To Date Total	76	58	134

Fort Madison State Penitentiary

Month	New Patients	Return Patients	Month Total
March	2	11	13
April	10	8	18
May	10	4	14
June	4	1	5
July	6	3	9
August	3	1	4
September	0	1	1
October	4	1	5
To Date Total	39	30	69

Exhibit 16