

**MEDICAL REFERRAL IMPROVEMENT
PROJECT FOR AMERICAN SAMOA**

by

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PROJECT SUMMARY

The purpose of this project is to assist the Hospital Authority, Government of American Samoa improve its medical referral program and enhance its on-island service capabilities. The project entailed: (1) two visits to the Lyndon Baines Johnson Tropical Medical Center, (2) observation of Medical Referral Committee (MRC) meetings, (3) private discussions with MRC members, providers, and administrative personnel, (4) a meeting with the Board of Directors of the newly formed Hospital Authority, (5) review of medical referral documentation from American Samoa and Tripler Army Medical Center, and (6) discussions with physicians and hospital administrators in Honolulu.

The initial focus of the project was the Medical Referral Committee's procedures and decision-making processes. As the project progressed and our understanding of the problems broadened, so too the focus of this report. The final report identifies six interrelated factors working to increase the number and costs of referrals. The first half is devoted to a discussion of these factors, and the second half offers specific recommendations in outline form.

The intended audience for this report is the Board of Directors of the Hospital Authority. Their understanding of the problems associated with medical referrals will be crucial to any serious resolve. Hospital Authority policies, goals, and priorities should guide the clinical decisions of the Medical Referral Committee. To a large measure, this is the task which lies before the Board.

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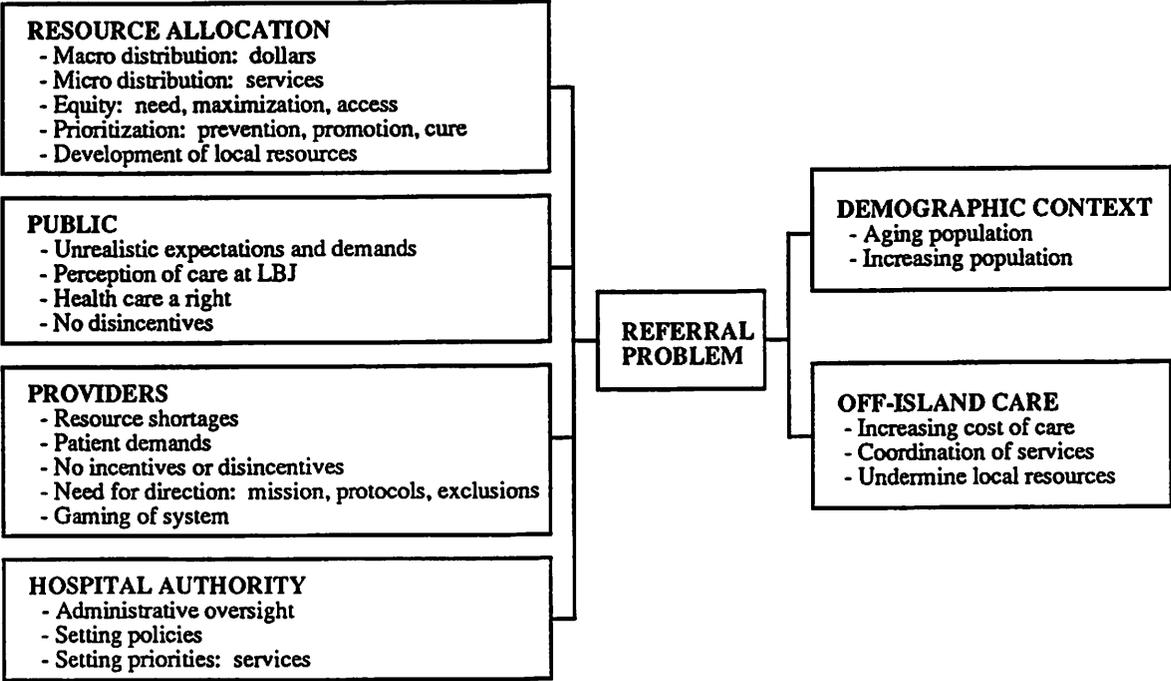
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OVERVIEW

The medical referral problem in American Samoa is best understood as a host of interrelated factors working to increase the number and costs of referrals. Relationships among these factors are rarely static or discrete. A change in one factor may have a rippling effect on others. For example, loss or gain of equipment, personnel or supplies may result in the need for more or less referrals, and an accompanying increase or decrease in costs. Figure 1 below offers a framework by which to view the medical referral problem, touching upon major factors and influences.

Figure 1. Factors Influencing Medical Referral



Those factors labeled "**Resource Allocation**" and "**Public**" are most closely identified with societal issues, notably those related to health care needs, allocations, expectations, demands, equity, and political will. These factors are central to the referral problem. They also are problematic and resistant to easy manipulation, change, or resolve. Those factors labeled "**Providers**" and "**Hospital Authority**" are more closely identified with systems development and management issues, and are subject to change through organizational activities and effective leadership. "**Demographic Context**" and "**Off-Island Care**" point to external factors which will continue to have adverse influences upon the need and cost of referral care, but lie largely beyond political or organizational control.

RESOURCE ALLOCATION

"Rule of Rescue"

The medical referral problem is directly linked to health resource allocation issues: how much money, what services, and to whom. These issues are especially vexing because health is an intently personal and public concern, one which invites strong opinions and commitments. The will to live is deeply rooted in man's psyche. He will go to great lengths to retain his vigor and exercise control over his faculties. He also will go to great lengths to protect loved ones from disease, suffering, disability, and premature death. Furthermore, man appears to share a collective moral conscience which demonstrates a strong proclivity to rescue those who face life-threatening situations. This duty-based imperative, dubbed "*Rule of Rescue*" by Johnson¹, is witnessed in its most-dramatic form every time an unconscious person is dragged from a burning building or a drowning man is pulled from the water. The "*Rule of Rescue*" can be seen in the day-to-day practice of medicine, from the setting of a fracture to the maintenance of a brain-dead patient on a ventilator. In the case of resource allocation and policy setting, the "*Rule of Rescue*" most often manifests itself as a countervailing force to limits. Perhaps the most time-honored expression is the rhetorical question, "How can you set a price tag on human life?" Even when policies are set and deemed rational and fair in aggregate, they suddenly become unfair when applied to an individual with a name and face. As an expression of personal and community values, the "*Rule of Rescue*" should have a place in decision making, but it also must be balanced against the realities of limitations.

Equity, Social Justice and Efficiency

At the macro level, health resource allocation entails budgeting for health care relative to other societal needs. This has become an increasingly difficult task in recent years due to the high cost of medical services and society's inability or unwillingness to accept the burdens of cost. In the words of Gilbert Welch, health care has increasingly moved to "the middle ground between the impossible (covering everything) and the unacceptable (covering nothing)".² "Middle ground" reflects a new sensibility, one recognizing the need to balance the rights and responsibilities of individuals with those of society, and the need to set limits on health services and expenditures. Oregon's plan to base Medicaid benefits on a prioritized list of health services ("essential and basic care...a floor beneath which no person shall fall") reflects this new sensibility.³

Allocation of health resources also occurs at lower levels where alternative approaches to health care and specific kinds of services are determined. At all levels, policy should be shaped by the concepts of *equity*, *social justice*, and *efficiency*. The concept of *equity* usually hinges on the following two principles: (1) distribution according to need, and/or in a manner which will serve the greatest number of persons, and (2) assurance that all persons have an equal opportunity to receive available health services. *Social justice* is usually derived from a set of principles concerning what a person ought to have as of *right* of birth. Essentially,

rights are more social than individual in character since they necessitate recognition of others as equals. *Efficiency* implies maximizing health benefits in the face of limited resources.

Principles of Sufficiency and Accounting

There are no shortages of methodologies for determining health needs and allocating health resources. The problem is agreeing upon a framework of ethical values and priorities by which to apply them. One approach to developing such a framework is to employ what Callahan calls the principles of "*sufficiency*" and "*accounting*".⁴ The principle of *sufficiency* recognizes health care as a personal good and a social imperative, but a resource which should be subject, like all others, to limits. According to *sufficiency*, societal obligations for health are met when poor health does not account for failures and deficiencies in major social institutions (e.g., political and legal systems, a stable economy, national defense, transmission of knowledge and culture, etc.), and when the great majority of people (e.g., four-fifths or more) can carry out the aims of society. The ideal test for *sufficiency* would be to develop and link key health indicators to the central needs and functions of society, and then relate these to personal and social functioning. For example, key health indicators for children might be linked to their physical, mental, and educational development needs; adult health indicators might be linked to work and community activities; and the elderly's to an adequate life span (e.g., late 70s to early 80s) and abilities to carry out interpersonal and community activities. In lieu of functional indicators, customary health indicators (e.g., life expectancy, infant mortality, death rate) might be used though their value is more ambiguous.

There are four principles underlying the concept of *sufficiency* which make it attractive.

(1) It recognizes health care as a personal good, but places the needs of society before those of the individual. (2) It holds that health care is a means of protecting, promoting, or restoring health, and not an end in itself. (3) It broadens the definition or measurements of health from a narrow, pathology-specific condition to one based on personal and social functioning (the latter being of key importance to most people). Defining health in terms of personal and social functioning helps remove the language barrier dividing the medical profession from the public. In effect, this empowers the public to make informed decisions about health and participate in health policy making.⁵ (4) Finally, the concept of *sufficiency* asserts that there can be, and often is, a point of marginal return in relation to health care spending and health outcomes.

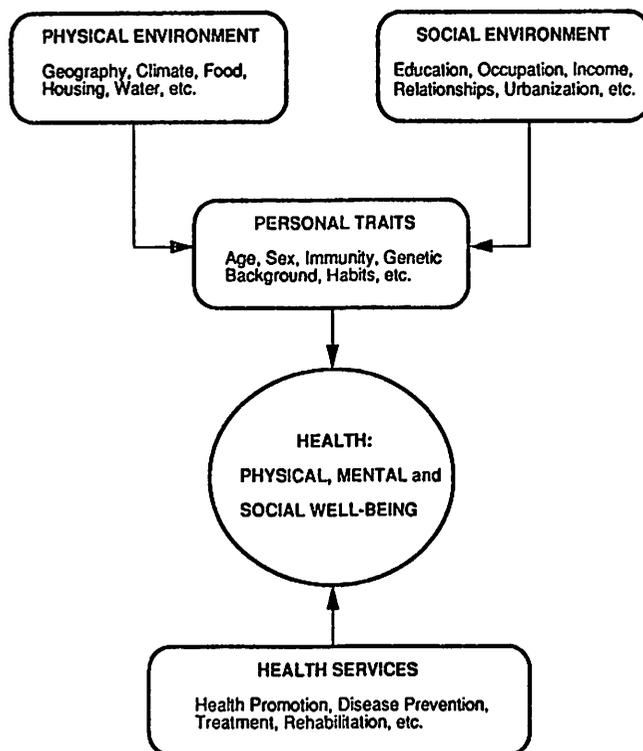
The principle of *full accounting* is intended to serve as a cross-check on the principle of *sufficiency*. It mandates that resources devoted to health are not harmfully diverted from other important societal needs such as education, social services, public safety, roads or parks, or housing. It also requires that allocation decision-making take place with an eye to the future. It attempts to assure that investments made in health care today will not produce adverse effects in the future. This is important in light of the fact that new technologies and services tend to stimulate consumption even in the absence of need (Roemer's law).⁶ As it is, billions of dollars are wasted annually on unproven or misused technologies.⁷⁻⁹ The injudicious introduction of new ones can increase this factor manyfold and have long-range deleterious effects. For example, the Republic of the Marshall Islands introduced

hemodialysis in the early 1970s. After its introduction, more patients were being placed on dialysis than anticipated. Since hemodialysis prolongs life, diabetic patients were now experiencing new complications which could not be managed on-island. The result was increased referrals to Honolulu. The costs associated with maintaining the Dialysis Unit and diabetic patients eventually became so great (more than 30% of the health budget) that it prevented Health Services from meeting the basic health needs of the general public. Eventually, Health Services made the very difficult decision to close its Dialysis Unit and cease referring diabetic patients to Honolulu. Robert Blank speaks insightfully about the problems which medical technology can present when he writes that it "can be addictive and compelling because it takes on a life of its own. We build into machines our aspirations and needs. Like humans, technologies once created seem to acquire a right to survive and to make their mark."¹⁰

Promotion, Prevention and Treatment

"Health care" and "medical care" are often used interchangeably as if they were synonymous when they are not. What this reveals is a confusion in the public's mind about health and medicine: health, for many persons, is inextricably linked to physicians, specialty care, high technology, and medications. Figure 2 below offers a more encompassing model of health.

Figure 2. Determinants of Health



As indicated in Figure 2, "Health Services" is but one of many factors influencing health, and its value is relative. It is not the prime determinant of health. In fact, there are health economists who argue forcefully that medical care has a less favorable impact on mortality than lifestyle, diet, and income distribution.¹¹

Within "Health Services" are the subcategories or approaches to health services: health promotion, disease prevention, treatment, rehabilitation, etc. The ordering of these subcategories is not fortuitous; it is intended to signal that the most significant health gains have come from aiming at the health of the community rather than the individual.^{4, 12} What promise do programs focusing on consumer education, health promotion, and disease prevention hold? U.S. statistics suggest that preventable illness makes up approximately 70% of the burden of illness and associated costs, and preventable illness is what health promotion and disease prevention focus on.¹³⁻¹⁵ Furthermore, the costs involved in health promotion and disease prevention are significantly less than for curative care. However the predominate focus of medical care today is on treatment of disease, with an emphasis on medical specialization and cure. One reason for this appears to be that doctors and the public simply feel better helping identifiable individuals in need rather than acting on abstract principles, even when the later hold the promise of greater benefits to more people. It is consistent with the "*Rule of Rescue*". In American Samoa, as in the U.S., less than 10% of health resources is allocated to health promotion and disease prevention.

When Treatment Prevails

There is no question about the need for curative care, especially at the primary level where early medical intervention can prevent chronic medical conditions, disabilities, and premature deaths. The concern is the amount of money spent on costly specialized care at the secondary and tertiary levels. Because the promise of health can never be fulfilled (i.e., there is no escape from aging, deterioration and death--only postponement), there really is no limit to what can be spent on the medical needs of an individual. This is especially true when physicians see their patient's welfare as their sole obligation, refusing to weigh the patient's interest against the competing claims of other patients or society as a whole. The American health care system offers a cautionary example of what can happen when resources are used almost exclusively on treatment, notably on highly specialized secondary and tertiary care. The U.S. spends more money on health care than any other nation. In 1992, it spent 14% of its GNP or \$838 billion on health care. This amounted to \$3,600 per person (by contrast, American Samoa's per capita expenditure was \$259).¹² Even in the public sector, which accounts for approximately 42% of health care expenditures, spending is weighted massively in favor of highly specialized secondary and tertiary care. In any given year, the government spends 70% of Medicare costs on about 9% of beneficiaries, namely those critically ill.¹⁶ In spite of such enormous expenditures on health, the outcome has been disappointing. Indices such as infant mortality and life expectancy in other industrialized nations typically match or exceed those in the U.S.^{17, 18} In the words of Enthoven, the leading architect of Clinton's Health Care Reform Plan, the U.S. curative approach to health care has reached a "flat curve of results with marginal utility".¹⁹

Utility and Medical Care

Not only are the costs associated with curative care a concern, but also the utility of many medical practices. In the area of infectious disease and emergency care, medical services have had an enormous favorable outcome on life expectancy and quality of life. But in other areas of medicine, the results have been less certain. Did the body heal itself or was it the handy work of the doctor? There is considerable outcome research which suggests that 20-30% of medical care rendered is unnecessary or inappropriate, and that 10% is harmful.²⁰⁻²³ One physician critical of many current medical practices writes that "no more than 20% of medical interventions have proven to be effective; as many as 30% of hospital procedures may be unnecessary; and as high as 65% of estimated annual expenditures are spent on 5% of the elderly, often during the last year of life."¹² R.H. Brook, a prominent researcher on outcome studies, comments: "If one could extrapolate from the available literature, then perhaps one fourth of hospital days, one fourth of procedures, and two fifths of medications could be done without".²⁴ In short, the practice of medicine is not Newtonian science, but a science of uncertainty--uncertainty being a driving force and outcome. Perhaps doctors receive a great deal of credit which properly belongs to nature. Given the degree of uncertainty associated with the practice of medicine, it seems only prudent to take a conservative approach to medical intervention. Additionally, it would seem reasonable to invest in those health services (i.e., health promotion and disease prevention) which help individuals order their lives in ways which maximize health and minimize the need for expensive medical treatment.

Allocations For Health Care in American Samoa

There is no rubric for determining appropriate allocations for health. Arguments about appropriate levels of spending are, to a large extent, based on value judgments and should be accepted accordingly. Cultures subscribing to a fatalistic view of life or showing a pre-occupation with an afterlife are not as likely to allocate as much money for health care as cultures which eschew fatalism or are highly materialistic. American Samoa's expenditures for health care between FY 1991 and FY 1994 are shown below in Table 1.

Table 1. Allocations for Health in American Samoa (FY 1991-1994)

FY	TOTAL POPULATION	TOTAL ASG BUDGET (\$)	HEALTH BUDGET (\$)	% OF TOTAL BUDGET	PER CAPITA (\$) FOR HEALTH
1994	54,000	60,000,000	13,647,500	22.7	253
1993	52,000	52,458,000	15,825,500	30.1	299
1992	50,900	52,165,000	13,190,500	25.3	259
1991	49,000	47,656,000	11,054,000	23.1	202

Source: Office of the Governor. Special Consultant to Health

The expenditures for health care appear sufficient in light of three considerations. (1) Close to one-fourth of government revenue is being spent on health care. This is a large percentage considering that American Samoa has other pressing societal needs. How does it compare with other countries? In 1990, health care expenditures consumed approximately 15% of the U.S. Federal budget, and 11% of State and local budgets.²⁵ In non-industrialized countries where health care funds are provided by general tax revenue, total government expenditures are more likely to range between 2% and 9% as is the case with Cote d'Ivoire and Ghana (Africa), Peru and Bolivia (South America), and Jamaica (Caribbean).²⁶ (2) American Samoa's per capita expenditure on health (\$253) is mid-range when compared with other U.S.-affiliated Pacific jurisdictions: Palau, \$244; FSM, \$59; Marshall Islands, \$160; Guam, \$335; and CNMI, \$581.²⁷ (3) Most important, standard health indicators suggest that the population of American Samoa is reasonably healthy, approximating that of the U.S. as shown in Table 2 below.

Table 2. Health Indicators for American Samoa (1990) and U.S. (1990-91)

HEALTH STATUS INDICATORS	AMERICAN SAMOA	UNITED STATES
Infant Mortality	11.0 /1,000	9.1 /1,000*
Life Expectancy at Birth	71.6 yrs.**	76 yrs.
Crude Birth Rate	37.1 /1,000	16.2 /1,000
Crude Death Rate	4.4 /1,000	8.5 /1,000
Leading Causes of Death	Heart Disease Cancer Cerebrovascular Accidents Pulmonary Disease	Heart Disease Cancer Cerebrovascular Accidents Pulmonary Disease

Sources: American Samoa Statistical Digest 1992 (Economic and Planning Office, ASG); U.S. Dept of Health and Human Services, National Center for Health Statistics.

*Note: The 1991 rate of 9.1/1,000 was the lowest ever recorded in U.S. (among the Black population alone, the infant mortality rate is closer to 18/1,000). Worldwide, the average rate for developed regions is 13/1,000, and the average rate for developing regions is 72/1,000.

**Note: This number was taken from "Data Matrix on the U.S. Pacific Jurisdictions," Pacific Health Officers Association 1993.

This is not to suggest that all the health care needs of American Samoa are being met; rather that most people can carry out the aims of society ("*principle of sufficiency*").

Allocation for Referral Care in American Samoa

While spending for health at the macro level is adequate, the Lyndon Baines Johnson Medical Center (LBJ) has experienced ongoing shortages of personnel, equipment, and supplies. This problem can be attributed to many factors, a significant one being the allocation of money for referral services. Table 3 on the next page shows how dollars were spent for health services from 1991 through 1994.

Table 3. Expenditure of Health Dollars (1991-1994)

FY	HEALTH BUDGET	OFF-ISLAND BUDGET*	% OF HEALTH BUDGET	PUBLIC HEALTH BUDGET	% OF HEALTH BUDGET
1994	13,647,500	1,755,000	12.8	1,000,000	7.3
1993	15,825,500	3,264,000	20.6	1,031,000	6.5
1992	13,190,500	3,200,000	24.2	1,087,500	8.2
1991	11,054,000	3,304,410	29.8	1,118,500	10.1

*The off-island budget is customarily underbudgeted. When funds run out, Department of Health will turn to the Fono for emergency appropriations and the latter, in keeping with the "Rule of Rescue", invariably appropriates emergency funds. Actual referral costs may exceed budgeted amounts by a factor of two.

Public Health has the responsibility of providing primary health care services (i.e., health promotion and disease prevention) to the entire population of approximately 52,000 people. Yet money allocated for this purpose over the past four years has averaged only 8.2% of the total health budget. More surprising is the fact that Public Health receives about one-third of the money spent on referral care. Table 4 below shows the dollars spent on referral care and the population served.

Table 4. Medical Referral Experience (FY 1991-1993)

YEAR	NO. OF PATIENTS	% OF POPULATION	REFERRAL COSTS (\$)	% OF TOTAL BUDGET
1993	261	-.005	3,264,000	20.6
1992	314	-.006	3,200,000	24.2
1991	318	-.006	3,304,410	29.8

Source: Office of the Governor, American Samoa

In simplest of terms, the Department of Health is spending 21-30% of its annual health care budget on the needs of 260-320 people, or less than 1% of the total population. This seems unreasonable and inequitable given that health consumers and providers have unmet needs, and a significant number of referrals appear unnecessary or inappropriate.

Rationale for Referrals

Referrals are typically justified on two grounds: (1) "medical necessity", and (2) lack of on-island medical resources, notably equipment, specialists, or supplies. Objective and reasonable as these rationales may sound, neither hold up well under scrutiny.

The term "medical necessity" took hold after Congress established the Medicaid program for the poor in 1965. The legislation reads, in part, that indigents are to receive care that is "medically necessary".²⁸ However, the term "medically necessary" was never defined, nor were the means by which to arrive at a determination. The concept of *need* lies behind "medically necessary", but *need* too is open to vastly different valuative interpretations and requirements. In short, there is little that is objective and nothing precise about "medical necessity". Without a definition of "medical necessity" or a well-defined means to arrive at such a determination, the door is left wide open to misuse and abuse.

There will always be a legitimate need for medical referral care. But without judicious controls, the practice can very easily become self-defeating. Capital spent for off-island medical care benefits a small number of individuals, and often for only marginal gains. Referrals offer little-to-no residual benefit to the community as a whole. In effect, they shrink resources available to the general population and undermine the ability of the Department of Health to enhance its service capabilities. Furthermore, referrals foster a sense of dependency on outside agencies and tend to undermine the public's confidence in staff at LBJ.

Toward an Allocation and Referral Solution

LBJ has always faced resource shortages. Were medical referrals drastically curtailed, say by two-thirds, as much as \$2 million per year might be shifted to meet the needs of continuing medical education and training for hospital staff, the purchase of equipment and supplies, the hiring of additional personnel, or contracting with specialists in Hawaii to provide services on-island. The payoff would be enhanced service capabilities and better medical care for more people. Patients are routinely referred to Honolulu for cardiac and pacemaker evaluations when this could be avoided in some cases with the purchase of a treadmill for EKG stress tests, and equipment for pacemaker analysis and programming. Patients are routinely sent to Honolulu for cataract surgery (\$3,700-\$4,000 per patient w/o travel) when such surgery could be performed at LBJ if an operating microscope were purchased, a Samoan physician was trained in its use, or a specialist was contracted to perform this service on-island. Dialysis patients are referred to Honolulu for shunts (approximately \$12,000 per patient for surgery and observation) when a Samoan surgeon could be trained to perform this procedure. As it is, LBJ has no budget for continuing medical education; the only opportunities physicians have for upgrading their skills come from informal contact with new contract workers who might have more current knowledge or training. This is not a reliable or especially effective means to assure that medical staff are current in their knowledge and skills. With a continuing medical education budget, consultants could be brought on-island for training of various kinds, or staff could be sent off-island for specialty training. Money spent hiring local personnel, purchasing equipment, or training would have residual economic benefits for the community.

It would be most appropriate to reduce referrals as part of a larger overall reordering of health care priorities within a context of limits. A theoretical framework by which priorities could be set for medical care is offered by Daniel Callahan and presented in summary form in Table 5 below.

Table 5. A Framework for Prioritization of Medical Care

LEVELS	CHARACTERISTICS OF CARE
1	<p>The provision of caring in its most basic forms: the (topical) relief of pain; hospice or comparable care for the dying; nursing or home care and companionship for the elderly and otherwise frail; simple mental health programs for the mildly disturbed; basic and decent home and institutional care for the chronically ill, the demented, the disabled, the retarded, the severely mentally ill—all those powerless to care for themselves.</p> <p>Level 1 sets the basic moral agenda and baseline for healthcare. It is not only important in its own right; it also should pervade all the other levels.</p>
2	The provision of nutrition, sanitation, a tolerably clean environment, and programs of occupational health, preventive medicine, and health promotion, including accident prevention and prenatal care.
3	The provision of immunization and protection against infectious disease, and antibiotics and antimicrobial to control infection.
4	The provision of emergency medicine and primary care, but limited to routine, relatively inexpensive forms of diagnosis and therapy (e.g., immediate life-saving and emergency care, palliation of pain, and simple forms of surgery and rehabilitation).
5	General, advanced forms of medical cure or restoration (e.g., advanced surgery, cancer chemotherapy, extensive rehabilitation)
6	The provision of highly advanced, technological medical therapy.

Source: Callahan, Daniel. *What Kind of Life: The Limits of Medical Progress*. Simon and Schuster, New York. 1990 pp 175-177.

Levels 1 through 6 might be visualized as a pyramid, with Level 1 being the base and representing care for all. As you move up the pyramid, care becomes more individualized and specialized, requiring higher technology and costing more to provide. The first four levels basically address threats to health which are faced by everyone. Services at these levels warrant priority because they offer the greatest contribution to the common good. Money spent in their fulfillment will have the greatest impact on mortality and morbidity, and at the lowest per capita cost. Levels 2, 3 and 4 provide personalized care without embracing a full range of highly specialized care, the kind dependent upon high technology. Levels 5 and 6, individual curative care, are the range in which most limitations would be imposed. Each level of care could be tailored to the particular needs and characteristics of American Samoa. Perhaps Level 6 would be used to reflect referral care. In any case, the various levels within a pyramid structure offer a reasonable framework for ordering priorities and resource allocations.

A clarification or reordering of health care priorities and resource allocations seem in order, along with the curtailment of off-island care. It would require full support of the Hospital Authority Board of Directors, leadership from administration, cooperation of the doctors, and input from the public. It also would require a public relations campaign to educate the public as to the needs and benefits of change. If such an undertaking could be timed to coincide with a hospital management contract or construction of a new facility, that would be all the better. Under such circumstances, people are more accepting of change. Their attention can be diverted from the perceived loss of benefits to a concerted effort for improved care.

Unrealistic Expectations and Demands

The people of American Samoa do not live the insular life one might suspect given their remote location in the Pacific. A very large number have traveled or lived in the U.S., and the population has access to mainland television programming via satellite (e.g., PBS and CNN). Furthermore, the U.S. has had a presence in American Samoa for over 100 years, leaving an imprint on the culture, notably in relation to the institutions of education and health. Thus it comes as little surprise that most Samoans are familiar with the health care services available in the U.S. and would desire them.

American Samoans, like Americans, have been conditioned to think that there is a technological solution or therapeutic cure for every health problem. Where there isn't one, a breakthrough is "right around the corner". This understanding creates two problems: (1) where there appear no limits to what medicine can accomplish, people are reluctant to set or accept limits on treatment; and (2) when the distinction between what is desirable and what is necessary gets lost, it creates an unrelenting "need" for more and better care. Better care in the public's mind usually means specialists and high technology, the kind to be found in Hawaii. In 1991, a leading cause for referrals was kidney and urinary tract problems. Many of these patients had kidney stones and were being referred for Lithotripsy. An uncomplicated single procedure in Hawaii costs approximately \$7,000. An acceptable protocol for urolithiasis is to treat the patient on an outpatient basis using oral analgesia for up to a month. If pain is intractable, the patient can be hospitalized and placed on IV analgesics for up to a week. Failing to pass the stone(s) within these time frames, the stone(s) can be removed surgically. When APRF consultants raised the issue of referring patients for Lithotripsy, they were informed that patients "demand" it; some because they don't wish to undergo surgery, and others because they wish to avoid a surgical scar. The cost for surgical removal of stones in LBJ should not exceed \$2,400 (8 days x \$300 per day). As stated earlier, no government can meet all the individualized treatment needs or desires of its population.

Patient demand for referral care occurs for a number of reasons. Demand may reflect the knowledge of, and desire for, optimal care in the best of facilities. Hospitals in Hawaii hold out this promise. Demand may reflect a lack of confidence in the quality of care rendered at LBJ. Demand also may be occasioned by the "*Rule of Rescue*": do everything possible and at any cost to save a life. Since many Samoans have family living in Hawaii, demand also might include the promise of reunion. Another source of demand, which is especially difficult to manage, arises from precedence: if patient X can be referred to Honolulu for condition Y, and patient Z has the same condition, then it only seems fair that patient Z also be referred. In this regard, every time the Medical Referral Committee (MRC) sends a patient to Honolulu for diagnostic or treatment purposes, there is the potential they are setting a new precedent, one which will likely impose additional demands and burdens on the system in the future--all the more reason why decisions must be judicious.

Perceptions of Care at LBJ

The public's perception of care at LBJ appears to be other than favorable. This is due, in part, by the fact that many people have received care at medical centers in Hawaii or on the mainland; thus, they judge LBJ by mainland standards. They do not comprehend the vast differences in facility-funding, nor understand that modern facilities and advanced technologies do not assure good patient care. The annual budget for the Queen's Medical Center (300 + beds) is more than 16 times that for the entire ASG health budget, and more than double that for the entire government of America Samoa. Moreover, many of the unfavorable perceptions formed about LBJ have more to do with appearances and inefficiencies than with inadequate care. The public complains about the inconvenience of long waiting times, but such complaints must be weighed in light of the fact that patients pay only \$2.00 per outpatient visit, and \$7.50 per day for inpatient care.

Periodically, the local newspapers print stories about shortages of personnel, equipment and supplies, operational inefficiencies, and personnel disputes. Such coverage, albeit unintentional, works to undermine the public's confidence in the care provided at LBJ. It also can have a negative impact upon the morale of hospital employees. No public relations effort has been orchestrated to counter the bad publicity or to enhance the hospital's image. This is unfortunate in light of the fact that LBJ has many well-trained and dedicated staff.

Health Care as a Right

There appears to be a prevailing local view that American Samoans have a "right" to care, i.e., that the government owes it to them free of charge. A passage found within the American Samoa Code Annotated (§ 13.0601) can be cited in support of this view. Some Fono members also have stated that the U.S. is obligated to provide health care under the Deed of Cession, though a close reading of this document does not readily lend itself to such interpretation. The notion of health care as a "right" has gained acceptability in recent decades. For example, it is found in the United Nations Universal Declaration of Human Rights ("Everyone has a right to a standard of living adequate for the health and well-being of himself and family, including food, clothing, housing, medical care and necessary family services.") and it has been articulated by the American Medical Association ("It is the basic right of every citizen to have available to him adequate medical care.").^{29,30} The concept of health care as a "right" is usually based on the proposition that without health, all other rights are impossible or severely compromised.

Many people misunderstand the concept of "right", thinking of it as a license to demand or lay claim to something when the concept actually arises out of a notion of social interdependence and mutual responsibilities. L. R. Churchill writes: "Rights for individuals make sense at all only within a social ethos. Just as there is no freedom without a field of action, there are no individual rights outside a social ambience....Every notion of natural or human rights implies mutuality within a social order, that is, the recognition of others who are equals in moral prerogative and agency."³¹ A right to health care does not necessitate absolute entitlement to

a maximum level of care; rather, entitlement to a basic and decent level of care. In the face of limited resources, it may be argued that it is the "right" to health care which necessitates the setting of limits in order to assure equal access to all. Without limits, communal resources can be exhausted on the needs of a small number of individuals, preventing entitlements to others.

No Disincentive for Referral Care

When individuals are responsible for paying the costs of the health services they consume, they are less likely to misuse or overuse those services than if they are provided free of charge. Thus is the rationale for cost-sharing and the requirements for "out-of-pocket" or "copayment" charges. While cost-sharing does generate revenue, its principal value is serving as a disincentive to improper use. There has been some debate about the outcome of cost-sharing in terms of its effects on expenditures and health status. The largest and most conclusive study to date relating to cost-sharing comes out of the Rand Health Insurance Experiment in the U.S. It used large controlled groups, each receiving the same benefits but under different terms; i.e, from free of charge to market rates with varying ranges of copayments and deductibles. With regard to expenditures, the Rand Study showed that individuals facing cost-sharing use fewer outpatient and hospital services than those who do not. This is especially true with regard to emergency room services. With regard to health status outcomes, the study used ten health measures to analyze the effects of cost-sharing on adults. It determined that free care was associated with minor health improvements for only two groups of patients--those with vision problems and those with high blood pressure.^{32, 33} Otherwise, copayments and deductibles had no negative impact on health status, but were instrumental in reducing inappropriate use of services.

The out-of-pocket contributions which American Samoans pay for health services is minimal, ranging from \$2.00 for an outpatient visit to \$7.50 per day for inpatient care. The charge of \$7.50 amounts to only .025 of actual operational costs per day (\$300). Such low copayments may have two undesirable effects: (1) It insulates the public from the real costs of providing medical care. Thus, citizens are far more likely to entertain unrealistic expectations and place unrealistic demands upon the health care system. This is especially true with regard to referral care since service charges in Hawaii far exceed those at LBJ--HMSA reported that the average daily hospital charge (room, board, and ancillary services) was \$2,040 in 1993, up 10% from the previous year³⁴--and neither patients nor the public have any idea what they might be. (2) When copayments are as low as they are at LBJ, they do not serve as disincentives to inappropriate use of services. Consider, for example, that the median household income in American Samoa in 1989 was \$16,114, and that the medium income for males and females aged 16 years and over was \$7,151 and \$5,952 respectively.³⁵ Male and female patients with medium incomes hospitalized for 30 days would pay only \$225, or .031 and .037 of their annual incomes respectively. This does not appear sufficient to serve as a disincentive.

Since off-island care is the largest single claim on resources, the Hospital Authority might consider: (1) requiring all patients to pay for their own air fare, and (2) bill patients a

percentage of the hospital charge incurred for off-island services. The government could assume total costs for the medically indigent and apply sliding-scale fees for persons with low income. Without effective disincentives to use off-island services, who wouldn't choose to receive medical care in Honolulu?

PROVIDERS

Documentation of Referral Problems

Provider behavior is the key factor to reducing medical referrals and referral costs. Administrative efficiencies in American Samoa and patient management in Honolulu will help, but the only substantial reductions will be achieved by the MRC **not referring patients in the first place.**

The leading causes for referral have remained consistent since 1991 as reviews by Region IX and APRF show below in Table 6.

Table 6. Leading Causes for Referral in Descending Order

Region IX FY 1991 318 Patients	Region IX 1/93-3/93 59 Patients	APRF 4/93-11/93 105 Patients
Cardiovascular	Kidney & Urinary Tract	Kidney & Urinary Tract
Kidney & Urinary Tract	ENT	Cardiovascular
ENT	Musculoskeletal	ENT
CNS	Gastrointestinal	CNS
Musculoskeletal	Female reproductive	Musculoskeletal
Gastrointestinal	Cardiovascular	Gastrointestinal

The number of patients referred and the number of escorts accompanying patients in 1992 and 1993 are shown below in Tables 7 and 8.

Table 7. Patients Referred in 1992 and 1993 by Quarter

Year	Patients 1ST QTR	Patients 2ND QTR	Patients 3RD QTR	Patients 4TH QTR	Patients TOTAL
1991					318
1992	85	72	82	75	314
1993	96	58	66	41	261

Table 8. Patient Escorts Sent in 1992 and 1993 by Quarter

Year	Escorts 1ST QTR	Escorts 2ND QTR	Escorts 3RD QTR	Escorts 4TH QTR	Escorts TOTAL
1992	30	23	23	19	95
1993	19	18	13	19	69

Indications of unnecessary or inappropriate referrals come from a variety of sources as summarized below:

- **Regional IX Evaluation:** An on-site review of the medical referral program by Region IX ("An Evaluation of the Off-Island Referral Program in American Samoa") noted, in part, that 16.7% ("a conservative estimate") of the referrals in 1991 were inappropriate, that 26 or 8.1% of persons referred died within a year, and of that number, only 7 had been approved for off-island care by the committee. A follow-up visit was made in April 1993. It noted, in part, much improved compliance with referral procedures, but observed again that, "written criteria defining medical necessity and formulation of standards of care do not exist, nor is there a task force assigned to work on this."
- **APRF Review:** Two on-site visits were made by APRF consultants. On both occasions, they had the opportunity to review records, observe medical referral meetings, and speak with MRC members. The medical consultant on the review team was of the opinion that two of the six referrals made at the MRC meeting he attended were clearly unnecessary. The fact that physicians were split in their vote on these patients suggests the consultant was not alone in his findings. Following the second on-site visit, two APRF physician consultants reviewed MRC notes on 113 patients and noted that 6 (5%) referrals were disapproved, 26 (23%) appeared medically appropriate, 37 (33%) appeared appropriate due to lack of equipment or specialists, and 44 (39%) may have been unnecessary or inappropriate. In fairness, however, the reviewing consultants noted that they had no opportunity to review the medical records of the referred patients, nor discuss individual cases with referring physicians.
- **Physician Insights:** Physicians in American Samoa, including members of the MRC, have been candid in acknowledging problems associated with medical referrals. They have pointed to enhanced performance of the MRC and reductions in referral numbers for 1993. They have also acknowledged that further reductions could be made and offered insights on how this might be accomplished. Many of their suggestions are incorporated in this report.
- **Anecdotal Information from Honolulu Providers:** An APRF consultant discussed referrals with physicians and hospital administrators in Hawaii receiving patients from American Samoa. Consensus was that patients are sometimes referred who need not be. For example, one physician related what he characterized as "recent experiences" which typified the problem of unnecessary referrals. He stated that on two separate occasions, he had advised LBJ not to refer a patient, explaining that the hospital in Honolulu could do no more for the patient than what was being done at LBJ. Each time he recommended that a patient not be sent, he also recommended that staff at LBJ prepare the family for the patient's death. In both cases, however, the patient was referred. The infant with Meningitis died within a day after being admitted in Honolulu, and the other patient survived long enough to be returned to American Samoa on a ventilator and died soon thereafter.

Patient Demands on Providers

The extent of demands which can be placed on Samoan physicians cannot be fully appreciated by outsiders unless they have some familiarity with "fa'a Samoa" or the "Samoan way". Fa'a Samoa reflects the complex social order, beliefs, and conduct which have survived in Samoa from ancient times. At its core is the "aiga" or extended family headed by a "matai" or chief. Those related by birth, adoption or marriage are recognized as belonging to one aiga which may include hundreds of people. One's sense of identity, happiness, welfare, and economic security, to a large measure, are derived from the cohesiveness and strength of one's aiga. Another important component of fa'a Samoa is the matai system, a pyramidal organizational structure which depends on a matai as the administrator of the aiga. The authority of the matai is generally unquestioned, and he is expected to assign tasks, determine kinds and amounts of donations, allocate communal land, settle disputes, and bring honor to his aiga. Respect for seniors and obedience to the matai are considered a primary responsibility of all members of the aiga. Within a village or district, the matai system extends upwards in a pyramid structure to include high chiefs, high talking chiefs, and paramount chiefs.

The Samoan physician is part of a culture where social interaction is highly prized and ritualized. There is a significant chance he will be related to, or know on a personal basis, the patient he treats. In accordance with Fa'a Samoa, the individual is obliged to show deference to traditional authority and respect for those his senior. In such a small and socially-oriented environment, one might imagine the pressures which can be brought to bear on a physician by a patient or family desiring referral. This is especially true if the patient belongs to the physician's aiga or holds traditional rank such as a senator in the Fono (i.e., legislative branch of government).

Two practical measures might be taken to alleviate the problem posed by demanding patients or families. The MRC might select two or three persons (e.g., physician, nurse or religious leader) to support attending physicians who encounter, or think they may encounter, a difficult patient or family demanding referral. Their mission would be to bolster the authority of the attending physician, and help reassure patients and families that good care is being rendered at LBJ within institutional limits. If a patient's condition is terminal, that too should be dealt with in a humane but forthright manner. The second practical measure which the MRC might take is to adopt explicit referral policies which include medical conditions and/or circumstances which are ineligible for referral consideration, e.g., Acquired Immune Deficiency, alcohol and drug dependence services, cancer cases that only require palliative treatment, cases with a five-year survival rate of less than 50% based on current medical statistics and experience in American Samoa, etc. The policy should be made absolutely clear that no patient will be denied the full range of care available at LBJ, but certain medical conditions will not be entitled to off-island referral.

Referrals Occasioned by Necessity

The majority of referrals appear medically necessary even though "medically necessary" is a vague term lacking in operational definition. There can be no doubt, however, that a considerable number of referrals are unnecessary or inappropriate as indicated earlier in this report, and may easily be costing the government hundreds of thousands of dollars a year. For example, one recent and questionable referral of an infant resulted in the government being billed \$500,000 for patient care.

Referrals Occasioned by Uncertainty

Many investigators of physician practices point to *uncertainty* as an important factor influencing decision making. John Wennberg, one of the major proponents of *uncertainty*, lists three leading causes: (1) the difficulty in classifying a particular patient so that the probabilities of disease, extent of disease, prognosis, and treatment outcomes can not be reasonably ascertained, (2) information doesn't exist or isn't available on the probabilities of treatment outcomes under controlled circumstances, and (3) uncertainties exist even when patients are appropriately classified and treatment outcomes are known because the values of the physician may not correspond with those of the patient, e.g., which risks are worth assuming and for what benefits.^{36,37} Uncertainty is never entirely eliminated even when the three sources of uncertainty are reduced because there remains uncertainty as to how the individual patient will fare in relation to known statistics.

The degree of uncertainty affects the threshold at which physicians choose to test and/or treat patients. Morreim notes that uncertainty in our age of high technology favors intervention over inaction, leading physicians to "share an almost obsessive desire 'to be complete', to think of every possibility, explore every option, eliminate every uncertainty". He goes on to state that physicians must shift from an ethic of 'use it if it might help', to 'don't use it unless it quite clearly will help'. This new focus on diagnostic elegance and therapeutic parsimony will require the physician to hone his clinical acumen more finely--to cultivate better his skills in doing histories, physical examinations, and good problem-solving".³⁸ Michael Bloor suggests that physicians establish routines in practice as a way of dealing with uncertainties.³⁹ For example, some physicians routinely refer patients to specialists when there is little or no medical need to do so. There is cause to wonder if referral, through usage, hasn't become "routine" at LBJ. In any case, uncertainty appears to be a significant factor influencing referrals because referral documents often contain vague requests such as cardiology "evaluation" or "assessment", "psychiatric services", or "neurological workup". If referring physicians were other than uncertain, more precise diagnoses would be included, or more precise requests for tests or treatments would be made.

One purpose of the MRC is to rely on the collective experience of clinicians in order to reduce medical uncertainties and recommend appropriate alternatives to referrals. In accomplishing this, the efficiencies of the MRC might be enhanced if: (1) the referring physician only, and not a substitute, make the formal case presentation, (2) quality of life indicators be considered

in all presentations, i.e., a patient's opportunity (resilience, capacity for health, ability to withstand stress, etc.), health perceptions (self-rating of health, concerns/worries, etc.), functional status (social functioning, psychological functioning, physical functioning), and impairment (symptoms, signs, self-reported impairments, physiological measures, pathological evidence, diagnoses), (3) formal presentations are followed by focused clinical discussions including quality of life issues and treatment alternatives, and (4) voting on a referral is conducted in private, i.e., physicians signify in writing "yes" or "no" and then votes tallied. Furthermore, the practice of allowing non-clinicians to participate in MRC meetings, especially to vote on referral cases, should be reconsidered because non-clinicians cannot effectively evaluate a patient's medical condition, the treatment needed, or the efficacy of a treatment modality. Their vote will be based on other than medical necessity or appropriateness.

Referrals Occasioned by Self-Interest

Studies demonstrate that there are many factors other than medical necessity and medical uncertainty to explain physician practices and decision making. Notable explanations include economic incentives, training, practice setting, style of practice, peers, and personal characteristics. The physician John Eisenberg, who has written extensively on physician decision making, addresses all of these issues, but persuasively concludes that the most "profound" influence is *self-interest*. The physician will weigh the relative importance of individual factors influencing him, and then seek to maximize the combined value of these factors.⁴⁰ Table 9 below shows some of the convergent factors present when a physician decides to refer a patient.

Table 9. Convergent Interests and Influences on Decision Making

PATIENT'S SELF-INTEREST	-Good clinical care -Preference and expectations -Convenience -Satisfaction
PHYSICIAN'S SELF-INTEREST	-Good clinical care -Style of Practice and personal characteristics -encourage or discourage follow-ups, preference for certain kinds of patients, refers frequently or rarely to specialists, conservative or aggressive re. interventions, etc. -Convenience (labor vs leisure) -Conflict avoidance -Impact on social image -Impact on self image -Influence of fellow physicians
GOVERNMENT'S INTEREST	-Fair, and consistent referral process -Efficiency
SOCIETY'S INTEREST	-Use resources in a manner to serve the greatest number of people -Equity (fairness and equal access)

Note: These factors are consistent with those which appear in Eisenberg's book, Doctors' Decisions and the Cost of Medical Care with exception of economic incentives. The later would not appear to be an important consideration at LBJ because doctors are employees on fixed salaries.

Of the factors identified in Table 9, those associated with patient and physician self-interest play dominant roles, almost to the exclusion of government's and society's interests. In consideration of self-interest, there appears to be far more incentives for a physician to refer a patient, especially upon request or demand, than not to refer a patient.

Referral may be governed by a single-minded concern for good clinical care without regard to any other factors. Referral may be in keeping with a physician's style of practice or personal characteristics. For example, studies indicate that specialists (e.g., internists, pediatricians, etc.) provide more intensive levels of care than generalists, and younger physicians conduct more testing than older, more experienced practitioners.^{41, 42} A review of referral records will show that certain physicians refer patients with greater frequency than others, which may or may not be explained by patient mix or clinical acumen. Referrals may be occasioned by convenience, especially if the patient is a difficult case to manage, the physician is overworked, the physician is insecure about his clinical skills, or morale among physicians is low. Referral may be a way of avoiding conflict, especially if the patient or family is demanding. Referral may serve as a means to enhance one's social image, or it may be used to curry favor with prominent persons (the "political" referral). APRF consultants were told in a conversation with one physician that the public generally view physicians who refer frequently as "better doctors". Then again, a physician may simply feel better by referring a patient in accordance with the "*Rule of Rescue*". In short, there are many explanations for referrals other than "medical necessity", though the later may be sufficient to explain the majority of referrals.

Gaming the System

The "traditional" relationship between the doctor and patient dates back to the days when the physician had little to offer a patient other than his personal skills. Under those circumstances, the relationship between doctor and patient was dyadic; the doctor was free to practice as he saw fit, and the patient's interest could always come first. Only remnants of the traditional relationship between doctor and patient can be found today, notably because medicine has gone the way of the world--highly institutionalized, compartmentalized, and driven by economic interests. Both doctors and patients are subject to the resources and controls of others.

The relationship between the doctor and patient in American Samoa is circumscribed by three factors: (1) government is the financier and payor of medical care, (2) government is the provider of care, and (3) resources of government are scarce.

Although doctors would like to practice medicine without consideration to costs or constraints, they cannot ethically do so. A patient's interest must be weighed against the competing interests of other patients, the interests of the government, and of society as a whole. The problem of "gaming" occurs when a doctor sidesteps ethical considerations or refuses to accept limits of entitlement for his patient. Whatever the motivation or rationale, gaming is a well-documented phenomena in medical practice and it occurs with considerable

frequency. Tactics range from the use of florid descriptions to exaggerate the condition of a patient to outright fraud. In the case of medical referrals, gaming is bound to occur unless medical staff share a clear sense of purpose and goals, understand the need to limit referrals, and strive to develop LBJ's own resources. E. Havvi Morreim sums up well the ethical and practical issues related to physician "gaming" when he writes the following:

The first concerns what economists call the 'free rider' problem, or what Garret Hardin has called the 'tragedy on the commons'. Where some social goals cannot be achieved without essentially universal cooperation--as where a community cannot build a new school unless virtually all its citizens help to pay for it--it is in everyone's interest that all do their share so that the goal will be reached. At the same time, however, it is in each individual's interest to make an exception for himself, to be a 'free rider', so that he can both avoid bearing his share of the burden while still enjoying the successful completion of the project. Reciprocally, such situations carry an assurance problem: unless each individual can be reasonably sure that his fellow citizens are contributing their fair share, he worries that his own cooperation may be a useless sacrifice, since the goal will not be reached unless everyone cooperates.

In allocating health care, this problem arises powerfully. All resource systems are finite, since of course no private payer or government can afford to pay for literally every benefit for every subscriber. Resource limits in turn necessitate allocation rules to determine who will receive and who must go without. And these rules must generally be honored, or the allocation system will collapse.

At the same time, every such system carries the seeds of its own destruction. Resource rules are unavoidably ambiguous and flexible, as we have noted. In virtually any given instance, the physician can usually game to extract an exception to the rules for his patient or himself. But such exceptions, if routinely made, are problematic in three ways.

Where gaming extracts resources for one patient that could not be afforded for all the other patients who have similar needs, one implicitly assumes that this particular patient is somehow more important, more worthy, than those other people. This presumption violates the fairness provision of distributive justice--that no person's interests are intrinsically more important than others'. Second, the gaming physician is exploiting unfairly the cooperation of his fellow physicians. One overtly pretends to honor the rules, so that others will believe that they have assurance of one's participation. Yet covertly he bypasses them, thus dishonoring the others' faith in him.

Finally, routine gaming threatens to destroy the entire allocation system. If one physician can justify making regular exceptions on behalf of himself and his patients, so can they all. Scarce resources cannot possibly be justly distributed unless some sort of distribution system is in place, even an imperfect one...⁴³

The Need for Direction: Goals, Mission and Protocols

To operate effectively, the MRC must have a clear sense of purpose, be acutely sensitive to the issues of distributive justice, and do all in its power to assure that referrals are efficacious. In all likelihood, their effectiveness will be enhanced if they formulate and/or adopt written goals, mission statement, criteria defining "medical necessity", exclusions for referral care, and medical protocols. Once they have done so, they should prevail upon their colleagues to accept goals and standards and play an active role helping to educate the public concerning referrals.

ADMINISTRATION

Administrative Oversight

Considering that medical referrals consume 21-24% of the entire health care budget, it is somewhat surprising that greater administrative vigor and oversight have not been shown in dealing with referral issues. Admittedly, though, referral issues have to be among the most difficult facing administration because they are so problematic, political, and the policies governing them are either vague ("medical necessity") or lacking. Without well-defined policies, the non-medical administrator is understandably reluctant to set foot on what is generally perceived as "medical turf". To challenge a referral is to invite a "knee jerk" response from physicians: interference may have life-threatening consequences. If the chief administrative officer is a physician, matters can be worse, for physicians are generally disinclined to consider issues related to costs or long-range service goals.

When it comes to the practice of medicine, much of medical knowledge is ambiguous, and there is great variety in clinical practice. One doctor might recommend surgery while another might recommend medical treatment, and one doctor might order extensive diagnostic testing while another would observe a patient for a few weeks. In the words of John Eisenberg, MD, "variation in medical practice patterns is a demonstration of the fact that the 'essentiality argument' of economics is not fulfilled in medical care. Since few medical services are absolutely essential for society's well-being, the use of most of these services is sensitive to changes in the financial resources available to purchase them. In other words, physicians have few iron-clad rules for practicing medicine."⁴⁴ Clearly, a non-medical administrator should play no direct role in evaluating a patient's medical condition, the treatment needed, or the efficacy of a treatment modality. However, there is no reason why an administrator shouldn't question a referral decision if it appears inappropriate, seek out explanations, or enforce standing policies and procedures. This does not constitute the practice of medicine without a license; rather, the legitimate exercise of authority to maximize resources, safeguard assets, provide oversight, and assure accountability.

Another reason why non-physician administrators need to assume a "hands on" approach to medical referral management is that many of the significant issues and decisions which must be made are not essentially clinical. They are policy issues relating to resource allocation, priorities, and service objectives. Ideally, such decisions should be made by the community-at-large. In the absence of community-based decision making, though, the perspective of administration (i.e., costs, efficiency, services to the entire community) helps balance that of medicine (i.e., individual patient welfare). As Colin Roberts writes, "At present doctors view their role as creators and shapers of policy decisions in health service as well as technicians responsible for decisions in the care of individual patients, that is, they believe in the freedom of doctors to determine what they do as well as how they do it. There is now a growing awareness that a separation of these functions is crucial to the proper planning and management of health services but this will probably be resisted by the medical profession who will view it as a loss of power and status. Nevertheless, the basis for decision-

making in the health service must rest on deciding its function and purposes and, in this, lay members of the public have as much entitlement to a view as professionals working in health services."⁴⁵ In lieu of direct community participation, administration should serve as the advocate of the silent, larger community.

With the advent of the new Hospital Authority, board members should assume a principle role in shaping referral policy. They are well suited for health policy making in that they share the values and concerns of the community for health care, but are without the same service commitment as health professionals. In the words of Roger Battistella, "From a managerial-rationalist standpoint, it may be concluded that health professionals are not well suited to deal with issues of policy and management. Their very training and vocational commitment is a liability. The twin process of self-selection and socialization in preparation for entry into a career tend to place a higher premium on community service than on considerations of resource allocation and management know-how...More often than not, professionals have an unassailable belief in the importance and value of what they do, and they are driven by a built-in impetus to expand service while simultaneously resisting evaluation of efficiency and effectiveness."⁴⁶

Medical Oversight

As stated earlier, the greatest cost-savings to be gained through effective management of the referral program will come from reducing the number of unnecessary referrals, and not from negotiating contracts with hospital facilities or retaining a third-party administrator to manage referrals in Honolulu. Assuring the reduction of referrals will require ongoing oversight of the Medical Referral Committee. This might best be accomplished through the creation of a full-time position for a Director of Referral & Resource Development. The individual appointed to this position should be a skilled clinician who has leadership qualities and some administrative experience. It will be crucial that this person work closely with administration to achieve desired goals. The Director of Referral and Resource Development might be given two major responsibilities: (1) provide overall leadership and management over the referral process, including chairmanship of the MRC, and (2) provide leadership in developing local medical resources as they relate to continuing medical education and the acquisition of medical equipment and technologies. There may be a physician on staff at LBJ who has the clinical skills and leadership qualities necessary to fulfill this position, but administration should be prepared to recruit off-island. Given that referrals consume nearly one-fourth of the health care budget and the average referral cost is \$11,000 per person, the new position would more than pay for itself if referrals were reduced by five per year--a goal which could likely be achieved within the first quarter of any given year.

Changing physician practices in relation to referrals will be challenging and require more than good clinical leadership, though the latter will be a key component. Literature on altering physicians' practices is fairly consistent: no one approach stands out as significantly better than another, but a combination of approaches requiring leadership, education, feedback, participation, administrative rules, incentives, and disincentives are generally more successful than a singular approach.

Incentives and Disincentives to Reduce Referrals

As the referral system operates, there are no physician incentives to reduce referrals, nor disincentives for deterring unnecessary referrals. The practice of using physician incentives and disincentives is as common and acceptable in health care as it is in business. Physicians working for HMOs and other types of managed care organizations are usually provided financial incentives for practicing good, cost-effective medicine (e.g., appropriate use of generic drugs, outpatient surgery, eliminating unnecessary tests and diagnostic procedures, etc.). Feedback can also be used effectively as a tool in changing physician practice patterns. Physician utilization and spending patterns can be tracked, compared, and contrasted with peers. Feedback may be disclosed on a personal or peer basis. In either case, peer pressure is a powerful tool within the profession which can be used as an incentive or disincentive to change practice patterns. Sanazaro states that changing physician behavior is most successful when it is done in a conducive environment with "regular, timely, salient, individualized feedback on performance compared with explicit standards."⁴⁶ and Eisenberg writes, "In summary, when feedback is used to alter physicians' practice patterns, the programs are most likely to be successful if the data are individualized, if doctors are compared with their peers, and if the information is delivered personally by a physician in a position of clinical leadership."⁴⁷

As an incentive measure to reduce referrals, the Hospital Authority might include continuing medical education and medical equipment as small budget items since the need for both is great and physicians desire them. At the same time, the Hospital Authority might submit an annual referral budget to the Fono based on previous expenditures (approximately \$3 million), assuring the latter that there will be no mid-year "emergency" requests for additional referral money (an administrative gaming practice which has served the hospital in the past). The referral budget might be divided into quarters with a target reduction or range of reductions set for each quarter. When target reductions are met, a predetermined amount of referral money might be transferred quarterly to the account for continuing medical education and equipment. Hospital finance could obligate funds for each referral and the MRC kept apprised of the budget at each meeting. While this would involve some guess work, the Honolulu third-party administrator should be able to provide realistic cost estimates for each patient referred. Under no circumstance should the annual budget for referral care be exceeded. With a continuing medical education and equipment budget contingent upon referral reductions, physicians would have incentive to disapprove unnecessary referrals and judiciously weigh those falling into "grey" decision areas.

Disincentives for unnecessary or inappropriate referrals can be built into the referral process. As it is, procedures appear too casual, lacking consistency and enforcement. Record keeping and data collection are inadequate for the purposes of administrative oversight, planning, and quality assurance. Should procedures, protocols, and record keeping be rigorously enforced, it would, of itself, serve as a disincentive for unnecessary referrals. No doctor wants to prepare documentation and paperwork, consult with a physician in Hawaii, or make a presentation before the MRC unless he or she has to. Additionally, doctors should receive feedback with regard to referrals: the causes, the costs, the numbers, and the physicians

referring patients. Peer pressure may serve to discourage unnecessary or "political" referrals, especially if it adversely affects the funding available for continuing medical education and medical equipment.

DEMOGRAPHIC CONTEXT FOR MEDICAL REFERRALS

The population of American Samoa is young. The median age is approximately 21 years (1990) as compared to about 33 years in the U.S. (1990).⁴⁸ Table 10 below shows population projections for American Samoa based on 1990 census.

Table 10. Population Projection By Age Group: 1990 - 2005

AGE GROUPS	1990	1995	2000	2005	% OF INCREASE FROM 1990-2005
0-4	6,952	8,946	9,335	9,521	37%
5-9	5,640	6,872	8,918	9,305	65%
10-14	5,229	5,617	6,859	8,902	70%
15-19	4,718	5,231	5,604	6,843	45%
20-24	4,664	4,697	5,211	5,582	20%
25-29	4,161	4,612	4,675	5,185	25%
30-34	3,513	4,146	4,589	4,650	32%
35-39	2,721	3,620	3,921	4,467	39%
40-44	2,246	2,711	3,486	4,081	82%
45-49	1,779	2,250	2,672	3,436	93%
50-54	1,522	1,746	2,198	2,610	71%
55-59	1,093	1,482	1,681	2,116	94%
60-64	923	1,027	1,394	1,580	71%
65+	1,612	1,983	2,370	2,962	23%
TOTALS	46,773	54,838	63,110	71,331	

Source: American Samoa Statistical Digest 1992 (Economic and Planning Office, ASG)

It will be noted that the age groups between 40-64 will experience the greatest growth within the next 11 years. The population of 40+ will increase from 9,175 or 19.6% of the population in 1990 to 16,788 or 23.5% of the population in the year 2005. By the year 2025, the 40+ population will number 29,124 or 27% of the population. As the population increases and ages, there will be additional demands placed on health services due to sheer numbers and increasing prevalence of chronic illness among the aging population. Greater morbidity will contribute to the need for more referrals unless, of course, there is a policy shift in resource allocation, one which promotes the development of local resources to meet growing needs.

OFF-ISLAND CARE

Cost and Coordination of Care

As documented earlier, the average daily hospital charge (room, board, and ancillary services) in Honolulu was \$2,040 in 1993. There is little reason to believe that the State's new emphasis on "managed competition" will result in long-range price stabilization or cost reductions. Cost containment efforts in health care have proven overall to be ineffective.^{49, 50} Reduction in the price of some services or products usually result in greater use of others or the creation of new ones. For example, within the last six months, three different hospitals in Honolulu have opened and marketed sleep clinics, suggesting to persons who snore (about one-fourth of the population) that they may be suffering from sleep apnea.

Under no circumstance will off-island care prove to be cost-effective if the care could have been provided on-island in the first place. However, there are some areas where LBJ might achieve cost savings. It might conduct or contract with a third-party administrator (TPA) to engage in the following activities: (1) conduct claims review on all provider charges (inpatient and ancillary services); (2) conduct concurrent or retrospective utilization review on all patients referred to Tripler Army Medical Center; (3) use a TPA's leverage (preferred provider group or negotiated rates) or have them negotiate service charges with providers; (4) do not refer patients without an off-island management plan, avoiding unspecified "studies"; (5) develop effective treatment authorization protocols and procedures, and do not pay off-island providers if they fail to adhere to them; and (6) as a general rule, consult with specialists in Hawaii before referring patients.

Coordination and continuity of care present challenges to providers at both sites. Good communication between LBJ and off-island providers or a TPA is the key to both. Referral management plans must be sent with each patient, and discharge summaries must be provided in a timely manner by off-island providers. Additionally, returning referral patients should be evaluated periodically to determine the outcome of referral treatment. This information should become part of a referral data base.

Telemedicine

Within the last six months, considerable interest in telemedicine has been sparked by Tripler Army Medical Center and the University of Hawaii John A. Burns School of Medicine. Telemedicine is the organized communication of medical data and information from one source point to another. The concept and technologies were introduced in the mid-1950s and have worked with varying degrees of success principally in the regions of northern Europe, Canada, U.S., and Australia. Telemedicine can be envisioned as "the practice of health care delivery, diagnosis, consultation, treatment, transfer of medical data and education, using interactive audio, visual and data communications."⁵¹ Its applications have been applied to medical billing and scheduling, medical records, patient education, teleconsultation,

telecardiology, telepathology, teleradiology, telepharmacology, continuing medical education, and administration.

Proponents of telemedicine state that it can: (1) enhance the availability of medical care in isolated areas, (2) transfer information which can improve clinical decision making, (3) reduce the isolation providers feel in remote and/or medically underserved areas and thereby enhance recruitment, (4) facilitate referral/consultation process between physicians, and (5) increase financial viability of rural institutions through patient retention and cost reductions. Others are less sanguine about the new technology in terms of its utility and costs. They point out that no program has been able to sustain operations without major grant support, and there are many unresolved questions related to diagnostic accuracy, data storage, patient confidentiality, medical liability, and reimbursement. Clearly the jury is out with regard to the future of telemedicine.

The application of technologies such as E-mail and telemedicine would seem to warrant consideration as possible means to reduce referrals, enhance coordination of care, and provide continuing medical education for medical personnel at LBJ. This is especially true given that facility planning has already begun for a new hospital. However, it would be unwise to opt for such technology without thoroughly analyzing the need, utility, effectiveness, and costs of this technology. In the largest context, it would have to be determined if such technology is appropriate for health care systems with limited resources. Would the introduction of this technology heighten unrealistic expectations or create additional demands for referral care? Other questions worthy of consideration are listed below:

- Culturally appropriate: Will the technology be acceptable to patients and providers? Will providers or patients find it too impersonal, invasive, or an affront to their sensibilities? Would certain medical consults prove to be unacceptable (e.g., those related to urology, gynecology/obstetrics, proctology, psychiatry)? Would language present a barrier?
- User friendly: Would the technology be too complex or the learning curve too great for provider acceptance and institutionalization?
- Provider training: What would be the training requirements for providers? Who would be trained and who would do the training? How long would it take? Costs?
- Applications: Would the technology be used principally for patient diagnostic and treatment purposes, medical training or continuing medical education, transmission and/or access to information/images, coordination and continuity of referral care, or administrative purposes? Would use be prioritized?

If employing interactive video, would medical consults be restricted to those cases involving emergency care, those which are life threatening, or may result in serious disabilities (i.e., those patients eligible for referral)? Would medical consults also include cases primarily for teaching purposes?

- **Equipment, compatibility and transmission:** Could any existing equipment at LBJ be used? Could any equipment be retrofitted? What new purchases would be required? Who would assist in the selection of equipment and what would the criteria be? What requirements will have to be met to assure compatibility with Honolulu providers? Purchase top of the line? Should equipment have self-diagnostic capabilities? Phase in? Anticipate obsolescence? Costs for equipment? Costs for transmission by minute or dedicated line? Life expectancy of equipment?
- **Personnel:** Would new personnel have to be hired to operate the equipment? What kinds of qualifications would be necessary? Could the people be found on-island or would they have to be recruited from off-island? Costs?
- **Maintenance:** Personnel requirements? Training requirements? Time requirements? Costs: salary(ies), parts inventory requirements, training, new diagnostic equipment, off-island servicing?
- **Site selection:** Availability and suitability (dedicated space, renovation, or new construction)? Environmental requirements (air conditioning, lighting, wiring, accessibility, size, security, etc.)? Costs?
- **Protocols, procedures and scheduling:** What would the goals, priorities, and scheduling needs for each application be? Who will develop protocols, procedures, or formats for effective and efficient use of the technology? Would consultant be required? Costs? Time requirements?
- **Coordination:** Would a full or part-time coordinator position be required? What would be the duties and responsibilities (scheduling, provider contact, patient contact, collection of medical records, data collection, etc.)? Costs?
- **Confidentiality and consent:** What kind of setting would be required for patient privacy? What kinds of examination and patient information would be suitable for a video format? What sort of data storage (video, computer, etc.) would be required and for how long? What safeguards need be developed to assure patient confidentiality? What information and assurances would be given in a patient consent form? What level of legal review would be required? Costs?
- **Institutional arrangements:** Establish well-defined communication channels with designated contact persons, observe schedules, and adopt uniform procedures and formats for consults. Specialists in Honolulu must know capabilities of providers in jurisdiction and understand the importance of restricting referrals.
- **Service contract:** Contracts for services and fees would have to be negotiated with providers in Hawaii. Negotiations should be aimed for bundled services and aggregate caps.

- **Evaluation:** An evaluation component would have to be developed prior to implementation of a telemedicine program to evaluate the safety, effectiveness, and cost-effectiveness of new technology.

The Undermining of Local Resource Development

Off-island referral care is problematic. There is a legitimate need for it, but it often works to undermine local resources, services, and the general good: it offers a finite contribution to the health of only a few individuals; it heightens unrealistic expectations and stimulates the ever-increasing demand for more and better curative care without regard to costs; it engenders dependencies on off-island providers and services; and it thwarts capital investment in needed equipment, supplies, personnel, and training at LBJ.

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MEDICAL REFERRAL RECOMMENDATIONS

MEDICAL REFERRAL RECOMMENDATIONS

1. RESOURCE ALLOCATION

Major Issues and Concerns

- The health care resources of American Samoa are limited.
- The Department of Health (DOH) allocates approximately one-fourth of its health care dollars to benefit less than 1% of the population.
- Money spent on referral care services shrink the dollars available to develop local resources (i.e., equipment, supplies, personnel, and training), stimulate ever-increasing demands for more highly advanced technological medical services, and heighten unrealistic expectations.
- While approximately one-fourth of health care dollars are spent on referral care, less than 10% is spent on health promotion and disease prevention, services which can have significant favorable impact on the entire population at the lowest per capita cost.

Recommendations

- 1.1 **Re-evaluate and reorder health care needs, priorities, and service allocations in consideration of:**
 - 1.1.1 equity: distribution in accordance to need and/or in a manner which will serve the greatest number of people (e.g., rightful place of primary care including health promotion and disease prevention in relation to secondary care including referral care);
 - 1.1.2 justice: provide a decent, minimal level of care to all American Samoans, limiting highly individualized treatments, if necessary, to achieve that standard;
 - 1.1.3 efficiency: maximizing health benefits in the face of limited resources.
- 1.2 **Reduce expenditures for referral care as part of a larger, overall reordering of health care priorities within a context of limits.**

1.3 Consider Callahan's model, with or without modification, as a framework by which to establish priorities for services allocation and spending:

Figure 7: A Framework for Prioritization of Medical Care

LEVELS	CHARACTERISTICS OF CARE
1	<p>The provision of caring in its most basic forms: the (topical) relief of pain; hospice or comparable care for the dying; nursing or home care and companionship for the elderly and otherwise frail; simple mental health programs for the mildly disturbed; basic and decent home and institutional care for the chronically ill, the demented, the disabled, the retarded, the severely mentally ill--all those powerless to care for themselves.</p> <p>Level 1 sets the basic moral agenda and baseline for healthcare. It is not only important in its own right; it also should pervade all the other levels.</p>
2	<p>The provision of nutrition, sanitation, a tolerably clean environment, and programs of occupational health, preventive medicine, and health promotion, including accident prevention and prenatal care.</p>
3	<p>The provision of immunization and protection against infectious disease, and antibiotics and antimicrobial to control infection.</p>
4	<p>The provision of emergency medicine and primary care, but limited to routine, relatively inexpensive forms of diagnosis and therapy (e.g., immediate life-saving and emergency care, palliation of pain, and simple forms of surgery and rehabilitation).</p>
5	<p>General, advanced forms of medical cure or restoration (e.g., advanced surgery, cancer chemotherapy, extensive rehabilitation).</p>
6	<p>The provision of highly advanced, technological medical therapy.</p>

Source: Callahan, Daniel. *What Kind of Life: The Limits of Medical Progress*. Simon and Schuster, New York. 1990 pp 175-177.

1.4 Orchestrate a public relations strategy for introducing policy changes related to medical referrals, taking full advantage of "good news" (e.g., hospital management contract, planning for a new hospital) to off-set "bad news" (e.g., increased cost-sharing, or referral exclusions).

2. PUBLIC

Major Issues and Concerns

- The public can place considerable demands upon physicians for referral care due to unrealistic expectations, the "Rule of Rescue", unfavorable perceptions of care at LBJ, and misconceptions about the "right" to care.

- Cost-sharing required of the public is insufficient, especially with regard to referral care: (1) it insulates the public from the real costs of providing medical care; (2) fosters unrealistic expectations and places unrealistic demands of the health care delivery system; and (3) fails to serve as an effective deterrent to unnecessary and inappropriate use of services.

Recommendations

2.1 Develop a public relations program.

- 2.1.1 Hire a qualified full-time PR person to lead hospital public relations activities.
- 2.1.2 Create and keep an informed public who have a favorable impression of the hospital.
- 2.1.3 Employ print, broadcast, press releases, and speaking engagements to explain prominent health issues to the public, and target community leaders for interpersonal communication.
- 2.1.4 Explain and promote hospital policies, actions, activities, and accomplishments in the best possible light.

2.2 Revise current cost-sharing policy, especially as it relates to medical referral care so that patient charges more closely reflect actual costs and serve as disincentives to unnecessary and inappropriate use of services.

- 2.2.1 Require referral patients to pay all or a portion for their round-trip air fare; and/or, a reasonable portion of the charges incurred for off-island care.
- 2.2.2 Employ a sliding-scale copayment schedule based on income to assure that no patient is refused referral care because of financial status.
- 2.2.3 Promptly bill and assertively collect copayments for referral care. More realistic cost-sharing policies, prompt billing, and assertive collection practices will help reduce inappropriate demands for referral services.

3. PROVIDERS

Major Issues and Concerns

- Undue pressure for referral is sometimes placed on providers by patients, the family of patients, or politically influential persons.
- Considerations other than "medical necessity" (e.g., "*Rule of Rescue*", self-interests, "gaming" the system, etc.) occur with unacceptable frequency, resulting in unnecessary and inappropriate referrals.
- Physicians do not always weigh a patient's interest against the competing interests of other patients, government, and society as a whole.
- Voting membership on the Medical Referral Committee (MRC) include non-clinicians.
- The referral process requires more formalization, closer clinical/administrative oversight, and a shift from the ethic of "refer if it might help" to "don't refer unless it will quite clearly help".
- The MRC lacks: a clear mission statement; criteria defining "medical necessity"; medical protocols; and medical exclusions.

Recommendations

- 3.1 **The primary attending physician who initiates a referral will assume overall responsibility for managing a patient referral.** The primary attending physician will conduct the duties outlined below.
 - 3.1.1 Evaluate the patient's activity level and performance status: physical characteristics, disease symptoms, functional abilities, psychological state, social roles, and treatment side effects.
 - 3.1.2 Weigh treatment interventions in relation to: (1) outcome benefits (i.e., improved health, quality of life, and duration of life); (2) risks of complications; and (3) costs to the community (i.e., treatment costs, competing interests of other patients, government, and society as a whole).
 - 3.1.3 Discuss fully with the patient all potential risks, complications, and benefits which may ensue from proposed medical intervention.

- 3.1.4 Consider patient beliefs and desires in relation to proposed medical intervention: e.g., an end-stage renal patient should not be referred if he declines dialysis; a Jehovah's Witness who will decline transfusion should not be referred for surgery which will likely require transfusion.
 - 3.1.5 Consult with the Chief of Services to determine if the patient is a suitable candidate for medical referral.
 - 3.1.6 Determine if a consult with a specialist would be advantageous; if so, record the specialist's recommendations on the medical referral form (see Attachment B).
 - 3.1.7 Upon concurrence of the Chief of Services, complete in full the medical referral form, and prepare a case presentation for the MRC. The completed referral form will be given to the Referral Coordinator who will make a copy for each MRC member. Patient medical records including lab reports, X-rays, etc. should be available for committee review.
 - 3.1.8 Advise patient of the MRC decision to refer or not to refer.
 - 3.1.9 Communicate directly with the receiving doctor, facility, or Third Party Administrator about an impending, authorized referral.
- 3.2 The Chiefs of Services**
- 3.2.1 The Chief of Service will discuss a potential medical referral with the primary attending physician, recommending alternative on-island care when appropriate, and/or a consult with a specialist.
 - 3.2.2 The Chief of Service will approve or deny a request for referral hearing before the MRC.
- 3.3 Membership of the MRC**
- 3.3.1 Voting members of the MRC shall include the Chiefs of Medicine, Surgery, Pediatrics, Obstetrics and Gynecology, Emergency Room and Outpatient Clinic, ENT, Eye, and the Director for Referral & Resource Development (see Recommendation # 4.2).

- 3.3.2 Non-physicians cannot effectively evaluate a patient's medical condition, the treatment needed, or the efficacy of a treatment modality; therefore, they should be barred from voting on referrals.
- 3.3.3 Attendance by non-voting observers at MRC meetings should be restricted to the Referral Coordinator, Hospital Administrator, Chief Financial Officer, or individuals requested by the Committee Chairman.

3.4 Activities during MRC meetings

- 3.4.1 The MRC should determine the efficacy of proposed medical referrals in a manner which is thorough, consistent, and fair.
- 3.4.2 The Director for Referral & Resource Development will chair and facilitate MRC meetings.
- 3.4.3 The Chief Financial Officer will review the referral budget (i.e., expenditures, obligated funds, and anticipated costs for specific treatments) with MRC members;
- 3.4.4 Each MRC member will receive a copy of the completed medical referral form for review and voting purposes.
- 3.4.5 Only the primary attending physician should make a case presentation to the MRC.
- 3.4.6 Physicians will discuss a proposed referral in a thorough manner to assure that:
 - 3.4.6.1 the medical condition under consideration is not one which is ineligible for off-island care (see Exclusions Attachment C);
 - 3.4.6.2 the diagnosis or treatment will significantly affect patient outcome, (i.e., prevent permanent disability, significantly improve quality of life, and/or duration of life);
 - 3.4.6.3 consult *Medical Risks: Trends in Mortality by Ages and Time Elapsed* for determination of survival rates for persons with various medical impairments;

3.4.6.4 referral would not be unnecessary, inappropriate, unkind, unwise, or unsafe (see MRC Mission Statement, Attachment A);

3.4.6.5 the off-island management plan is specific in its request for diagnostic or treatment procedures, and incorporates limitations.

3.4.7 Physicians will vote in private on each pending referral by checking the appropriate box on the referral form.

3.4.8 Results of the voting will be counted and recorded by the Referral Coordinator.

3.4.9 A copy of the referral form including voting results will be retained by the Referral Coordinator.

3.5 **Activities subsequent to MRC meetings**

3.5.1 It is the sole responsibility of the primary attending physician (not the Referral Coordinator) to promptly advise his patient of the MRC's deliberation. If the referral was declined, the medical reasons should be explained thoroughly to the patient.

3.5.2 If the referral is approved, the primary attending physician (not the Referral Coordinator) will communicate directly with the receiving physician; failure to do so violates the principles of good medical management.

3.5.3 The primary attending physician should in all cases send a written summary of the patient's medical record to the receiving physician to assure communication of sufficient information and avoid the duplication of tests.

3.6 **Appoint a committee to assist primary attending physicians in managing difficult patients.**

3.6.1 The MRC should recommend, and administration appoint, a committee (i.e., two or three persons) to support primary attending physicians who encounter or anticipate encountering a difficult referral (i.e., a patient or family demanding referral when it is unnecessary or inappropriate).

- 3.6.2 Committee members might include providers (doctors or nurses), a religious leader, or representative from administration, and serve on a rotating basis.
- 3.6.3 Committee members would play a supportive role, bolstering the attending physician's authority and attenuating potential hostilities through diplomacy and conflict resolution strategies.
- 3.7 **The MRC should develop a medical referral mission statement which is indicative of institutional policies and goals.** (A mission statement is presented in Attachment A for consideration of adoption.)
- 3.8 **The MRC should develop a comprehensive referral form for the purposes of administrative processing and data collection.** Care should be taken to see that the form is completed in full and signed by the primary physician referring a patient. (A referral form is presented in Attachment B for consideration of adoption.)
- 3.9 **The DOH should adopt an exclusionary policy, identifying specific medical conditions which are ineligible for consideration of referral care, and the MRC should be unyielding in its enforcement of this policy.** (Medical conditions excluded from referral consideration are presented in Attachment C.)
- 3.10 **The MRC should develop and follow written medical protocols for the treatment of the more common medical conditions requiring referral care.** (Protocols for referral conditions common in the past are presented in Attachment D for consideration of adoption.)

4. ADMINISTRATION

Major Issues and Concerns

- Service values have tended to dominate and overshadow managerial-economic values, compounding the problems of allocation referral care and effectiveness.
- Insufficient measures have been taken to counter the provider maximalist approach to care (i.e., use whatever resources are available to obtain the best medical results).
- Budgetary practices and insufficient fiscal oversight have allowed physicians to refer patients without adequate consideration of costs.

- There are no provider incentives or disincentives to promote efficacious referrals or to discourage inappropriate or unnecessary referrals.

Recommendations

- 4.1 **Referral care should be circumscribed by well-defined written policies and procedures, and a mission statement which reflects institutional goals and objectives.**
- 4.2 **Provide in-service training/orientation for medical staff which will induce them to consider the impact of individual medical service decisions on resources, and promote institutional goals and objectives as they relate to medical referrals.**
- 4.3 **Create a full-time position for a physician as Director of Referral and Resource Development to provide leadership and management in the areas of (1) medical referrals, (2) continuing medical education, and (3) technology assessment. Responsibilities will include, though not be limited to, the following:**
 - 4.3.1 **Medical Referral**
 - 4.3.1.1 provide administrative and clinical oversight of the medical referral program, serving as chairman and voting member of the MRC;
 - 4.3.1.2 assure that physicians observe referral protocols and procedures;
 - 4.3.1.3 assure coordination of referral services, and continuity of patient care;
 - 4.3.1.4 recommend policies, procedures, and activities to reduce referral costs: e.g., contract with select specialists to provide periodic, ongoing visits to LBJ; train a Samoan surgeon in dialysis graft implantation; train a nurse to administer chemotherapy on-island; train staff in the use of ultrasound as an alternative to CT scanning of abdomen and pelvis; etc.
 - 4.3.1.5 establish a comprehensive data base on medical referrals for the purpose of planning, administration, and patient outcome studies;

4.3.1.6 collect, analyze, interpret and report referral data and information for the purposes of quality assurance, coordination of services, feedback to MRC members, and cost containment;

4.3.1.7 oversee development of medical protocols for referral care;

4.3.1.8 oversee policy deliberation for the updating of referral exclusions.

4.3.2 Continuing Medical Education

4.3.2.1 Plan continuing medical education for medical staff in an effort to upgrade the knowledge and skills of local hires;

4.3.2.2 evaluate and order on-island and off-island training needs;

4.3.3 Medical equipment and technologies

4.3.3.1 evaluate and order medical equipment and technological needs for the purpose of improving local resources and reducing the need for referral care;

4.3.3.2 use cost benefit analysis, among other considerations, in determining appropriate technology for hospital use.

4.4 **Provide physician incentives to reduce unnecessary and inappropriate medical referrals.**

4.4.1 Consideration #1:

- Budget a substantial amount of funds, on a quarterly basis, for continuing medical education and the purchase of new equipment.
- Set quarterly target goals for referral expenditures.
- Allow spending for continuing medical education and equipment if providers do not exceed targeted cost-containment goals for referrals. If expenditures for referral care exceed target goals, deduct (reallocate) from the

continuing medical education and/or equipment budgets. A percentage of each quarterly budget for continuing medical education and equipment should be held in reserve until the end of the fiscal year (or rolled over) to guard against overspending.

4.4.2 Consideration #2:

- Budget for referral care based on historic experience (roughly \$3 million per year), assuring the Fono that there will be no additional "emergency" requests.
- Set quarterly target cost-containment goals for referral expenditures. If quarterly goals can be met (perhaps a sliding scale), agreed upon funds might be reallocated to an account for continuing medical education and/or the purchase of equipment. A percentage of each quarterly budget for continuing medical education and equipment should be held in reserve until the end of the fiscal year (or rolled over) to guard against overspending.

4.5 Provide physician disincentives to reduce unnecessary and inappropriate medical referrals.

4.5.1 Vigorously enforce all referral protocols and procedures through the office of the Director for Referral and Resource Development.

4.5.2 Track and provide feedback to physicians relying on peer pressure or administrative action to alter undesirable practice patterns.

4.6 Monitor closely any Third-Party Administrator contract assuring that:

4.6.1 all provider claims (outpatient, inpatient and ancillary) are being reviewed;

4.6.2 there are no occurrences of double billing;

4.6.3 concurrent and/or retrospective utilization is being conducted on all patients, including those referred to Tripler Army Medical Center;

4.6.4 there is documented authorization for any medical care not specified in the referral treatment plan;

4.6.5 the TPA uses its office to negotiate the lowest rates possible for referral patients.

4.7 **Seek a Medicaid exemption from the Department of Health and Human Services so that Tripler Army Medical Center might be authorized to treat Medicaid patients.**

4.8 **Negotiate with Tripler Army Medical Center for "Interagency" rates since they are all inclusive, on a per diem rate, and are considerably less than other hospital charges in Honolulu:**

Burn Center	\$2,768
Medical Care	727
Surgical Care	1,012
Obstetrical & Gynecological Care	952
Pediatric Care	730
Orthopedic Care	911
Psychiatric & Substance Abuse	438
Medical Intensive Care & Coronary Care	1,601
Surgical Intensive Care	1,745
Neonatal Intensive Care	1,016
Organ & Bone Marrow Transplant	1,513
Same Day Surgery	396

4.9 **Evaluate the use of E-mail and telemedicine as means of improving administrative efficiencies, coordination of care, continuity of care, and diagnostic consults with off-island specialists.**

4.9.1 Employ cost-benefit analysis.

ATTACHMENT A

MEDICAL REFERRAL COMMITTEE MISSION STATEMENT

ATTACHMENT B

**REFERRAL REQUEST FORM
RATIONALE FOR REFERRAL REQUEST FORM**

ATTACHMENT C

EXCLUSIONS FOR REFERRAL CARE

ATTACHMENT D

SAMPLE MEDICAL PROTOCOLS

MEDICAL REFERRAL COMMITTEE MISSION STATEMENT

General principles guiding committee deliberations should include the following:

- Health care is a publicly-funded enterprise undertaken for the common good and welfare of people of American Samoa.
- In the face of limited resources, health care needs of the community should supersede those of the individual.
- Government is obligated to provide only an essential level of health measures, supportive care, and limited forms of individualized curative care.
- LBJ is obligated to provide individualized curative care, including referral care, only to the extent that resources are available, and that such care does not preclude or significantly diminish the government's ability to provide emergency care, primary care, public health measures, and supportive care.

In its deliberations, the MRC will evaluate off-island medical interventions in relation to:

- outcome benefits: improved health, quality of life, duration of life, and the probabilities of achieving them;
- costs to the patient: discomfort, hazards, indignity, and risks of complications; and
- costs to the community.

The MRC will refrain from referring a patient when it is:

- unnecessary--when a referral will offer no substantial benefits to a patient;
- inappropriate--when a patient's need can be adequately met with the resources available at LBJ;
- unkind--when referrals do not enhance a patient's quality of life, but merely prolong it in a state of pain, indignity, or induce additional trauma (e.g., chemotherapy for an advanced cancer patient);
- unwise--when expenditures for a referral will exceed the ability of LBJ to absorb the cost, or when expenditures are diverted from an area where they could bring greater benefit to other patients or the community; and
- unsafe--when the risks of complications for a proposed referral outweigh the desired benefit.

REFERRAL REQUEST FORM

(To be completed by Referring Physician)

Referring Physician: _____ Date: _____

Patient's Name: _____ Hospital #: _____

Referred to: _____ Patient Escort: Yes No

Home Address or Island: _____

Age: _____ Date of Birth: _____ Sex: Male Female

Referral considered: acute non-life threatening; life threatening;
 Diagnostic; chronic medical re-evaluation

Patient complaint: _____

Rosser's Patient Distress Rating: (circle)

Disability		Distress	
I.	No disability	A.	No Distress
II.	Slight social disability	B.	Mild
III.	Severe social disability and/or slight impairment of performance of work.	C.	Moderate
	Able to do all housework except very heavy task.	D.	Severe
V.	Unable to undertake any paid employment.		
	Unable to continue any education.		
	Old people confined to home except for escorted outings and short walks and unable to do shopping.		
VI.	Confined to chair or to wheelchair or able to move around in the house only with support from an assistant.		
VII.	Confined to bed.		
VIII.	Unconscious		

Disability rating	Distress rating			
	A	B	C	D
I	1.000	0.995	0.990	0.967
II	0.990	0.986	0.973	0.932
III	0.980	0.972	0.956	0.912
IV	0.964	0.956	0.942	0.870
V	0.946	0.935	0.900	0.700
VI	0.875	0.845	0.680	0.000
VII	0.677	0.564	0.000	-1.486
VIII	-1.028			

Clinical findings (supportive pertinent information, i.e., physical, lab, X-ray, etc.):

Diagnosis (include ICD & complicating conditions: _____

Consultation with off-island specialist: Yes No

Recommendation of specialist: _____

Anticipated risks: _____

Anticipated benefits: _____

Risks, complications and benefits of treatment fully discussed with patient: Yes No

Patient's concerns and decisions: _____

Recommended Treatment Plan: _____

Services not available at LBJ which necessitate referral (e.g., specialties, equipment, supplies, etc.):

Diagnostic workup test ordered at LBJ: _____

Obligated funds: \$ _____ Referral Committee Vote: Yes No

Signature of Referring Physician

RATIONALE FOR REFERRAL REQUEST FORM

The Referral Request Form will serve four principle functions:

1. Completed forms will be retained and used in a data base on medical referrals to which financial information can be integrated in accordance with reporting needs.
2. It will assist administration in planning and developing services by identifying personnel, training, and equipment needs which, if met, will enhance local services and help reduce referrals.
3. Used in conjunction with rigorously enforced referral policies and procedures, the Referral Request Form will serve as a disincentive for unnecessary referrals.
4. It can be used as a tool by which to evaluate MRC performance.

Item: Identifying referring physicians

- Clinicians have varying styles of practice, ethical outlooks, and levels of clinical skills. Some refer patients with much greater frequency than others. Those clinicians who refer above normal limits can be identified and provided appropriate feedback from appropriate clinical and/or administrative personnel.

Item: Rosser's patient distress rating

- Rosser's scale will force primary attending physicians to evaluate patients in consideration of personal and social functioning which is the key to "quality of life" considerations, and the later should play a major role in the determination of a referral.
- Rosser's rating uses non-medical language which: 1) enables non-medical persons to understand pathology in terms of "practical" or functional context; 2) empowers non-medical professionals in the sense that they can play an informed role in the shaping of health policy.
- It provides a means by which surgical, medical, or social interventions can be measured in terms of outcome.

Items: Diagnosis (including ICD and complicating conditions), anticipated risks, anticipated benefits, recommended treatment plan

- Too many referral documents contain vague statements about a patient's medical condition, diagnosis, and requested treatment. A patient shouldn't be referred for a medical condition unless the referring physician is confident that a patient will clearly benefit from referral, and that the benefits to the patient clearly outweigh risks.

Item: Consultation with off-island specialist

- Consultation with a specialist prior to MRC meetings should be routine, and a specialist's recommendation should be recorded as a matter of clinical record and given consideration at MRC meetings.

Item: Identifying services, equipment or supplies not available at LBJ which necessitate referral

- This information will help identify personnel, training, and equipment needs which, when met, will enhance community medical services and help reduce the need for referrals.

Item: Diagnostic workup tests ordered at LBJ

- Identification of diagnostic work-up tests can be used for MRC evaluation, and administrative purposes.

Item: Obligated funds

- Hospital finance, guided by information provided by the TPA and its own experience, should obligate funds for a referral based on diagnosis and recommended treatment plan. Cost considerations should play a role in MRC's deliberations.

Item: Referral Committee vote

- After thorough discussion of a referral case, MRC members should vote in private to avoid undue influences (e.g., peer pressure, a dominant personality, politics, etc.).

EXCLUSIONS FOR REFERRAL CARE

1. Acquired immune deficiency (AIDS), HIV infections, and related conditions
2. Alcohol and drug dependence services
3. Any condition (e.g. cancer) that only requires palliative treatment
4. Any condition for which the survival rate is less than six months
5. Any condition for which a five-year survival rate is less than 50% based on current medical statistics and experience in American Samoa
6. Amyotrophic lateral sclerosis, tuberculosis, and Hansen's disease, except cases where the MRC determines that the patient can be treated appropriately outside of American Samoa and the patient has complied with prescribed treatment administered at LBJ
7. Congenital defects or abnormalities, except cases where the MRC determines the patient's quality of life and the longevity can be significantly increased through referral care
8. Cosmetic services, except in such cases where the MRC determines that severe emotional and psychological damage can be avoided only through referral care
9. Corrective appliances and artificial aids, such as braces, prosthetic devices, eyeglasses and hearing aids that can be obtained and fitted in American Samoa
10. Custodial, domiciliary, or convalescent care
11. Dental services, except for surgical procedures as a result of accidental injury to natural teeth or jaw
12. Durable medical equipment
13. Services which are "experimental" (i.e., used for research or on animals) or "investigative" (i.e., used only on a limited number of people or where the long term effectiveness of the treatment has not been proven in scientific, controlled settings)
14. Eye refraction for glasses, eyeglasses, eye exercises, contact lenses and/or fittings and refractive surgery to correct vision problems
15. Diabetic retinopathy

16. Hydrocephalic cases previously referred and treated, but with abnormal motor or mental development
17. Long-term physical therapy and rehabilitative services that can be provided at LBJ
18. Mental retardation and non-correctable mental deficiencies
19. Organ transplantations other than corneal and renal transplants, should the later prove to be a more cost-effective modality
20. Procedures not generally and customarily available
21. Services not medically necessary, including interrupted pregnancy, reversal of sterilization, fertilization by artificial means, and services related to sex transformations or sexual dysfunction and inadequacies
22. Temporomandibular joint disorders and related diseases
23. Mental health care

SAMPLE MEDICAL PROTOCOLS

LUNG CANCER: REFERRAL FOR DIAGNOSIS AND TREATMENT

Medical Workup Requirements

- Chest X-ray
- Sputum Cytology
- Surgical Biopsy (Scalene node biopsy, Percutaneous needle Biopsy or "minithoracotomy")
- Mediastinoscopy, Endoscopic transbronchial biopsy--as applicable)
- Oncology Consultation

Medical Criteria for Referral

- Small Cell Carcinoma demonstrated by cytology or biopsy with "limited disease" (i.e., no spread beyond hemithorax and regional nodes)
- Unknown tumor type limited to single hemithorax after all diagnostic methods available at LJB have been attempted and failed to reveal specific tumor type AND characteristics of the tumor suggest small cell carcinoma. Referred for diagnostic studies only.
- All tumor types other than small cell carcinoma will not benefit from radiation therapy and may be treated surgically and/or chemotherapeutically at LB.

Patient Consent

- Patient understands the risks and significant side-effects of radiation and chemotherapy.
- Patient fully understands the limited prognosis (less than one year expected survival).

BREAST CANCER: REFERRAL FOR RADIATION TREATMENT

Medical Workup Requirements

- Chest X-ray
- Biopsy (including regional node dissection)
- Laboratory (Serum Alkaline Phosphatase; Pathologic examination of biopsy specimen to determine estrogen receptor protein concentration)

Medical Criteria for Referral

- Patients who have had an Oncology Consultation and are determined to be candidates for radiation therapy
- Refer for radiation only; surgical procedures to be performed at LBJ

Patient Consent

- Patient understands the risks and side-effects of radiation therapy.
- Patient understands that this therapy is an adjunct to, and not a substitute for, appropriate surgical and medical therapy.

GASTROINTESTINAL MALIGNANCY: REFERRAL FOR TREATMENT

Medical Workup Requirements

- Chest X-ray
- Ultrasound - Liver, Pancreas
- Liver Biopsy
- Laboratory: Liver Function Tests (SGOT, ALK PHOS, Total Bilirubin, PT/PTT)
- Endoscopy/Colonoscopy When Indicated

Medical Criteria for Referral

- Primary neoplastic lesion without metastasis that is surgically resectable
- Surgery requires equipment or expertise not available at LBJ and Chief of Surgery agrees to referral on this basis.

Patient Consent

- Patient understands the risks and effects of surgery.
- Patient has been advised of the prognosis and expected impact on function and lifestyle postoperatively.
- Patient consents to surgery prior to referral.

ACUTE MYOCARDIAL INFARCTION

Medical Workup Requirements

- 12 Lead EKG
- Chest X-ray
- Laboratory:
 - Complete Blood Count (CBC)
 - Electrolytes
 - Prothrombin, Partial Prothrombin times
 - Cardiac Enzymes (CPK, LDH)
- Cardiology Consultation

Medical Criteria for Referral

- Acute Myocardial Infarction in the left Main Coronary Artery distribution (Left Anterior MI) with intractable ischemia unresponsive to medical therapy
- Patient is a candidate for transport and emergency coronary artery bypass grafting.
- Patient does not have any of the following conditions which would make survival during transport unlikely:
 - Cardiogenic Shock
 - Congestive Heart Failure
 - Serious concurrent disease requiring life support measures (i.e., pulmonary, renal, or hepatic failure)
- Cardiovascular surgery consultation has been obtained and surgeon agrees to accept the patient.

Patient Consent

- Patient understands and agrees to accept the very significant risks of transport and surgery.

CARDIAC ISCHEMIA: REFERRAL FOR CORONARY ANGIOGRAPHY

Medical Workup Requirements

- 12 Lead EKG
- Chest X-ray
- Cardiology Consultation
- Exercise Tolerance Test (Treadmill EKG)-if applicable
- Lab: Creatinine

Medical Criteria for Referral

- Patient is a candidate for Coronary Artery Bypass Grafting or Transluminal Coronary Angioplasty and angina is refractory to optimal medical treatment (nitrates, Beta Blocking agent, Calcium Channel Blocking agent).
 - Chronic Stable Angina with high risk factor (i.e., ETT with early onset STT seg depression; prolonged persistence of ST seg depression after exercise; exercise induced hypotension, or ST seg depression greater than 2mm).
 - Unstable Angina - (Patient with documented recurrent angina at rest lasting greater than 15 minutes; or patient with recurrent angina on exertion with acutely decreasing exercise tolerance not completely relieved with Nitroglycerin).
- Patient has no contraindications to either angiography procedure or to CABG (i.e. allergy to contrast agent, renal failure (creatinine>3mg/dl), refractory CHF, insufficient pulmonary reserve, immunosuppression, etc.).
- Patients who refuse transfusion of blood products are not candidates for cardiac surgery, thus, referral for preoperative evaluation is not warranted.

Patient Consent

- Patient understands the procedure and accepts the risks of lethal arrhythmia, myocardial infarction, coronary artery laceration, other complications requiring emergency surgery, intra- and post procedure pain, or hematoma at arterial puncture site.

**CARDIAC VALVE DISEASE: REFERRAL
FOR DIAGNOSTIC STUDIES/SURGERY**

Medical Workup Requirements

- EKG
- Chest X-ray - pa and lateral
- Cardiology consultation

Medical Criteria for Referral

- Mitral Stenosis - significant stenosis as evidenced by rest dyspnea, prolongation of diastolic murmur, left atrial dilation on cxr, pulmonary hypertension evidenced by dilation of right pulmonary artery of 15mm or more on cxr
- Aortic Stenosis - patient less than 50 years of age with characteristic murmur 3/6 or greater, or pulse pressure less than 80 mm, and with palpably delayed carotid upstroke
- Aortic Stenosis - patient older than 50 years of age with syncope on exertion, angina, or congestive heart failure
- Aortic Regurgitation: patient with dyspnea on exertion (onset after less than one flight of stairs), or orthopnea, or paroxysmal nocturnal dyspnea, or left ventricular hypertrophy with strain on EKG, or with documented increasing cardiomegaly on CXR
- Mitral Regurgitation - patient on adequate digitalis and diuretic therapy with progression of dyspnea, or congestive heart failure refractory to medical therapy
 - Mixed valvular disease - patient on adequate digitalis and diuretic therapy with progression of dyspnea, or congestive heart failure refractory to medical therapy
 - Patient must have no contraindications to cardiac surgery -- serious coexisting non cardiac disease that would compromise survival, or end-stage myocardial decompensation.
- Those patients who refuse transfusion of blood products cannot be candidates for cardiac valve surgery. Referral of such patients for preoperative evaluation is not warranted.

Patient Consent

- Patient understands and agrees to accept the significant risks of the following complications of cardiac valve surgery: significant intra- and postoperative risk of mortality, myocardial infarction, stroke, renal failure, or infection.
- The patient understands that the following successful surgery that endocarditis prophylaxis and anticoagulation will be life long requirements.

**UROLITHIASI: REFERRAL FOR LITHOTRIPSY
OR ENDOUROLOGY PROCEDURE**

Medical Workup Requirements

- Laboratory:
 - Urinalysis
 - Complete Blood Count (CBC)
 - Creatinine

- Radiology: IVP

Medical Criteria for Referral

- Urolithiasis with infection

- Stone greater than 6mm diameter as measured on IVP

- Intractable pain that has required hospital admission of one week duration on IV analgesics

- Failure to have passed stone within one month of outpatient treatment on oral analgesia

- Contraindications for Lithotripsy include:
 - Pregnancy
 - Abdominal Aortic Aneurysm
 - Renal artery calcification
 - Ureteral stone distal to the pelvic rim
 - Stones in a nonfunctioning kidney
 - Creatinine level greater than 3 mg/dl
 - Cardiac Pacemaker
 - History of pancreatic disease

Patient Consent

- Patient understands and agrees to accept the risk of the following complications of lithotripsy: Intra- and postoperative pain, risks inherent to anaesthesia and possible organ damage (e.g. renal parenchymal damage, pancreatic damage, ileus, ureteral obstruction, hypertension, and treatment failure).

**LUMBAR SPINE DISEASE: REFERRAL
FOR NEUROSURGICAL EVALUATION**

Medical Workup Requirements

- X-ray - lumbar spine
- Neurology consultation

Medical Criteria for Referral

- Cauda Equine Syndrome
- Severe neurological deficit - i.e., dense motor deficit, bowel and bladder incontinence
- Progressive neurological deficit
- Multiple nerve root involvement suggestive of tumor
 - Patient has no contraindications to surgery - i.e., has sufficient cardiopulmonary reserve to tolerate procedure; if in setting of concurrent disease such as metastatic neoplasm, the patient has prognosis sufficient to warrant major surgical intervention; surgery is expected to restore significant function.

Patient Consent

- Patient understands that the risk of surgery is significant and potentially life-threatening complications can result.
- Patient understands that surgical intervention may not restore function or may only restore partial function.

MENINGITIS: REFERRAL FOR NEUROSURGICAL PROCEDURE

Medical Workup Requirements

- Lumbar Puncture-Cerebral Spinal Fluid analysis and culture
- Optimal medical management at LBJ
- Neurosurgical Consultation

Medical Criteria for Referral

- Pre-existing Ventricular Shunt in the setting of acute bacterial meningitis
- Penetrating head trauma with acute bacterial meningitis
- Post-meningitis neurosurgical complications including secondary hydrocephalitis, brain abscess

Patient Consent

- Patient (i.e., patient or guardian) understands the risks and prognosis, and consents to surgical procedure.

ARTHRITIS: REFERRAL FOR JOINT REPLACEMENT

Medical Workup Requirements

- X-ray
- Physical therapy - evaluation and treatment
- Optimal medical management
- Rheumatology Consultation
- Orthopedic Surgery Consultation

Medical Criteria for Referral

- Patient has limitation of motion, and pain prevents a productive life.
- Patient has received optimal medical therapeutic trial for a minimum of one year.
- Patient has complied with a comprehensive program of physical therapy over a period of at least one year.
- Patient's physical status is such that joint replacement is practical (i.e., patient's weight is not greater than 15% over ideal body weight for replacement of a weight bearing joint).
- Patient does not have concurrent medical disease that will preclude optimal rehabilitation (i.e. does not have respiratory or cardiac disease, diabetes, or renal failure).

Patient Consent

- Patient understands the procedure and has been advised of the possible complications, including limb amputation that can arise from the procedure.
- Patient agrees to an extended physical therapy program after surgery.
- Patient has been advised of realistic prognosis of postoperative function.