To Divert a Medical Malpractice Insurance Crisis, we must recognize the symptoms and prescribe solutions in advance of crisis!

There is no one solution to slowing down the trend of increasing overzealous medical malpractice claims in order to divert potential catastrophic results being realized in other states. (e.g. Critical medical services no long being available).

Amendments to Hawaii's Informed Consent Law have allowed the process to start, by addressing what information the physician must provide to the patient. HMA is in the process of creating checklists for each procedure that will be reviewed by the Board of Medical Examiners to approve, with public input.

The next two priority issues that must be addressed from the puzzle of solutions are to place liability where it belongs, and to place a cap on non-economic damages, in that order.
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You have an interesting case report, a review of a favorite medical condition or a novel surgical approach just sitting on your desk or in your files, waiting to be published.

The HMJ Peer Review Panel of volunteer physicians and other scientists in fields from aerospace medicine to zoster specialists are very fair and want to help you get your manuscript published in the Hawaii Medical Journal.

The panel accepts about three out of four papers submitted and some of those not accepted are returned to the authors for revision. We do want our readers to know what is happening in Hawaii medicine, in clinical fields and in research areas.

Through regular columns, including the Medical School Hotline, the Cancer Center Hotline, the Residents’ Case series, we become aware of the many medical activities going on in our state. We have reports on the Hawaii Medical Association annual meeting in the November 2003 issue for those of you who could not attend the meeting. Mahalo to Russ Stodd, our annual meeting reporter and contributor of his very popular Weather Vane column. Bill Goodhue’s report on the annual meeting of the Aha Ui O Na Kauka (Association of Native Hawaiian Physicians) appeared in the December 2003 issue.

There are many other informative and interesting meetings going on in Hawaii that could be published for our readers. If you would like to report on your group’s meetings, send it in or e-mail it to my attention. Since reports of conferences are not peer reviewed they are usually published in a timely manner. Photographs are always appreciated and are published on a space-available basis.

Even if you have not submitted an article for a long time, there is no better medium to get your findings to fellow physicians than through the Hawaii Medical Journal. As a physician, your role is not just to treat but to teach as well. Send your submissions to me at 1128 Smith Street, Honolulu, HI 96817 or via e-mail at nsgoldstein@hawaii.edu with a copy to Drake Chinen, editorial assistant, PO Box 19277, Honolulu, HI 96817 or via e-mail at drakec@hawaii.edu.
In nearly November 2003, I sent a letter to 2,079 Hawaii physicians whose names were listed in the Little Blue Book (of physicians) and the HMA member directory. This letter was under the banner of HPAD, Hawaii Physicians for Assisted Dying, an organization formed in April 2003. In the letter I outlined the specifics of the Hawaii Death with Dignity (DWD) bill that will be introduced to the legislature in 2004, and mentioned the numerous safeguards built into the bill. A reply form was enclosed asking, “What is your position on the proposed Hawaii Death with Dignity Act?”

If the physician supported the legislative effort he/she was given 4 boxes from which to “check” one or more of the following statements: 1) I am in favor; 2) I am in favor but unwilling to become involved at this time; 3) I would like to join HPAD; and 4) I am willing to have my name listed as a physician who supports the Hawaii Death with Dignity Act.

The recipients were told that a position of support “does not necessarily mean that you yourself would be willing to write a prescription, but rather that you recognize and support a patient’s individual right to choose.”

If the physician opposed the legislative effort he/she was given 2 checks boxes: 1) I do not support physician-assisted dying legislation; and 2) I do not support physician-assisted dying legislation because:… followed with a space for comments.

A return addressed but not stamped envelope was included.

My initial purpose in sending this mailing was to elicit a response from those who would be willing to support a physician-assisted dying bill similar to the one narrowly defeated at the close of the 2002 legislative session. However, as the responses started coming in, it became clear that there was a larger percentage of support than I had anticipated.

To date there have been 224 responses, with 164 (73%) in favor and 60 (27%) opposed. 19 physicians elected to join HPAD and 75 were willing to having their name listed as being in support of assisted dying legislation.

Of those who were opposed, almost a third cited religious beliefs, another third indicated the physician’s duty is to “heal and not kill”, while and the remaining third gave no reason.

Since the idea of participating in a Death with Dignity law appears to some physicians as tantamount to murder, I feel it is important to emphasize that the DWD law specifically outlaws lethal injections, mercy killing and active euthanasia.

The physician’s “assistance” is limited to diagnosing the terminal illness, referring the patient for a confirming second medical opinion and then, after all of the safeguards have been met, writing a prescription for a lethal dose of medication that the terminally ill patient must self-administer.

It must also be emphasized that it is the patient who has initiated the request for help in his/her dying process and the patient can change his or her mind at any time.

A more exhaustive survey published in the December 1996 edition of the Hawaii Medical Journal noted that of 1,028 Hawaii physicians, 60% approved of physician-assisted dying. This is not to say that all of the physicians who responded would personally agree to write a prescription for a dying patient, but rather that they felt the patient had a right to end his or her suffering in a quick and dignified manner.

Although my mailing was not a formal controlled survey like that conducted in 1996, it would appear that in the last five years support among Hawaii physicians has been increasing. This finding is similar to public polls that show support consistently above 70%.

As a co-founder and past president of Hospice Hawaii, I know from experience that only a small percentage of patients want assistance in hastening their death. For those few, however, it is a major blessing.

Hawaii’s Death With Dignity bill is modeled after Oregon’s Death With Dignity Act, which has been in effect for over five years. Because the Oregon law requires a second medical opinion along with mandatory patient counseling on alternative treatments such as palliative care, hospice and pain management, many patients withdrew their request for the medication after learning they had options.

Of those who had prescriptions filled, about half died of their disease without ever availing themselves of the medication. Many referred to it as “an insurance policy” against an undignified death.

The Oregon law has been working well. There has not been one single documented instance of abuse. During its first five years only 129 patients out of 42,274 patients suffering from the same underlying diseases have ended their lives by self-administering a lethal dose of medication.

In that same five years over 150,000 Oregonians died, making the number of hastened deaths less than one tenth of one per cent (0.09%). This is a far cry from the claims of opponents who alleged that passing such a law would make Oregon the “Suicide Mecca” of the United States.

Of the physicians surveyed following enactment of the law, 30% reported that they had increased their hospice referrals, 76%

See Assisted Dying, p. 35
Gertrude Parmele Judd was born April 23, 1803 at Paris, New York, the son of a physician, Elmanathan, and Betsy (Hastings) Judd.

His early education was received at Clinton (New York) Grammar School, supplemented by private tutoring in the classics by Rev. Edwin W. Dwight. He attended Medical College, Fairfield, New York, graduating in 1825.

On September 20, 1827, Dr. Judd married Laura Fish at Clinton, New York. They became the parents of nine children: Gerrit Parmele, Jr., Elizabeth Kinau, Helen Seymour, Charles Hastings and Laura Fish, twins, Albert Francis, Allan Wilkes, Sybil Augusta, and Juliet Isabel.

Some six weeks after their marriage Dr. and Mrs. Judd sailed from Boston as members of the Third Missionary Company. They left on November 3, 1827, aboard the “Parthian” and arrived at Honolulu March 30, 1828, after a voyage of 148 days.

As surgeon and physician Dr. Judd served the American Board of Missions for 14 years until May, 1842, when he resigned to enter the service of King Kamehameha III. He played a prominent part in many history-making events as adviser to the King from 1842 to 1853, and, successively, occupied virtually every important government post. He began his service in 1842 by becoming translator and recorder for the government, as well as president of the Treasury Board.

When Lord Paulet of England took possession of the government in 1843, Dr. Judd, fearing the seizure of state papers, removed them from the government house and concealed them in the royal mausoleum. There at night, by the light of a ship’s lantern, he secretly carried on government business. During this period Dr. Judd was appointed one of the Joint Commission to replace the King, but soon resigned when the Commission was bent on abrogating salutary laws restraining licentiousness and crime. Admiral Richard Thomas restored sovereignty to King Kamehameha on July 31, 1843, and the following November Dr. Judd was invited by his Majesty to serve as Minister of Foreign Affairs. He became Minister of the Interior on March 3, 1845, and Minister of Finance on April 15, 1846.

Dr. Judd was the first to realize that the white people who made Hawaii their home must become subjects and supporters of the Hawaiian king if the Hawaiian state was to be saved from absorption by foreign powers. On March 9, 1844, Dr. Judd and John Richard, the King’s Attorney General, were the first to forswear allegiance to their native lands and become Hawaiian subjects. The doctor’s entire life was devoted to the creation of a strong constitutional government for Hawaii. From 1849-1850 Dr. Judd was sent on a diplomatic mission to negotiate treaties with France, England, Belgium, and the United States guaranteeing the independence of the Hawaiian Islands. Accompanying him were the two princes, Alexander and Lot, who later became Kamehameha IV and Kamehameha V.

When he entered the service of the government, he found it encumbered with debts and paying exorbitant interest. By a system of prudent economy he paid off these debts and established for the Hawaiian government an enviable financial reputation. It was Dr. Judd who represented the King and handled all of the money for the building of Kawaihao church, aiding also in the planning of the structure and the supervision of its construction. Again it was he who conceived the idea of independent ownership of the land by the Hawaiian people and persuaded the King to make the great division of the lands. From 1843 to 1853 he sat in the legislature as a noble, and in 1858 and 1859 he served as a representative.

Because his efforts were all devoted to aiding the Hawaiian government Dr. Judd incurred the enmity of that faction who desired a weak government as an end toward annexation by the United States. The great smallpox epidemic in 1853 when some 3,000 natives died
gave the doctor’s enemies a chance for revenge. Although Dr. Judd and the Rev. Richard Armstrong worked valiantly to stem the tide they were picked as scapegoats and were even accused of introducing the disease. Using this as a lever, the opposing faction was able to force Dr. Judd’s retirement from government service in September, 1853.

During the rest of his life he practiced medicine and engaged in plantation and other business ventures, except for the period when he served in the House of Representatives.

One of the founders of Punahou School in 1841, Dr. Judd personally supervised the erection of the first building and served as one of the first trustees. In 1856 he was one of the signers of the charter of incorporation for the Hawaii Medical Association. On July 17, 1860 the cornerstone of the Queen’s Hospital was laid. The doctor’s influence was felt in fulfilling this great need, and he served as one of the first trustees. From 1863 until his death he served as a member of the Hawaiian Evangelical Association board. A master of the Hawaiian language, he translated books on hygiene, the life of Abraham Lincoln, and assisted in the translations of the Bible. In 1870 he founded a medical school for native boys.

Dr. Judd died on July 12, 1873, in Honolulu at the age 70.

Aptly descriptive of his lifetime work, the epitaph on his tomb in Nuuanu Cemetery reads, “Hawaii’s Friend”.

**Assisted Dying from p. 33**

reported making efforts to improve their knowledge of pain medication, 69% reported efforts to improve recognition of psychiatric disorders including depression and 79% reported their confidence in prescribing pain medication had improved. In addition, the use of medical morphine, considered the “gold standard” for relieving pain in end stage cancers, increased by 70%.

One Oregon finding that has not yet been published comes from Compassion In Dying (CID), an organization that supports personal choice at the end of life. CID has been able to document a decrease in the number of violent deaths among the terminally ill (such as by the use of a gun or hanging) proportionate to the number of hastened deaths using the Oregon law.

As physicians we need to accept the fact that we can’t cure everything. We must respect a patient’s right to self-determination in end-of-life choices where all other reasonable efforts to relieve suffering have failed.

The way each person dies should be a personal, unique choice. Ideally, no law should need to be passed about such a private decision; it should be like it was years ago, a matter between each person and his/her doctor.

However, our litigious society demands that these matters be encoded in the law. HPAD therefore takes the position that the choice of physician-assisted dying should be made legal even though it is intended for only a small minority of people.

Anyone who does not support assisted dying for religious, moral or ethical reasons is not required to participate. Also, any physician who prescribes a lethal dose of medication to a terminally ill patient, provided all of the safeguards are adhered to, is immune from civil and criminal liability.

**Editor’s Note:**

Robert Nathanson MD was in general practice for 37 years with Kaiser Permanente in Kailua and Kaneohe. He was co-founder and first president of Hospice Hawaii in 1979 and founder of HPAD- Hawaiian Physicians for Assisted Dying; a group of medical professionals interested in supporting a patient’s right to a dignified and peaceful death.

He may be contacted at HPAD, 68-615 Farrington Hwy., #19B, Waialua, HI 96791.
A December 14th dinner-dance gala at the Halekulani Hotel on the beach in Waikiki marked the Honolulu County Medical Society (HCMS)’s 78th Annual Meeting and Installation of Officers for 2004, honoring incoming HCMS President Ronald H. Kienitz DO. Nearly 150 HCMS members and their spouses filled tables in a spacious terrace ballroom after enjoying cocktails and pupus to the music of pianist Jim Howard and viewing exhibit booths on the ballroom lanai.

S. Kalani Brady MD, MPH chanted the invocation and blessing as he led the Presidential Procession into the ballroom and onto the stage once attendees were seated. Inam Rahman MD, outgoing HCMS President, administered the Oath of Office to Dr. Kienitz, and welcomed incoming Secretary John Rausch MD who will succeed 2003 incumbent Linda Rasmussen MD. Dr. Rahman also congratulated incoming Treasurer Roger Kimura MD who succeeds incumbent Russell Wong MD. Scott McCaffrey MD was vested as HCMS President-Elect. Master of Ceremonies Edmond Chung ably introduced speakers. The sultry, jazzy sound of vocalist Azure McColl and her accompaniment provided entertainment during cocktails and the delicious sit-down, served dinner.

President Kienitz’s engaging inaugural address emphasized teamwork between HCMS and the Hawaii Medical Association (HMA), in both of which he has been a longtime member, towards achieving the complementary goals of each organization in cost-effective ways. These goals include promoting collegial interaction among physicians, fostering and promoting interests of organization members and their patients, promoting the betterment of public health, maintaining high standards of medical practice through peer review, increasing membership, and establishing one voice for efficiently addressing the important issues facing physicians. His remarks, punctuated with well-placed witticisms and opened with his wearing a protective helmet attesting to a recent bicycling accident, received a standing ovation!

Prominent politician Mufi Hanennman, most recently City Council Member and Mayoral candidate, was the evening’s Keynote Speaker, and addressed What Physicians Need to Know about the Crystal Methamphetamine Crisis in Hawaii, and What They Can Do to Help. He quoted statistics documenting Hawaii having the nation’s highest rate of “ice” users and focused his comments on proposing solutions to our “ice” epidemic. These include not only law enforcement, but also prevention and education. He emphasized that physicians can serve as critical links in efforts to curb burgeoning addictive disorders among our people through early detection and intervention. He continued that the unique position of respect and trust held by Hawaii’s physicians provides an invaluable opportunity for them to provide direction for services for our drug exposed youth and adults. He distributed a brochure summarizing these and other comments about recognition of signs of “ice” use, location of treatment centers, identification of some physicians experienced in treating substance related disorders, and helpful websites. He also distributed a Drug Contact Sheet for Parents questionnaire suitable for physicians in assisting parents to identify signs that family members may be experimenting with drugs. His remarks received the second standing ovation of the evening!

Franklin Young MD and his lovely wife Madeline were happy winners of the drawing for a free One Night Stay at the Halekulani.

Dancing to music of Rubber Soul, Hawaii’s very own Beatles rendition band headed by HMA/HCMS member Fred Goldblatt DO, rounded out the evening.

Thanks to the many who made this year’s HCMS annual meeting one of the most successful ever, including but not limited to Sponsor Hawaii Prescription Care, Table Sponsors Clinical Laboratories of Hawaii, LLP and Pan Pacific Pathologists, Inc, exhibitors Pharmacia and All-Star Sports & Therapy Center, and HCMS Executive Director Julie Kinhult.

Honolulu County Medical Society
Maureen Andrade (center), Pat Kawamoto (left) and Tanya Paizon welcome attendees.

A no-host bar and pupus preceded dinner.

Staffers at the Pharmacia (above) and adjacent exhibit booths share product information.

Pianist Jim Howard plays easy-listening music for the cocktail hour.

Congenial conversation characterized the evening.

President Kienitz, with son Bryce and his beautiful wife Kathy.
President Kienitz and Muß Hannemann discuss strategy.

Master of Ceremonies Edmond Chung keeps things running smoothly.

S. Kalani Brady, MD, MPH chants the invocation and blessing.

Master of Ceremonies Chung says longtime HCMS and HMA member Ron Kienitz, DO needs no introduction.

2003 President Rahman administers the Oath of Office to incoming President Kienitz.

President Kienitz says the protective gear reflects his recent bicycling accident, and is not needed for the slings of office!
President Kienitz’s Inaugural Address.

Mufi Hannemann confronts Hawaii’s “ice” epidemic head-on!

Attendees listen attentively before giving President Kienitz and Mufi Hannemann standing ovations.

Winners of the free “One Night Stay at the Halekulani” plan their getaway.

Azure McCall croons her magic

Dance, anyone? Rubber Soul’s ready!

Photos courtesy of Brent Shigeoka
Maternal Predictors of Infant Health Outcomes among Hawaiians

Wendy A. Todd MPH and John W. Peabody MD, PhD

Abstract
Disaggregated data, vital statistics, and a comprehensive literature review were used to assess the relationship between Hawaiian maternal predictors and infant health outcomes. Despite near universal health care coverage, Hawaiians continue to use less prenatal care, have average rates of low birth weight, and the highest infant mortality rates compared to other ethnic groups in Hawaii. Specific investigations and interventions are necessary to reduce the disparity of Hawaiian infant health outcomes.

Introduction
Despite near universal health care coverage, Native and Part Hawaiians’ experience among the highest morbidity and mortality rates compared to other ethnic groups in Hawaii and in the continental United States. Limited Hawaiian-specific analysis, particularly among women and children makes it difficult to successfully target interventions that might address the disparity of poor infant health outcomes among Hawaiians. This is particularly important in maternal and child health where policy interventions are highly effective at improving outcomes. Other studies have found significant associations with ethnic specific maternal characteristics and prenatal care utilization, low birth weight and infant mortality. Interestingly, many of the risk factors commonly associated with health behavior and outcomes are not applicable to Hawaiians because they have universal access to prenatal care. This paper is a comprehensive review of maternal risk factors and infant health outcomes among Hawaiians. The aim is to identify elements that can be used as tools to drive policy, support culturally competent health services, and suggest further areas of research to adequately address Hawaiian maternal and child health care needs.

Methods
Data Collection on Hawaiians
Traditional data collection and reporting often fails to expose health issues related specifically to the Hawaiian population, because Hawaiians are typically grouped with other Pacific Islanders and Asian Americans. Additionally, data is aggregated at the national level making it difficult to assess the true health outcomes for Hawaiians who live in Hawaii. These broad categorizations result in misleading conclusions. For example, in a 1998 Monthly Vital Statistics Report, the authors conclude “mortality rates were lowest for infants born to Asian and Pacific Islanders mothers (5.3), followed by white (6.3), American Indian (9.0), and black (14.6) mothers” at the national level. The favorably low Asian and Pacific Islanders infant mortality rate is not representative of the Hawaiian infant mortality rate. The limited disaggregated data, when available, demonstrates Hawaiians experience higher rates of infant mortality, in Hawaii and in the U.S.

Another common generalization, which further masks the true health status of Hawaiians, are studies that fail to distinguish any ethnic group and report data in aggregate form for everyone living in Hawaii. For example, research conducted by the Casey Foundation examined maternal and infant health outcomes in Hawaii during the 1990s and concluded that children of Hawaiians got off to a significantly healthier start to life when compared to national averages. The eight measures that defined a “healthy start to life” were teen births, repeat teen births, births to unmarried women, low maternal education, late or no prenatal care, low-birthweight births, preterm births, and smoking during pregnancy. The disaggregated live birth data by ethnicity was limited to 4 categories; Non-Hispanic white, Non-Hispanic Black, Hispanic and Other. Ethnic-specific data covering all Hawaii-resident, non-military, singleton live births from 1979-1992, revealed more complex and worrisome health outcomes. Compared to whites, Japanese and Filipinos, Hawaiian women had a higher percentage of parity for age (over 3 times the percentage of whites), and a higher percentage of teen births (also over 3 times the percentage of whites). In addition, studies indicate Hawaiian women are more likely to smoke during pregnancy than women in other ethnic groups in Hawaii.

In 1975, a Hawaiian non-profit organization, ALU LIKE, Inc., initiated research specific to Hawaiian health issues with funding from the federal government. These and other efforts by community-based organizations have begun to identify and address health issues related specifically to Hawaiians living in Hawaii.
While non-profit agencies and traditional healers work toward improving the health and maximizing the strengths of Hawaiians, the paucity of service and health outcomes data, particularly data that disaggregates Hawaiians versus non-Hawaiians populations, limits Hawaiian specific policy and culturally specific interventions.

Existing Data on Maternal and Child Health among Hawaiians

Hawaiians in general suffer higher rates of preventable chronic disease than other populations in the United States. In addition (and perhaps related to chronic disease), Hawaiians experience infant mortality at higher rates than other ethnic groups in Hawaii and in the continental U.S. These poor health outcomes are surprising, given the near universal availability of health services under the Prepaid Health Care Act requiring most employers to provide coverage in a pre-paid health care plan that includes maternity benefits to employees. Health insurance in 1977 covered approximately 97% of the population; subsequent expansions of Medicaid eligibility in the late 1980s and the enactment of the State Health Insurance Program in 1989 further increased coverage. Despite health service availability, Hawaiians continue to under-utilize services. Further analysis is needed to determine the reasons for under-utilization and the extent of its impact.

Data Utilized for this Paper

A literature review search in PubMed was done to collect publications regarding Hawaiian maternal and infant health. The keywords were: ‘Hawaiian infant mortality’, ‘Hawaiian prenatal care’, and ‘Hawaiian low birth weight’. Of the 26 articles reviewed, four articles fit the following criteria: published within the past 10 years, used Hawaiian vital records after 1979 (when near universal health care coverage was established), and compared maternal prenatal health utilization and/or infant health outcomes among non-military Hawaiians and other ethnic groups living in Hawaii. Two additional articles were included: one that assessed the relationship of maternal characteristics (including geographic location) and low birth weight among ethnic groups in Hawaii (excluding Hawaiians) and a second article that presented a qualitative study regarding barriers to prenatal care pregnant women from different ethnic groups experience. Extracted findings and implications from these studies were combined with current demographic and perinatal data from the Hawaiian Department of Health. The Healthy Hawaii 2000 program initiated by the Department of Health in Hawaii was responsible for gathering data to assess the health status of residents in Hawaii. Data from previous studies and vital statistics from the Department of Health were used to perform a detailed review of the maternal risk factors and infant health outcomes of ethnic groups living in Hawaii, with particular attention to Hawaiians.

Results

Despite near universal health care coverage, Hawaiians continue to use prenatal care less, have average rates of low birth weight yet have infant mortality rates that are very high when compared to other ethnic groups in Hawaii (See Table 1).

Initiation and Utilization of Prenatal Care

The initiation to prenatal care and subsequent utilization of prenatal care throughout pregnancy differs among ethnic groups in Hawaii. Hawaiian women, who had the most pregnancies (5,547) and most live births (4,717) of any ethnic group, had the lowest percentage of first trimester prenatal care (77.8%). By comparison, 92.4% of Chinese and 90.2% of

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<th>Live Births and Prenatal Care Utilization</th>
<th>Low Birth Weight Rate (&lt;2500 grams) per 1,000 births</th>
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<th>Rate per 1,000 live births</th>
<th># of Infant Deaths and Low Birth Weight (&lt; 2500 grams)</th>
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Birth Rate Data from Health Trends in Hawaii http://66.135.230.7/research/Demographics_files/demographics.htm?body=sheet015.htm
All other data from Department of Health 2000 Vital Statistics http://www.state.hi.us/doh/stats/vr_00/index.html

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Japanese and 88.9% white women living in Hawaii received prenatal care, thereby achieving the national and state “Healthy People Objective” in 2000 [16]. The percentage of women who do not receive care after the first trimester is also highest among Hawaiian women (18.6%), compared to white (10.1%), Chinese (4.5%), Filipino (14.0%) and Japanese (6.5%) women.17  

The researchers also analyzed the association between maternal characteristics and prenatal care. Using Hawaiian birth record files from 1979-1992, two studies found determinants of inadequate prenatal care use or no prenatal care included women who were: Hawaiian, unmarried, under 18 years old, had high parity for age and low educational attainment.6,10 Hawaiian women, who are at higher risk for each of these indicators compared to other ethnic groups, represented almost half of the total number of pregnant women who did not receive prenatal care.6,10 

Low Birth Weight  
In 2000, the low birth weight rate in Hawaii was 7.5/1,000 live births and varied by ethnicity and geographical area. The low birth weight rate for Hawaiian women was 7.3 per 1,000 live births compared to Filipino and Japanese babies at 9.3 and 9.4, respectively. Caucasian, Chinese and all other ethnic groups in Hawaii have low birth weight rates of 5.3, 6.9, 5.8, respectively. The absolute number of low birth weights, however, is highest among Hawaiians; of the 1,317 total low birth weight births, 345 infants were Hawaiian (26.2%).17 Table 4 shows the number, rate and percentage of low birth weights across ethnicity.  

The wide range of low birth weight (5.3-9.4 per 1,000 births) across ethnic groups in Hawaii can be further disaggregated by census tracts.3 From the 1980 Census data, covering 155 census tracts, live birth vital record files for infants born between 1979 and 1987 were extracted. This analysis revealed that low birth weight was not associated with low socioeconomic status or inadequate prenatal care. However, single mothers were more likely to give birth to low birth weight infants. Ethnic heterogeneity was also associated with low birth weight. Low birth weight rates were much lower by contrast, in census tracts where one ethnic group comprised one-third or more of the total population.8  

Another study compared birth weights among Samoan and Hawaiian (excluding Part Hawaiians) infants. Despite the common risk factor of low socioeconomic status, only 2.9% of Samoan births have low birth weight. Hawaiians, who had fewer risk factors compared to Samoans, actually had a higher percentage of low birth weight infants (6.6%).7 The significant predictor for low birth weight in both groups was marital status (unmarried) and parity (primiparous women older than 17). Thirty eight percent (629/1,649) of Hawaiian mothers were unmarried compared to 29.8% (1,735/5,825) of Samoan mothers were unmarried.9  

Infant Mortality  
Hawaiians have the highest infant mortality rate in Hawaii. The disparity has gradually been decreasing over the past twenty years.3 In 2000, the infant mortality rate for Hawaiians was 7.8 infant deaths per 1,000 live births. The lowest infant mortality rate in 2000 was among Japanese at 5.8/1,000.17 Disaggregating the data further reveals that Native Hawaiians (excluding part Hawaiians) experience extremely high infant mortality rates at 13.9 deaths per 1,000 live births. Strikingly, most of these excess deaths occur in the postneonatal period.8  

The magnitude of the infant mortality problem for Hawaiians can also be described by looking at totals rather than rates. The number of Hawaiian infant deaths (49) was more than double the number of Caucasian infant deaths (23) and Filipino infant deaths (23) and more than four times the number of Japanese infant deaths (11).17 (See Table 1)  

Discussion  
Poor health outcomes are associated with socioeconomic status, clinical risk factors, and under-utilization in the U.S.19 These outcomes are often found in diverse ethnic marginalized populations making it difficult to disentangle the relationship between socioeconomic status, access to care, and clinical factors. Hawaii is unique in that all populations, regardless of socioeconomic status have access to health services. Despite
the equal accessibility to care, this study shows that Hawaiian women and children are experiencing worse health outcomes compared to other groups in Hawaii due to risk factors beyond socioeconomic status and access to care: Hawaiian women use less prenatal care and have higher IMR despite universal access. Three important factors are associated with these findings: Hawaiian women who are unmarried and/or high parity for age use less prenatal care; (2) Hawaiian women do not have a higher rate of low birth weights despite lower socioeconomic status; and (3) Hawaiian infants have an excessive postneonatal mortality rate. These findings could potentially and significantly impact policy and program planning required to eliminate the excess health disparities Hawaiians experience.

Although a relationship between prenatal care utilization and low birth weight is widely assumed, this was not the case for Hawaiians. Unmarried marital

<table>
<thead>
<tr>
<th>Maternal Ethnicity</th>
<th>Predictor of Not Following Adequate Prenatal Care Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High parity for age Unmarried Low educational attainment</td>
</tr>
<tr>
<td>Hawaiian</td>
<td>X X X X X X</td>
</tr>
<tr>
<td>Caucasian</td>
<td>X X X X X X</td>
</tr>
<tr>
<td>Japanese</td>
<td>X X X X X X</td>
</tr>
<tr>
<td>Filipino</td>
<td>X X X X X X</td>
</tr>
</tbody>
</table>

- High Parity for Age: Defined as one or more previous births for adolescents, three or more previous births for mothers of age 18-21 years, four or more previous births for mothers 22-24 years and five or more previous births for mothers 25 years and older.
- Low Educational Attainment: Defined as two or more years below expected grade level of age for adolescents (less than 18 years) or less than 12 years for adults.
- Non-U.S. born status: Women from US Territories included as part of the foreign-born group.

<table>
<thead>
<tr>
<th>Stressor:</th>
<th>Maternal Ethnicity</th>
<th>Hawaiian</th>
<th>Filipino</th>
<th>Japanese</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preoccupied with concerns over body image</td>
<td>Discomfort in seeking services outside family</td>
<td>Family-related stress</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conflict with spouse or mate who was perceived as dominant</td>
<td>Preoccupation with need to gain social acceptance in community</td>
<td>Discomfort in sharing troubling thoughts and feelings because they may be burdensome to others</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conflict with family who was perceived as overprotective</td>
<td>Cognitive style emphasizes expectations thru pregnancy are not congruent with lived experiences</td>
<td>Worries about pregnancy and birth complications</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethnicity of Infant</th>
<th>Number of Low Birth Weight babies under 2500g</th>
<th>Low Birth Weight Rate (per 1,000 births)</th>
<th>% of Low Birth Weight (No LBW in ethnic group/total no. of LBW babies)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian</td>
<td>213</td>
<td>5.3</td>
<td>16.2</td>
</tr>
<tr>
<td>Hawaiian</td>
<td>345</td>
<td>7.3</td>
<td>26.2</td>
</tr>
<tr>
<td>Chinese</td>
<td>46</td>
<td>6.9</td>
<td>3.5</td>
</tr>
<tr>
<td>Filipino</td>
<td>327</td>
<td>9.3</td>
<td>24.8</td>
</tr>
<tr>
<td>Japanese</td>
<td>199</td>
<td>9.4</td>
<td>15.1</td>
</tr>
<tr>
<td>All others</td>
<td>187</td>
<td>7.4</td>
<td>14.2</td>
</tr>
<tr>
<td>Total</td>
<td>1,317</td>
<td>7.5</td>
<td>100%</td>
</tr>
</tbody>
</table>
status and high parity for age, not utilization, were the key predictors of low birth weight among Hawaiians. These findings suggest that further research is needed to clarify whether barriers to prenatal care still exist and are not being adequately addressed for these populations. One possibility is that Hawaiian women are not engaging in western medicine for prenatal care, and may instead be seeking traditional practices for prenatal care. The implication is that public health professionals may need to focus on maximizing support services that are culturally competent for women who are not married and have high parity for age.

Perhaps the most troublesome finding of these studies is the high postneonatal deaths rates among Hawaiian infants. High rates of postneonatal death are rare in developed countries, as many causes of death during this stage are identified and prevented. It is surprising to find a high rate of postneonatal mortality because it is considered a "preventable mortality." In the U.S., only Hawaiians and Native Americans experience more postneonatal mortality than neonatal mortality. In Hawaiians, who have near normal percentages of low birth weight, the higher than expected postneonatal mortality rates suggest that more research is needed to explore if poverty and maternal chronic disease, rather than low birth weight, are more important mediators of infant mortality risk in some populations.

Alternatively, these findings may reflect a more general decline in public health in the United States. The nation’s low international ranking (27th in 1997) of infant mortality is possibly a reflection of the lack of public health professionals’ concern and decreasing public interest in maternal and child health over the past 20 years. Decreased public interest would then translate into lower federal funding that has occurred, in part, because of setting priorities based on aggregate measurements. Overall infant mortality declines mask persistent and remedial problems in segments of the population. The findings from this study on Hawaiian specific infant mortality predictors and outcomes are possibly indicative of this problem.

References
Diabetes Mellitus Prevalence in Out-Patient Marshallese Adults on Ebeye Island, Republic of the Marshall Islands

Seiji Yamada MD, MPH, Anna Dodd MD, Tin Soe MD, PhD, Tai-Ho Chen MD, and Kay Bauman MD, MPH

Abstract
The purpose of this study was to use a low-cost method of estimating prevalence of diabetes mellitus for a small island population receiving medical care from a single facility. A suitable sample of 692 (16.4%) from a total of 4,223 medical records of Ebeye Island Marshallese adult outpatients 30 or more years of age was reviewed in July and August 2000 for evidence of diabetes mellitus. Diagnosed diabetes was defined as having a diagnosis of diabetes noted in the chart. In patients without a diagnosis of diabetes, undiagnosed diabetes was defined as one fasting whole blood glucose ≥ 7.0 mmol/l (126 mg/dl) or one random whole blood glucose ≥ 11.1 mmol/l (200mg/dl). Impaired fasting glucose was defined as one fasting whole blood glucose 6.1-7.0 mmol/l (110-125mg/dl). For this population of adults 30 or more years in age, the crude prevalence of diabetes (diagnosed cases: 13% (confidence interval; CI = 10-15%) and undiagnosed cases 6.9%(CI = 5.0-8.8%)) was 20% (CI = 17-23%). As the population of Ebeye is younger than the world population, adjustment to a standard world population gives an age-adjusted prevalence of diabetes in adults 30 or more years of age of 27%, and an age-adjusted prevalence in adults 20 or more years of age of 20%. In comparison, the crude prevalence of diagnosed and undiagnosed diabetes in the U.S. in adults 20 or more years of age is 8.3%, and the worldwide prevalence in adults 20 or more years of age is 4.0%. Limitations of our methodology include lack of randomization, lack of access to proper laboratory equipment, and passive case-finding, necessitating revision of standard diagnostic criteria. Prevalence rates of diabetes in Marshallese outpatients are thus significantly higher than U.S. or worldwide rates. In addition, there are many cases of undiagnosed diabetes in the RMI. Recommended are a cross-sectional serosurvey of a large age- and gender-stratified population, increased resources to care for people with diabetes, and public health interventions to improve nutrition and facilitate physical activity in order to lower the prevalence of diabetes. The large-scale social forces that lead to diabetes need to be addressed accordingly.

Background
The RMI is composed of 29 atolls and 5 small, lowlying islands. Although the total landmass (70 sq. mi. or 181 sq. km.) is approximately equal to Washington D.C., the nation spreads across 750,000 square miles of the Central Pacific. The nation is roughly split into 2 island chains, Ratak (Sunrise) in the east, and Ralik (Sunset) in the west. Majuro, the nation's capital, is in the Ratak chain, while Kwajalein Atoll, where Ebeye is located, is in the Ralik chain. According to the 1999 Census, the total population of the RMI is 50,840, 68% of which resides in Majuro and Kwajalein Atolls. Kwajalein Atoll contains 97 islands with a total landmass of 6.5 square miles. The islands enclose a 1,100 square mile lagoon. According to the census, the total Marshallese population of Kwajalein atoll is 10,902, the vast majority of which, 9,345 live on Ebeye, one island within Kwajalein Atoll. Ebeye, with a landmass of 0.14 square miles, has the highest...
population density in the RMI at 66,750 people per square mile. The average household size in Kwajalein atoll is 9.10

Although somewhat geographically isolated, the RMI has a long history of occupation and colonization, being claimed first by Spain, then colonized by Germany and subsequently Japan. After World War II, the U.S. administered the Marshall Islands as part of the Trust Territory of the Pacific Islands. During their administration, the U.S. conducted a nuclear testing program in the northern atolls of Bikini and Eniwetak from 1946 to 1957.11 The Marshall Islands separated from the Trust in 1978 and have been independently governed since that time. Currently, the U.S. leases Kwajalein Island and several other islands in the atoll to support a military base formerly called the United States Army Kwajalein Atoll/Kwajalein Missile Range (USA K/A/KMR), now known as the Reagan Test Site (RTS), where some two thousand U.S. personnel working for defense contractors and their dependents live. Grocery stores are generally well-stocked, and the amenities on Kwajalein Island are similar to those available to the general public in Hawaii. The contractors at RTS are some of the few large employers in the Marshall Islands, and the employment opportunities draw many families to Kwajalein Atoll from other atolls. A minority of Marshallese workers lives on Kwajalein, while the majority lives on Ebeye and commutes to work by ferry. As noted above, some nine thousand Marshallese live on the 66 acres of Ebeye Island. Large-scale agriculture is not possible on coral rock and paved Ebeye. Historically, water, sewage, and electricity services have been spotty. The variety of available foods is limited, and the Marshallese tend to subsist on chicken, fish, and non-perishable items. Poor quality food and the lack of participation in physical activity may contribute to overweight and obesity in Ebeye.

This study does not examine the epidemiology of overweight and obesity on Ebeye, but the epidemic of overweight has been documented in other areas of the Marshall Islands. In a study of 1100 subjects from Majuro (the capital of the Marshall Islands) and three remote islands, in 18 to 49 year-olds, 30.7% of men were overweight (25<BM1<30) and 19.8% were obese (BM1>30); 28.8% of women were overweight and 32.8% were obese (Gittelsohn J et al. Overnutrition and undernutrition in the Republic of the Marshall Islands. Unpublished report, 1998).

Based on the information found in the medical records, patients were classified into three groups: (a) diabetic, (b) impaired fasting glucose, and (c) non-diabetic or no glucose screens done, defined as follows. Patients diagnosed with diabetes by their clinicians were classified as diabetic. Patients without previously diagnosed diabetes were categorized in the following manner:

(a) undiagnosed diabetes; fasting whole blood glucose ≥ 126mg/dl (7.0 mmol/l) or random whole blood glucose ≥ 200 mg/dl (11.1 mmol/l)
(b) impaired fasting glucose (IFG): fasting whole blood glucose 110-125 mg/dl (6.1-7.0 mmol/l)

(c) normal fasting glucose: fasting whole blood glucose <110 mg/dl (6.1 mmol/l) or never having had their glucose tested.

Patients who had received glucose testing had had their whole blood glucose measured with an Elite personal glucometer from Bayer (the only means of measuring glucose on Ebeye, as no analyzer was available at the time of the study.) Of note, the above values are the serum glucose criteria of the American Diabetes Association (ADA). Whole blood glucose levels are lower than equivalent serum glucose levels. Thus, by utilizing serum glucose cutoffs for whole blood levels, we underestimate the prevalence of diabetes. Further, the ADA diagnostic criteria require that these glucose criteria be met on two separate occasions, and that the > 11.1 mmol/l (200 mg/dl) values be accompanied by symptoms. We, however, relied on single measurements if multiple measurements were not available because the proportion of patients who had any glucose measurements done at all was very small. We also did not require that patients exhibit symptoms, as progress notes were sparse. Patients with known diabetes, as diagnosed by their health providers in Ebeye, were included in the diabetic group. Information about levels was obtained from progress notes and laboratory results indicating blood glucose measurements.

Patients who had not had a glucose measurement were categorized as non-diabetics. After the sampling had been performed - in order to ascertain the approximate fraction of clinic patients that had had a glucose measured - a small non-random subsample of 67 alphabetically contiguous charts of patients determined to be non-diabetic were reviewed a second time.

Statistical Analysis

The direct method of age-adjustment, utilizing the age distribution of the Republic of the Marshall Islands and a standardized world population (utilized by the International Association of Cancer Registries), was used to calculate an age-adjusted prevalence rate. This rate utilized as its denominator the number of charts that we reviewed. Although our sampling was not randomized, assuming that no major bias was introduced via the sampling method, confidence intervals of the prevalence rates were calculated.

Results

A total of 692 outpatient medical records were analyzed. Of the subsample of 67 patients who were determined not to have diabetes, most (47 of 67 or 70%) had never ever had a glucose measurement. That is, the majority of patients classified as non-diabetic were thus classified on the basis of not ever having had a glucose measurement performed. Table 2 depicts the classification of patients into diagnostic groupings, stratified according to age.

Table 3 shows the prevalence of the various diagnostic categories. The total prevalence of diabetes (diagnosed and undiagnosed) in Marshallese outpatients ≥30 years of age is 20% (CI = 17-23%), with 13% (CI = 10-15%) of patients with diagnosed diabetes and 6.9% (5.0-8.8%) with undiagnosed diabetes. The prevalence of impaired fasting glucose (IFG), 2.5%, is shown in Table 4. Table 5 shows the age-stratified breakdown of hyperglycemia (that is the sum of patients with diagnosed and undiagnosed diabetes and impaired fasting glucose). Overall, the prevalence of all measured parameters increases with age, though the rate drops slightly from the 50-59 to the 60-74 age groups. Figure 1 depicts the breakdown of diagnosed and undiagnosed diabetes and IFG for all age groups greater than 30 years of age.
Table 3.— Prevalence of Diabetes in Marshallese Outpatients ≥30 Years of Age at the Ebeeye CHC

<table>
<thead>
<tr>
<th>Age</th>
<th>30-39</th>
<th>40-49</th>
<th>50-59</th>
<th>60-74</th>
<th>≥75</th>
<th>All Ages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diagnosed Diabetes (CI)</td>
<td>2.7% (0.8-4.4)</td>
<td>12% (7.3-16)</td>
<td>32% (23-41)</td>
<td>27% (15-39)</td>
<td>32% (12-51)</td>
<td>13% (10-15)</td>
</tr>
<tr>
<td>Undiagnosed Diabetes (CI)</td>
<td>2.7% (0.8-4.4)</td>
<td>4.9% (2.0-7.8)</td>
<td>15% (10-25)</td>
<td>19% (8.5-33)</td>
<td>14% (0-29)</td>
<td>6.9% (5.0-8.8)</td>
</tr>
<tr>
<td>Total Prevalence of Diabetes (diagnosed + undiagnosed)</td>
<td>5.3% (2.6-7.8)</td>
<td>17% (11-22)</td>
<td>47% (38-57)</td>
<td>46% (33-90)</td>
<td>45% (25-66)</td>
<td>20% (17-23)</td>
</tr>
</tbody>
</table>

Percentage of the Marshallese population ≥30 years of age with physician-diagnosed diabetes and undiagnosed diabetes, based on medical record review. CI = confidence interval.

Table 4.— Prevalence of Impaired Fasting Glucose in Marshallese Outpatients ≥30 Years of Age at the Ebeeye CHC

<table>
<thead>
<tr>
<th>Age</th>
<th>30-39</th>
<th>40-49</th>
<th>50-59</th>
<th>60-74</th>
<th>≥75</th>
<th>All Ages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impaired Fasting Glucose</td>
<td>1%</td>
<td>3%</td>
<td>4%</td>
<td>2%</td>
<td>14%</td>
<td>2.5%</td>
</tr>
</tbody>
</table>

Prevalence of impaired fasting glucose in Marshallese outpatients of the Ebeeye Community Health Center age ≥30 years, based on medical records. Impaired fasting glucose is based on a fasting whole blood glucose 110-125 mg/dl.

Table 5.— Prevalence of Hyperglycemia (Diabetes & Impaired Fasting Glucose) in Marshallese Outpatients ≥30 Years at the Ebeeye CHC

<table>
<thead>
<tr>
<th>Age</th>
<th>30-39</th>
<th>40-49</th>
<th>50-59</th>
<th>60-74</th>
<th>≥75</th>
<th>All Ages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Prevalence of Diabetes and Impaired Fasting Glucose</td>
<td>6.0%</td>
<td>20%</td>
<td>51%</td>
<td>48%</td>
<td>59%</td>
<td>22%</td>
</tr>
</tbody>
</table>

Prevalence of diabetes and impaired fasting glucose in Marshallese outpatients of the Ebeeye Community Health Center age ≥30 years, based on medical records. Diabetes includes previously diagnosed and undiagnosed diabetes defined by the criterion of fasting whole blood glucose ≥126 mg/dl or random whole blood glucose ≥200 mg/dl. Impaired fasting glucose is based on criterion of fasting whole blood glucose 110-125 mg/dl.

Table 6.— Age-Adjusted* Prevalence Rates for Various Denominators and Comparable Figures from Elsewhere

<table>
<thead>
<tr>
<th>Prevalence Category</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age-Adjusted Prevalence of Diabetes in Ebeeye Population as a Whole</td>
<td>12%</td>
</tr>
<tr>
<td>Age-Adjusted Prevalence of Diabetes in Ebeeye Adults ≥ 20 Years of Age</td>
<td>20%</td>
</tr>
<tr>
<td>Crude Prevalence of Diabetes in U.S. Adults ≥ 20 Years of Age†</td>
<td>6.3%</td>
</tr>
<tr>
<td>Worldwide Prevalence of Diabetes in Adults ≥ 20 Years of Age‡</td>
<td>4.0%</td>
</tr>
<tr>
<td>Age-Adjusted Prevalence of Diabetes in Ebeeye Adults &gt; 30 Years of Age</td>
<td>27%</td>
</tr>
<tr>
<td>Crude Prevalence of Type 2 Diabetes in Native Hawaiians &gt; 30 Years of Age§</td>
<td>20.4%</td>
</tr>
</tbody>
</table>

*to World Standard population, see note 15; †CDC, see note 16; ‡King, see note 1; §Grandinetti, see note 5
For purposes of comparison with published data, we calculate the age-adjusted prevalence rates for diabetes in Ebeye in the entire population and in adults ≥20 years of age as follows. Assuming that there are no cases of diabetes in Marshallese under the age of 30, the age-adjusted (to the world standard population) prevalence rate for diabetes (diagnosed and undiagnosed) in the Ebeye population as a whole is 12%. The age-adjusted prevalence rate for diabetes in Ebeye adults ≥20 years of age is 20%. The age-adjusted prevalence rates for diabetes in adults ≥30 years of age is 27%. It would also be possible to age-adjust to the U.S. population to facilitate comparison to U.S. figures, but this would greatly inflate the figures.

Discussion
The age-adjusted prevalence of diagnosed diabetes was 20% in Marshallese outpatients >20 years of age at the ECHC. This is a much higher rate than the crude prevalence of diabetes (diagnosed and undiagnosed) of 8.3% in U.S. adults ≥20 years of age (in an older population than the world standard) and the worldwide rate of 4.0% in adults ≥20 years of age. See Table 6.

The crude prevalence of IFG was lower in Marshallese outpatients ≥30 years of age (2.5%) than in U.S. adults ≥20 years of age (6.9%). This difference reflects the low levels of testing for fasting glucose in our population and is an artifact of our passive case-finding methodology.

The age-adjusted prevalence of diabetes (diagnosed and undiagnosed) in Marshallese ≥30 years of age, 27%, is greater than that found in Native Hawaiians of the same age, 20.4%. See Table 6. These rates also exceed those found in Western Samoa, American Samoa, and Samoans living in San Francisco. Of note, the study on Native Hawaiians utilized an active case-finding serosurvey methodology and the 1985 WHO criteria for defining diabetes.

It was not possible to assess patients' body mass indices in this study, as most patients did not have their heights and weights in their records. Although the prevalence of overweight and obesity on Ebeye has not been studied, if it is similar to the prevalence documented on Majuro (Gittelsohn et al, 1998), it may contribute significantly to the high prevalence of diabetes on Ebeye.

A significant portion of the population is not being tested or treated for diabetes. This may point to a lack of understanding of the disease, an unwillingness to seek western medical attention, a lack of resources to test for the diabetes, cultural barriers to care, or inadequate screening. Despite the dedication of its workers, health services are limited by inadequate funding. As noted above, at the time of this study, all glucose measurements were performed on a personal glucometer, as the health services did not have an analyzer. Medications for diabetes were often in short supply.
As noted above, the prevalence of diabetes in the Marshall Islands must be seen in the context of large-scale social forces, including history and political economy. Living conditions on Ebeye are directly related to the strategic uses to which the U.S. has put the Marshall Islands. Weapons testing in the Marshall Islands by the U.S. has disrupted the traditional Marshall Islands culture and has greatly distorted its economy. Ecological destruction, dependence on the U.S., and overcrowding have led to substantial changes in the lifestyle and diet of the Marshallese which presumably have contributed to epidemics of obesity and diabetes in the Marshall Islands.

Limitations of the study. Because the proportion of patients who had ever had a glucose measured was low, we required that the criterion value be met once only, without subsequent confirmation. This may overestimate the number of patients that we enumerated with undiagnosed diabetes.

The number of outpatient charts, 14,806, actually exceeds the population of Ebeye Island, counted to be 9,449 in the 1999 census. This probably reflects a net out-migration of the population from the Ebeye. The 1999 census notes a dramatic change in the age structure of the RMI between the 1988 and the 1999 censuses, with a narrowing of the base of the age pyramid — reflective of a decline in fertility and an out-migration of families with very young children. A second possibility is that patients who have expired might still be on the clinic rolls. Table 1 shows that the study population was comparable to the census population, except for those ≥75 years of age, who were over-represented. Furthermore, given the special circumstances of Ebeye, as outlined above, these findings with this population cannot be generalized to the population of the Republic of the Marshall Islands as a whole.

Other possible sources of data such as inpatient charts, diabetes clinic logs, and the results of community screening programs were not utilized, as the record-keeping was arranged differently, and avoiding duplicate counting would have been difficult. If additional cases from such sources of data were to be counted, however, they would increase the estimated prevalence.

Case-finding was not randomized. Clusters of family members who share or do not share a predisposition to diabetes may share the same last name, putting them closer together in an alphabetical listing. Randomized sampling would have been preferable but would have required more resources. If resources allowed, it would be preferable to review all available charts; then it would not be necessary to calculate confidence intervals.

Data contained in this paper would benefit from confirmation with repeat fasting plasma glucose measurements and oral glucose tolerance tests. If patients with no record of whole blood glucose were formally tested, some proportion of this group would have diabetes and impaired fasting glucose, leading to higher estimates than reported here.

Conclusion
The prevalence of diabetes and impaired fasting glucose in Marshallese on Ebeye is higher than the worldwide rate. There is a need for more thorough investigation to confirm the overall prevalence of diabetes in the Marshallese population. The next step in further delineating the prevalence of diabetes in the RMI would be to conduct a cross-sectional serosurvey of a large, age- and gender-stratified population.

Pacific islands have few funds available for health care, let alone epidemiological inquiries. The methodology utilized here is suggested as a low-cost method for other Pacific districts interested in estimating the prevalence of diabetes in their islands.

Further investigations need to be done to assess the prevalence of obesity, waist-hip ratio, and physical activity. Research should also focus on the Marshallese people’s ideas about weight, disease, wellness, and diabetes.

While more accurate prevalence measures would be useful, these findings should spur an island-wide effort to ameliorate the epidemic of diabetes. People with diabetes need to be identified through intensive screening efforts. Clinical care for patients with diabetes needs to be improved. A family (ohana) support lifestyle interventions for Native Hawaiians have been shown to be more effective than standard care and may be useful in the treatment of diabetes in Marshallse. Further, public health interventions to improve nutrition, facilitate physical activity, and decrease rates of obesity are needed. Nutritional counseling to improve dietary choices must take cultural preferences into account.

The distortions in the culture and lifestyles of the Marshallese people secondary to the continued use of Kwajalein Atoll for Ballistics Missile Defense have likely contributed to the prevalence of diabetes in Ebeye. Through its historical and current involvement in the Marshall Islands, the U.S. bears considerable responsibility for the health and welfare of the Marshallse people. The U.S. should continue to work in concert with the RMI government to address the needs of the community. As noted by Zimmet, “Type 2 diabetes will not be prevented by traditional medical approaches; what is required are major and dramatic changes in the socio-economic and cultural status of people in developing countries and the disadvantaged, minority groups in developed nations.” A social justice perspective on the health problems of the Marshallese people suggests that the response of the health community should be one in solidarity with the people.
Acknowledgements

We would like to thank Dr. Richard Arakaki and Dr. Marjorie Mau for their helpful suggestions.

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17. King.
18. Grandinetti A et al.
25. Zimmel P.
Native Hawaiian Health

Prior to Western contact in the late 18th century, Native Hawaiians were a healthy and thriving community with little threat of infectious or contagious diseases (Bushnell, 1993). However, Captain Cook's arrival to the Hawaiian Islands in 1778 spurred a rapid decline of the Native Hawaiian population. In stark contrast to the healthy and vibrant community of pre-Western contact, poor health and socio-economic status are constant focal points of today's Native Hawaiian community. Presently, in the state of Hawaii, Native Hawaiians display some of the most discouraging health statistics, including the highest rates for chronic conditions such as asthma, diabetes, hypertension, and heart conditions (Johnson, B., et al., 1998). Native Hawaiians also have the lowest life expectancy of any ethnic group in Hawaii (Department of Health, 1996), and among the prominent ethnic groups in the state, display the highest mortality rates for major causes of death including heart disease, cancer, stroke, accidents, and diabetes (Braun & Look, 1995; Blaisdell, 1993).

Native Hawaiian Center of Excellence

Efforts by the John A. Burns School of Medicine (JABSOM) to actively address the plight of Native Hawaiians are being implemented by its Native Hawaiian Center of Excellence (NHCCE), which is funded by the Health Resources and Service Administration and the United States Department of Health and Human Resources. In existence since 1991, the NHCCE is now a division within the newly formed Department of Native Hawaiian Health.

The NHCCE addresses its mission, "To improve the health of all Native Hawaiians," by increasing the number of Native Hawaiians practicing medicine; improving retention of Native Hawaiian medical students; ensuring that Native Hawaiian culture, health issues, and culturally appropriate practices are incorporated into the medical school curriculum; increasing the number of Native Hawaiian faculty and Native Hawaiians in academic medicine; facilitating Native Hawaiian medical students and junior faculty research on Native Hawaiian health issues, especially as they pertain to the delivery of healthcare services to Native Hawaiians; and, by increasing public awareness of Native Hawaiian health issues.

NHCCE Community Health Research Program

"...The Native Hawaiian world view is a complex and extensive process which requires an open mind and acknowledgement that most things unique to the Native Hawaiian world view are inadequately expressed through Western theoretical constructs." (Tsark, et al., 1998, p. 229) Educational institutions such as JABSOM have the ability to spark interest, impart progressive knowledge, challenge one's worldview, and serve as catalysts for social justice and change. Utilizing these concepts, the NHCCE developed the NHCCE Community Health Research Program (NCHRP). With the support of Dr. Kenton Kramer of JABSOM’s Office of Medical Education, the Program is offered primarily to first year medical students as an elective in their community health rotation. The program’s objectives are to: 1) provide interested students with a basic introduction to scientific research; 2) increase awareness of Native Hawaiian health issues and research opportunities in Native Hawaiian health; 3) provide students with opportunities to conduct original research or work with a research mentor; and 4) expose students to lapa‘au (traditional Native Hawaiian healing practices). The goal of the NCHRP is to develop future physicians and researchers who have an understanding and awareness of both western and indigenous constructs. This will ensure that future physicians and researchers will be respectful and sensitive to the needs of indigenous populations.

NCHRP is a popular choice among first year medical students because of its novel approach to an otherwise standard research course, the ability to fulfill multiple JABSOM requirements, an opportunity to work with research mentors, and accessibility to subject areas not covered elsewhere in JABSOM’s curriculum. Since its inception in 1999, six to eight first year medical students annually have enrolled in NCHRP.

The demand for the program has exceeded the available resources to accommodate all interested students. Medical students not accepted into the NCHRP are welcomed to audit the sessions of interest to them and obtain assistance with their research requirements. Because of the program’s popularity among medical students and the importance of this type of program in restoring the health of Native Hawaiians, the NHCCE is investigating additional ways in which to incorporate indigenous medicine, cultural competency, and culturally sensitive research training into the entire JABSOM’s four-year medical curriculum.

The curriculum is 9 months in length with weekly 4-hour meetings that consist of lectures and discussion with guest speakers and hands-on learning through participation on research projects. Lecture topics include basic research methodology and design, community based participatory research, and Native Hawaiian cultural protocol. Students are exposed to research and community health partners throughout the year. These partners include Native Hawaiian and non Native Hawaiian health researchers who are involved in Native Hawaiian health research. These individuals serve as mentors and include Native Hawaiian researchers such as Nalene Andrade, M.D. (Chair, Department of Psychiatry), Blane Chong, M.D. (Queen’s Physicians Group), Clayton Chong, M.D. (Principal Investigator for ‘Imi Hale), Marjorie Mau, M.D. (Chair, Department of Native Hawaiian health) and Kekuni Blaisdell, M.D., noted Native Hawai-
ian rights activist and western trained hematologist. Dr. Blaisdell has been pivotal in incorporating *lapa'au* into the curriculum with a series of *lapa'au* sessions throughout the year. Experts share their knowledge with students on various aspects of *lapa'au* such as *ho'oponopono* (traditional Native Hawaiian conflict resolution), *lomi lomi* (traditional Native Hawaiian massage), *la'a* (traditional Native Hawaiian healing using medicinal plants), and kahealani (traditional Native Hawaiian healing by calling or prayer).

Through active learning and participation, students incorporate information and knowledge acquired from lectures and discussions into a research project. Upon completion of their first unit (August-November), students will have completed a literature review; by their second unit (November-March), a methodology section; and by the end of their third unit (March-June), their data analysis and discussion sections of their project are completed. The following table lists previous NCHRP student projects by subject category, as well as corresponding research mentors.

The program encourages students to present and publish their research findings. Students have presented at local, national, and international conferences such as JABSOM's Biomedical Research Symposium, Showcasing Diversity: Research From a Multicultural Perspective at the University of Hawaii, Manoa, National Conference and Exhibition for the American Academy of Pediatrics, and the Pacific Region Indigenous Doctors' Congress. In 2003, a former NCHRP student was awarded second place honors in the JABSOM's MS2 Research Symposium for the project, *Indigenous Popolo*, (*Solanum americanum*) an Investigation of Solanine Content. Three former NCHRP students furthered their research training by completing the Harvard University Minority Summer Research Program. Although the skills learned through the NCHRP are beneficial to medical students personally and professionally, the program emphasizes the need and importance of communicating findings back to the community with which they did their research as well as understanding the impact of their research on the health of Native Hawaiians.

While the NCHRP provides students with training in scientific research, the strength and uniqueness of the program lies in its commitment to improve the health of the Native Hawaiian community and its holistic emphasis on health and well-being. Students complete the program with the knowledge of how to design a scientific research project.

See *Native Hawaiian Health*, p. 57

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Cancer Research Center Hotline

Ethnic Disparities in Colorectal Cancer Incidence and Mortality in Hawaii

Brenda Y. Hernandez PhD and Marc T. Goodman PhD

Colorectal cancer is one of the most common cancers in Hawaii. The majority of cases occur among individuals 50 years and older and males are disproportionately affected. Each year, over 600 Hawaii residents are diagnosed with colorectal cancer and nearly 150 die from the disease. The incidence of colorectal cancer statewide has remained relatively stable while mortality rates have decreased over the past thirty years. This parallels the overall trends for this malignancy across the United States. Nonetheless, with an increasingly aging population, the total number of individuals diagnosed with and dying from colorectal cancer continues to increase each year in Hawaii.

There is considerable variation in the incidence of and mortality from colorectal cancer among the major ethnic groups in Hawaii (Figure 1). Japanese men and women have the highest rates of colorectal cancer, although the disparity is more pronounced among men. Between 1996 and 2000, the average annual incidence of colorectal cancer among Japanese men was 82.66 cases per 100,000 population (age-adjusted to the 2000 US population) compared to 67.36 per 100,000 among all men statewide. Filipino women had the lowest incidence of this malignancy (33.25 per 100,000 population) among all sex-ethnic groups.

With respect to deaths from colorectal cancer, between 1996 and 2000, Hawaiian men had the highest mortality rates compared to men overall (23.95 per 100,000 population and 18.26 per 100,000 population, respectively, age-adjusted to the 2000 US population) (Figure 2). A similar, albeit less dramatic, difference was also observed among Hawaiian women who had the highest colorectal mortality rates compared to women overall (13.97 per 100,000 and 11.59 per 100,000, respectively). Filipino women had the lowest death rates from colorectal cancer (8.85 per 100,000 population) among all sex-ethnic groups.

Ethnic disparities in survival among colorectal cancer patients in Hawaii have been observed since the 1960s. A recent analysis found that the disparities in colorectal cancer survival between Hawaii's major ethnic groups have decreased over the past forty years with the exception of Native Hawaiians. Native Hawaiians continue to have the poorest survival of all groups.

Ethnic differences in the diagnostic stage of colorectal cancer are pronounced (Figure 3). These differences are observed for both men and women. Chinese and Japanese had the highest proportion of in situ cancers (9% and 10%, respectively). Hawaiians had the lowest proportion of these early cancers (4%). Conversely, Hawaiians had the highest proportion of colorectal cancer diagnosed at the most advanced stages (20%) compared to all ethnic groups.

Regular colorectal cancer screening beginning at age 50 is recommended by the National Cancer Institute and the American Cancer Society beginning at age 50. Screening tests include fecal occult blood testing, flexible sigmoidoscopy, colonoscopy, and double contrast barium enema. Although the relative efficacy of individual tests is currently under scientific review, in general, colorectal cancer screening has been shown to facilitate early intervention, including the removal of pre-cancerous colorectal polyps, resulting in a decline in mortality.

Differences in screening utilization may account for the ethnic variation in colorectal cancer incidence and mortality in Hawaii. A statewide household survey of the Hawaii Department of Health's 2002 Behavioral Risk Factor Surveillance System suggests wide ethnic variation in colorectal cancer screening utilization. Among individuals 50 and over, Japanese followed by Caucasians had the highest use with 46.1% and 40.2%, respectively, reporting ever having a sigmoidoscopy or colonoscopy. Screening was substantially lower among Hawaiians (34%) and Filipinos (24.6%).

These data support the notion that the high incidence among Japanese may at least be partly attributable to more screening compared to other groups. The data do not, however, completely explain the comparatively greater mortality observed among Hawaiians. A recent analysis of Hawaii Tumor Registry data found that although poor survival among Native Hawaiians can be attributed, in part, to a greater proportion of cancers diagnosed at advanced stages, it does not entirely account for survival differences among Hawaiians.

Ethnic variation in colorectal cancer incidence and mortality may also be explained by differences in genetic and lifestyle factors. Approximately 15% of colorectal cancers occur in individuals with a family history suggesting an inherited genetic condition, shared risk factors, or both. Inherited forms of colorectal cancers constitute only a small proportion of all cancers and include familial adenomatous polyposis (FAP) and the hereditary nonpolyposis colorectal cancers (HNPPC). FAP and HNPPC are caused by germline mutations in two specific types of genes, the adenomatous polyposis coli (APC) gene and DNA mismatch repair (MMR) genes (e.g., MLHI, MSH2), respectively. The majority of colorectal cancers occur among individuals without a family history.

Investigators at the Cancer Research Center of Hawaii (CRCH) have studied both genetic and lifestyle risks factors for colorectal cancer. Lifestyle risk factors influencing the development of colorectal cancer were found to include high intake of red meat, low intake of fiber, high alcohol consumption, obesity, lack of physical activity, and smoking. CRCH investigators have long observed...
Figure 1.— Incidence of Invasive Colorectal Cancer, Hawaii 1996-2000 (Age-adjusted to the US 2000 Population)

Figure 2.— Mortality from Invasive Colorectal Cancer, Hawaii 1996-2000 (Age-adjusted to the US 2000 Population)

Figure 3.— Distribution of Stage of Diagnosis of Colorectal Cancer in Hawaii, 1996-2000 (Men and Women)
that Japanese immigrants to Hawaii have a substantially increased risk of colorectal cancer compared to Japanese in Japan, as well as U.S. Caucasians. This increased risk has also been observed among Japanese Americans in other parts of the United States. CRCH investigators attribute at least some of this increased risk among Japanese Americans to the adoption of Western lifestyle habits resulting in increased caloric intake, increased body weight, and reduced levels of physical activity, as well as consumption of red meats.

The development of colorectal cancer may also be influenced by genetic susceptibilities. CRCH investigators have observed that relatively common polymorphisms in specific genes controlling the metabolism of carcinogens and/or nutrients can confer susceptibility to colorectal cancer. Moreover, these polymorphisms can interact with dietary or other lifestyle exposures to enhance colorectal cancer risk.

Colorectal cancer survival may also be influenced by genetic susceptibilities. In a recent publication in the Journal of the American Medical Association, CRCH investigators reported genetic differences by ethnicity among Hawaii colorectal cancer patients. Apolipoprotein resulting in overexpression of a key cell cycle regulatory protein, cyclin D1, was associated with advanced colorectal cancer among Hawaiian and Caucasian patients but not in Japanese patients. This intriguing finding may, to some extent, explain the more advanced stage at diagnosis and poorer survival among Hawaiians and the comparatively early stage and better survival among Japanese in Hawaii.

Colorectal cancer continues to be a major cause of morbidity and mortality in Hawaii. Disparities among ethnic groups are striking. The high incidence experienced among Japanese likely involves both genetic and dietary influences as well as, to some extent, higher screening utilization. It is not clear to what extent lifestyle habits including the Westernization of diets will continue to influence cancer incidence in future generations of Japanese Americans in Hawaii. The continued high mortality and poor survival among Hawaiians continue to primarily reflect lower screening rates; but, to some extent, they may also reflect genetic susceptibilities resulting in more aggressive tumors or other biologic differences. Continued research and surveillance is necessary to further elucidate reasons for, and eliminate, the ethnic disparities existing for colorectal and other cancers in Hawaii.

For more information about the Cancer Research Center of Hawaii, please visit our website at www.crch.org.

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Native Hawaiian Health from p. 53

study as well as the limitations of this western approach in understanding the well being of Native Hawaiians. Students complete the program with perspectives on concepts such as spirituality and its importance in indigenous healing practices. By providing a program that introduces medical students to both western and indigenous practices, the NCHRP hopes to develop future physicians who can apply this dualistic framework to their future clinical and/or research practices. In this manner, these future physicians can proactively serve and provide insight into restoring of health of Native Hawaiians.

References

Classified Notices

To place a classified notice.
HMA members.—As a benefit of membership, HMA members may place a complimentary one-time classified ad in HMJ as space is available.
Nonmembers—Rates are $1.50 a word with a minimum of 20 words or $30. Not commissionable.

Insurancen Problems?

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A Good Scare Is Worth More To A Man Than Good Advice.  
Everyone wants to relax and quit worrying about severe acute respiratory syndrome (SARS), but that just isn’t possible. A recent major study in the New England Journal of Medicine (NEJM) warned about the risk of commercial air travel. Previously, the World Health Organization defined a SARS contact as any coughing passenger within two rows, but the NEJM study suggests the contact area is wider than that. Analyzing one three hour flight where a 72 year-old man fatally ill with SARS, infected 22 others aboard a Boeing 737 (five of them died) it was found that the risk area is at least three rows. Coughing spreads the infectious droplets, at least an arm’s length, but researchers concluded that the “attack rate” of the virus is variable. The somewhat good news in the report is that the disease is spread only by travelers with outward symptoms, and the silent SARS carriers are not a risk to others.

The World Is Not Necessarily Just.  
An unnamed individual violated Colorado and federal law by mailing a copy of a peer review report. The University of Colorado Hospital Authority asked for a restraining order to prevent publication of the mail received from an anonymous source, citing Colorado law and the federal Health Insurance Portability and Accountability Act provide for confidentiality. U.S. District Judge Walker Miller in Colorado trumped the Colorado peer review statute, and will allow the Rocky Mountain News to publish names and medical conditions discussed in the peer review report. Judge Miller allowed that the hospital arguments for patient privacy were legitimate, but that First Amendment case law is so strong it is overriding. The judge ruled that the public has a right to know about discipline in the medical profession, even if it does invade someone’s privacy. Anyone want to volunteer for the peer review committee?

If Medicare Says “You’ll Get Used To It.” You Won’t.  
Medical Economics surveyed their readers about participation in Medicare: specifically, what would it take to drop out of the federal program. The survey makes no pretense about being a valid statistical sample, but probably is fairly representative. 13% of respondents have already opted out, and another 35% intend to drop out if fees are reduced again. 19% said Medicare is not so bad compared to their managed care contract (then why join that plan? Ed.), so Medicare would have to get much worse before dropping out. 33% are so dependent on Medicare patients, they could not consider dropping out. What most physicians do not know is that the current reimbursement fix is temporary, and the same gross domestic product (GDP) nonsense formula is still in the law, and will return to haunt doctors unless it is modified.

The University – A Modern School Where Football Is Taught.  
If you anticipate that your child will attend a private college, you can buy into a prepaid tuition savings plan that will lock in the tuition cost at the present date, even if your offspring is in diapers. For example, if the tuition is currently $30,000, you can invest $15,000, and receive a certificate that will cover 1/2 of the college’s tuition for one year. Over 220 private colleges and universities, such as Princeton, Amherst and Univ. of Chicago, are in the “$29 plan.” Meanwhile the school will have your money to play with prior to your seedling’s arrival, and suppose he/she proves to be academically too weak for acceptance? Still, considering the enormous increases in tuition in recent years, you might save a bundle.

Genius Is Childhood Recalled At Will.  
A recent study published in Lancet wrestled with determining remedies for chronic low-back pain. 313 adults who complained of backache were randomly assigned mattresses of varying firmness. Using a scale of one to ten, with one being the softest and ten the firmest, patients reported their degrees of pain on waking and again 30 minutes later, as well as pain-related disability. They continued the study for 90 days. Historically, a firm mattress has been recommended, but overall, those given a medium mattress (rated 5.6) were twice as likely to report improvements while lying in bed, upon arising, and in back-pain related disability. So, it appears that all doctors need to do is to prescribe the Goldilocks program - not too soft, not too hard, but just right! No report as yet available on the porridge.

Every Decent Man Is Ashamed Of The Government He Works Under.  
Congress tap dances around the issue of drug pricing, and the Food and Drug Administration (FDA) continues to frighten people about buying cheap drugs from Canada, claiming they might be unsafe. It is certain that pharmaceutical people are applying heavy pressure to all government agencies, but patients are “voting with their feet.” Governors and mayors across the nation are ignoring the smoke screen and helping out on this very popular issue. New Hampshire has established a web site with direct links to Canadian pharmacies that allows residents to order drugs. Minnesota is also working on a web site, and has sent pharmacy inspectors to Canada, visiting several companies that said they want to participate. West Virginia is making plans to import Canadian drugs through local pharmacies rather than mail orders, and is not bothering to ask for federal approval. Vermont and Illinois are trying to get federal approval of similar programs. The FDA claims that city, county or state programs that import drugs violate federal law, and they could be liable. But as the saying goes, something done wrong often enough, becomes right.

The More Claret, The Less Clarity.  
Despite the French penchant for red wine, a group studying breast cancer at the Fred Hutchinson Cancer Research Center in Seattle, has found that booze is not the answer. In interviews 2000 women between the ages of 65 to 79, it was found that those postmenopausal women with a history of breast cancer, drinking two or more alcoholic drinks per day gave a 330% increased risk of lobular cancer and a 50% increased risk of ductal cancer, and a 40% increased risk of estrogen-receptor and progesterone-receptor positive breast cancer. Breast cancers which were hormonally insensitive, had no link to alcohol consumption.

Tell Me What You Eat, And I’ll Tell You What You Are.  
With a semi-disclaimer (“evidence suggests but does not prove”), the Food and Drug Administration is allowing claims that nuts may reduce the risk of heart disease. Much of the data are from large population studies asking people about eating habits, among other variables. Obviously, it cannot prove cause and effect, but studies have shown that nuts may help lower elevated serum cholesterol. Nuts are high in unsaturated (beneficial) fats. The FDA doesn’t allow health claims for certain nuts, including macadamias and cashews, because they contain higher levels of saturated fat, but the difference is very slight. Walnuts producers claim the highest levels of heart-healthy omega-3 fatty acids, almonds have the highest levels of vitamin E and calcium, and peanuts contain resveratrol that may protect against heart disease.

The Best Thing That Can Be Said About Golf Is That It Isn’t Compulsory.  
Attention golfers! The Mayo Clinic Sports Medicine Center is studying a phenomenon commonly called “the yips.” The condition is one in which the golfer suddenly twitches, jerks the hands, or flinches in situations of criticality. Sixteen low handicap golfers took part in a putting tournament in hopes of determining if the condition is neurological or psychological, and whether beta blockers can help alleviate yips. A scenario was set up where the “critical situation” is lining up a 12 inch putt with $400 on the line, and cameras rolling to record the action. So far, Mayo researchers have been studying yips since 2000, with no defined conclusions.

ADDENDA  
❖ On average in America, one person dies every thirty minutes as a result of drunken driving.  
❖ At some point in their lives, 90% of women will be solely responsible for their finances.  
❖ 56% of Americans sing Christmas carols to their pets.  
❖ “Politics” is actually a combination of two Latin roots: poli which means many, and tics which means blood suckers.  
❖ When will everyone quit insisting that I have a nice day?

Aloha and keep the faith — rts
HMA Advocacy Works

For physicians and their patients

Through the court system

HMA is currently suing Hawaii Medical Services Association for employing illegal policies and practices including overruling physicians' determined "medical necessity," failing to provide a proper explanation when a claim is denied, and arbitrarily reducing a physicians' payment. These and other practices have impacted both physicians and patients as HMSA's policies force physicians to absorb costs or make patients pay hundreds of thousands of dollars out of their own pockets to receive particular treatment or services. The case continues through the court system. HMA's lawsuit is part of a national movement by medical societies to take a stand against unfair insurance practices.

International Healthcare Management's $65 million anti-trust suit. When a new healthcare provider planned to enter the Hawaii marketplace, HMA favored competition. HMA physicians studying the plan had strong questions and stated them. HMA and its leaders were hit with a $65 million antitrust suit. The suit got dismissed. HMA and its physicians won! Physicians may now negotiate contracts with insurers without fear of anti-trust reprisal so long as there is no intent to price fix or boycott. The court ruled that HMA and other organizations were advising members when it commented on concerns and that is a role professional organizations are allowed to take.

In the Legislature

Informed Consent Revised. The previous Hawaii law required physicians to inform their patients of every "possible" risk, complication and anticipated benefit of medical treatment or surgical procedure. The word "possible" established a standard that no physician was able to meet. As a result, all physicians were vulnerable to unmerited lawsuits. That looming danger translated into significant malpractice insurance risk thus jeopardizing patient access to care. HMA led an initiative to change the law and succeeded!

HMA continues to be an advocate for physicians and their patients. See the inside front cover for current legislative priorities.

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