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Perspectives of Chuukese Patients and Their Health Care Providers on the Use of Different Sources of Interpreters

Kara Wong Ramsey MD; James Davis PhD; and Gina French MD

Abstract

Background: Immigrants from Chuuk, a Pacific Island nation in Micronesia, are a growing population of limited-English speakers in Hawai‘i. The purpose of this study was to examine the perspectives of Chuukese patients and their physicians in Honolulu, Hawai‘i on interpreter services.

Methods: An anonymous multiple choice survey was distributed to potential patients through a Chuukese community group and to physicians through the Hawai‘i Residency Programs to examine the following sources of interpreters: Family member or friend, telephone interpreter, or professional in-person interpreter. Statistical significance of cross-tabulated responses was analyzed using Fisher’s exact test.

Results: 114 surveys from health care providers and 95 surveys from Chuukese community members were analyzed after exclusion criteria. Using a family member or friend was the method most frequently used by physicians (78%) and Chuukese patients (71%). Telephone interpreters were used the least by physicians (6%) and Chuukese patients (2%) and both rated it poorly in terms of comfort and ease of use. Physicians rated professional in-person interpreters as the best method (67%) while Chuukese patients rated using a family member or friend as the best method (61%), especially among those who reported a lower English proficiency (P = .04) and who lived in Hawai‘i for fewer years (P > .01).

Discussion: The preference of Chuukese patients for using a family member or friend as interpreter differs from national standards which promote the use of a professional interpreter. Given the preference of both physicians and Chuukese patients for in-person interpreters over telephone interpreters, there is a need for increased training and hiring of in-person interpreters.

Keywords
Chuukese, Micronesian, translator, medical interpreters, language barrier, telephone interpreter, professional interpreter, cross cultural care

Introduction

The National Standards on Culturally and Linguistically Appropriate Services requires that health care organizations provide patients with limited English proficiency free access to interpreter services at all points of contact in a timely manner. Furthermore, they must assure the competence of translation services, and family and friends should not be used as translators unless requested by the patient. A recent survey of 135 hospitals found that many hospitals are not meeting these requirements, with only 78% able to provide timely language services in the emergency department and 62% using patients’ family and friends to translate.1 Outpatient clinics show similar trends, with 70% reporting using patients’ family and friends to translate.2 Multiple studies, including both cross sectional surveys and randomized controlled trials, have shown that patient satisfaction, health care provider satisfaction, quality of care, and health outcomes are improved and fewer interpreting errors occur with the use of trained professional interpreters as opposed to ad hoc translators such as family members or friends.3-6 Most of these national studies have examined primarily Spanish speaking patients. Few have looked at languages in which the availability of bilingual staff or professional interpreters is more limited, such as Micronesian languages. Micronesian are a growing population in the United States, with 40% of Micronesians living in Hawai‘i and 41% of that group living within the city of Honolulu. After a 251% increase in the Micronesian population between 1990 and 2000, a 2006 inter-censal estimate showed 14,000 Micronesians in Hawai‘i. A vast majority are from the Federal States of Micronesia, which includes the nation of Chuuk. Eighty percent do not use English as their primary language, and thus may rely on interpreters during their health care encounters.7,9 Due to the limited availability of in-person Micronesian interpreters, telephone interpreters or family/friends are often used. There has been growing interest in training Micronesians as professional interpreters. However previous studies have shown conflicting results in whether patient satisfaction, and clinical outcomes are improved with professional in-person interpreters or telephone interpreters.10,11 The purpose of this study was to assess the availability, utility, accuracy, satisfaction, and cultural appropriateness of different sources of interpreters from the perspectives of both Chuukese patients and their physicians.

Methods

An anonymous multiple-choice survey tool was administered to physicians and Chuukese community members in Honolulu, Hawai‘i to examine the following types of interpreters: family member or friend, professional interpreter via telephone, or in-person professional interpreter. For each of the methods, the survey asked about the user’s opinion on the availability, ease of use, accuracy, and cultural appropriateness of the method as well as the user’s overall preferred method. Physicians were also asked about any perceived barrier to its use in the healthcare setting.

The following demographic information was collected in the Chuukese community survey: age, gender, years lived in Hawai‘i, and clinic most visited. The following demographic information was collected on the physician surveys: healthcare role (resident or attending physician), department or specialty, age, gender, and clinic.

The survey for physicians was created on SurveyMonkey and distributed to attending physicians and residents via e-mail by program administrators through the Hawai‘i Residency Program. The survey was also distributed via e-mail by the respective medical directors at Kooka Kalihi Valley and Kalihi Palama Health Center, two community health centers in Honolulu who serve a large number of Chuukese patients. Physician participants were offered $5 Starbucks cards as incentives.
The survey for Chuukese community members was translated and back-translated by professionally trained Chuukese interpreters through the University of Hawai‘i and New Nations of Micronesia, a Chuukese community group based in Hawai‘i. In partnership with this community group, the paper surveys were administered by the translators at various community and church events without the presence of health care providers to encourage accurate responses without fear of retaliation. Participants from the Chuukese community were offered single ride bus vouchers as incentives.

Only physician and Chuukese respondents who worked at or visited the largest health centers in Honolulu serving Chuukese patients (Kokua Kalili Valley, Kalili Palama, Queen’s Medical Center, and Kapi‘olani Medical Center) were included for data analysis. Health care provider respondents who were not physicians or residents were excluded, as well as those who had never used a family member or friend for translation since this widely used method was the baseline for comparisons with other methods. Preliminary analyses examined the frequencies of survey responses. Subsequent analyses compared questions by cross-tabulating responses. Statistical significance was assessed with Fischer’s Exact Test. This study was approved by the Hawai‘i Pacific Health Research Institute HPHRI # 2011-008 and determined to be IRB exempt.

Results

Physician Surveys

In all, 127 surveys were collected from health care providers and 114 were analyzed after exclusion criteria. See Table 1 for demographic data and Table 2 and Table 3 for survey response results. Telephone interpreter services are largely available, with only 8% of providers reporting it unavailable, compared to 27% of providers reporting in-person clinic interpreter services unavailable. However, attending physicians and residents report the most frequent method actually used was family member or friend (78%) compared to telephone (6%) or in-person clinic or hospital interpreter (13%). Barriers to using a telephone interpreter included “taking too long” (61%) and “too hard to use” (26%). Barriers to using an in-person clinic interpreter included “taking too long” (33%) and being “too expensive” (10%). Overall attending physicians and residents felt that an in-person clinic interpreter was the best way to talk with Chuukese speaking patients (67%) compared to a telephone interpreter (4%) and family member or friend (22%). Compared to attending physicians, residents were significantly more likely to rate a family member or friend as the best way to talk with patients (37% compared to 12%, \( P > .01 \)) and as the most frequently used method (96% compared to 66%, \( P > .01 \)).

Chuukese Surveys

In all, 111 surveys were collected from the Chuukese community and 95 were analyzed after exclusion criteria. See Table 1 for demographic data and Table 2 and Table 3 for survey response results. Seventy-five percent reported needing translation assistance with their doctor. Thirty-one percent reported acting as a translator for a family member or friend. Only 21% reported using a telephone translator and 66% reported using an in-person clinic translator. The most frequently used method was family member or friend (71%) compared to in-person interpreter (20%) and telephone interpreter (2%). The preferred method was family or friend (61%), followed by in-person interpreter (29%), and telephone (3%). People who reported lower English proficiency (rated as “a little” and “not good” as compared to “good” and “very good”) were more likely to report using a family member as the preferred method (72% versus 44% of respondents who reported higher English proficiency, \( P > .01 \)). People who reported lower English proficiency were also more likely to report understanding their doctor only a “little” or “not much” (67% versus 25%, \( P > .01 \)) and feel less comfortable (67% versus 25%, \( P = .01 \)) with an in-person clinic interpreter. People who lived in Hawai‘i for less than 5 years were more likely to report using a family member as the preferred method than those who had lived in Hawai‘i longer (69% versus 47%, \( P > .01 \)).

Discussion

Despite good reported availability of telephone interpreter services, physicians, residents, and Chuukese patients do not rate them favorably in terms of comfort and ease of use and do not use them frequently. Both physicians/residents and Chuukese patients report using a family member or friend as the most frequently used translation method. While overall a majority of both attending physicians and residents rate in-person interpreters as the preferred method, the proportion of residents who reported using a family member or friend as the preferred method was greater than that among attending physicians. In contrast, a majority of Chuukese respondents report using a family member or friend as the preferred interpreters, especially those with lower self-reported English proficiency and who have lived in Hawai‘i for fewer years.

Physicians have been encouraged to use professional interpreters with limited English speaking patients to protect patient confidentiality and ensure accurate and transparent communication. Much of the literature on cross cultural care has been based on Hispanic populations and demonstrates a preference for professional interpreters over family and friends. The attending physicians’ and residents’ results for the perceived best method largely reflect these findings, and may, in fact, be an attempt to try to give the “right” answer as taught in contemporary medical education. Despite this preference, most physicians still report using a family member or friend as the most utilized method, which likely reflects the reported lack of availability of the best method in real practice. However, the preferences of the Chuukese patients in our sample appear to be very different. The reason for this was not addressed in this study. Chuukese patients may feel more comfortable talking about their personal medical issues with a close family member or friend compared to a stranger. One professionally trained Chuukese interpreter noted that Chuukese patients may not trust strangers to discuss their medical problems with their doctor. Anecdotally, some community providers noted that there may also be multiple
regional differences in Chuukese dialects that make it difficult to utilize professional interpreter services broadly. The difference in opinion between physicians and Chuukese patients challenges our current national standards in medicine, which have traditionally advised against using family members or friends as interpreters. They highlight how culturally sensitive health care should be tailored to the preferences of the individual cultural group or perhaps the individual patient.

Limitations of this study include the discretely different physician and patient populations. We surveyed Chuukese community members outside of the medical establishment in partnership with a Chuukese community group to encourage honest responses that might be withheld in the presence of health care providers. Therefore, our participants do not necessarily represent the specific patients with whom the surveyed physician population interacts. However, we did limit our statistical analysis and exclusion criteria to the four largest identified health care providers among the surveyed Chuukese community to provide the best possible comparison. We were unable to compare responses by health care facility since several physician and Chuukese patient respondents identified with multiple facilities.

Despite these limitations, this study is the first to examine the use of sources of interpreters in a Micronesian population, which is a growing population of non-English speakers in Hawai‘i and is increasingly accessing the health care system. Given the preference of both physicians and Chuukese community members for in-person interpreters over telephone interpreters, there is a need for the training and hiring of in-person interpreters at medical facilities. There may also be a need for educational outreach to the Chuukese community to teach about the potential benefits of using a professionally trained interpreter as opposed to a friend or family member for medical translation which may help increase comfort and utilization of this method among Chuukese patients. Our results show that many physicians from multiple hospital centers do not feel that in-person interpreters are readily available at their facilities. Future studies are needed to help understand the discrepancy between Chuukese patients and their physicians in preference for in-person professional interpreters versus a family member or friend as interpreter and to determine the accuracy of Chuukese translation by each of the available methods.

Conflict of Interest
None of the authors identify any conflict of interest.

Acknowledgements
We gratefully acknowledge the community and study support from Dr. Brenda Nishikawa from Kapi‘olani Medical Center and Barbara Tom from Nations of Micronesia. This study received funding support from a resident research grant from the Pacific Medical Administrative Group and biostatistical support by grants from the National Center for Research Resources (U54RR026136) and the National Institute on Minority Health and Health Disparities (U54MD007584).

### Table 1. Demographics of Survey Respondents

<table>
<thead>
<tr>
<th>Physician Survey Respondents (n=114)</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthcare Role</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physician</td>
<td>68</td>
<td>60%</td>
</tr>
<tr>
<td>Resident</td>
<td>46</td>
<td>40%</td>
</tr>
<tr>
<td>Specialty</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pediatrics</td>
<td>67</td>
<td>61%</td>
</tr>
<tr>
<td>Internal Medicine</td>
<td>26</td>
<td>24%</td>
</tr>
<tr>
<td>Ob/Gyn</td>
<td>12</td>
<td>11%</td>
</tr>
<tr>
<td>Family Practice</td>
<td>5</td>
<td>5%</td>
</tr>
<tr>
<td>Psychiatry</td>
<td>4</td>
<td>4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Healthcare Facility (Reflects multiple choices by some respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kapi‘olani Medical Center</td>
</tr>
<tr>
<td>Queens Medical Center</td>
</tr>
<tr>
<td>Kokua Kalihi Valley</td>
</tr>
<tr>
<td>Kalihi Palama Health Center</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Male</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 50</td>
</tr>
<tr>
<td>50 and older</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Chuukese Patient Survey Respondents (n=95)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
</tr>
<tr>
<td>Under 50</td>
</tr>
<tr>
<td>50 or older</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Male</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Number of years lived in Hawai‘i</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1</td>
</tr>
<tr>
<td>1-4</td>
</tr>
<tr>
<td>5-9</td>
</tr>
<tr>
<td>10-14</td>
</tr>
<tr>
<td>15 or more</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Healthcare Facility Used (Reflects multiple choices by some respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kapi‘olani Medical Center</td>
</tr>
<tr>
<td>Queens Medical Center</td>
</tr>
<tr>
<td>Kalihi Palama Health Center</td>
</tr>
<tr>
<td>Kokua Kalihi Valley</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reported English proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very good</td>
</tr>
<tr>
<td>Good</td>
</tr>
<tr>
<td>A little</td>
</tr>
<tr>
<td>Not good</td>
</tr>
</tbody>
</table>

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Table 2. Survey Responses on Different Interpretation Methods

<table>
<thead>
<tr>
<th></th>
<th>Physician responses</th>
<th>Chuukese patient responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td><strong>Family member or friend</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accurate and Understandable?</td>
<td>n=114</td>
<td>67 (59%)</td>
</tr>
<tr>
<td>Culturally Appropriate or Comfortable Method?</td>
<td>n=114</td>
<td>80 (70%)</td>
</tr>
<tr>
<td><strong>Telephone interpreter</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accurate and Understandable?</td>
<td>n=78</td>
<td>68 (87%)</td>
</tr>
<tr>
<td>Culturally Appropriate or Comfortable Method?</td>
<td>n=78</td>
<td>46 (60%)</td>
</tr>
<tr>
<td><strong>In-person clinic interpreter</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accurate and Understandable?</td>
<td>n=73</td>
<td>73 (100%)</td>
</tr>
<tr>
<td>Culturally Appropriate or Comfortable Method?</td>
<td>n=73</td>
<td>71 (97%)</td>
</tr>
</tbody>
</table>

Questions are paraphrased. More people had used and were able to rate using a family member or friend compared to other methods. Survey response choices “Yes” and “Mostly” are combined into “Yes”, and “A little” and “No” are combined into “No” in this table.

Table 3. Physician and Chuukese Patient Responses Comparing Their Most Frequently Used and Most Preferred Interpretation Method

<table>
<thead>
<tr>
<th>Survey Questions</th>
<th>Family member or friend</th>
<th>In-person clinic interpreter</th>
<th>Telephone interpreter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which method do you use the most?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physician respondents (n=114)</td>
<td>89 (78%)</td>
<td>15 (13%)</td>
<td>7 (6%)</td>
</tr>
<tr>
<td>Chuukese respondents (n=95)</td>
<td>65 (71%)</td>
<td>18 (20%)</td>
<td>2 (2%)</td>
</tr>
<tr>
<td>Which method is the best?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physician respondents (n=114)</td>
<td>25 (22%)</td>
<td>76 (67%)</td>
<td>5 (4%)</td>
</tr>
<tr>
<td>Chuukese respondents (n=95)</td>
<td>55 (61%)</td>
<td>26 (29%)</td>
<td>3 (3%)</td>
</tr>
</tbody>
</table>

Authors’ Affiliation:
- Department of Pediatrics, University of Hawai‘i John A Burns School of Medicine, Honolulu, HI (KWR, GH)
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References
Transforming Primary Care Practices in a Hawai‘i Island Clinic: Obtaining Patient Perceptions on Patient Centered Medical Home

Alain K. Takane BA and Susan B. Hunt MHA

Abstract
Health care access is a significant problem for residents of Hawai‘i Island who are experiencing a healthcare provider shortage crisis. Many residents must travel far for routine medical care, and in some cases to other islands. Hamakua Health Center, Inc., which operates from two clinical sites (Honokaa and Kapaau), is transitioning towards a Patient-Centered Medical Home care model. Through focus groups, a qualitative study was completed to obtain patient perceptions on Patient-Centered Medical Home. The Hamakua and Kohala Family Health Center staff were asked to recommend a list of patients from their respective health centers for focus group participation. In this sample (N=18), 67% of participants were female of various ethnicities. The participants’ mean age was 62.2 (SD =14.3) years. Questions asked by the moderator were based on the American College of Providers’ Patient-Centered Medical Home Assessment Tool.

The three universal themes generated by the focus groups included quality care, provider and health services accessibility, and communication and coordination. Health information technology was a topic that was explored in the focus groups, and encompasses all three themes. Communication is regarded as a key to receiving quality care. Participants suggested having a rotation of specialists flown-in regularly from O‘ahu to improve care quality. Technology is appreciated as it can streamline the information exchange process, and increase the patient’s access to health services. There is unanimous concern regarding confidentiality and privacy. It is imperative that the health centers keep patients informed as they make their transition.

Keywords
Patient-Centered Care, Medical Home, Health Information Technology, Focus Groups, Quality Care, Qualitative Research, Hawai‘i Island.

Introduction
Health care access is a significant problem for residents of Hawai‘i County.¹ There are approximately 40% fewer licensed healthcare providers than the county should have to adequately meet the population’s needs.¹² Patients endure lengthy wait times for an appointment to see a healthcare professional.¹ Many residents must also travel far for routine medical care, and in some cases to O‘ahu for specialty care.¹

Hawai‘i County was among 17 communities selected to serve as a pilot population for the implementation of health information technology (health IT) through the Beacon Community Cooperative Agreement program.³⁴ To address the health care access challenges in Hawai‘i County, the Hawai‘i Island Beacon Community (HIBC) project, which serves under the Beacon Community Cooperative Agreement program, is facilitating a clinical transformation through implementation of the Patient-Centered Medical Home (PCMH) model within provider practices. In addition, HIBC is implementing the use of care coordinators through a public/private partnership with Federally Qualified Health Centers and private practice physicians, and improving discharge planning at the three Hawai‘i Island acute care hospitals.³⁵ HIBC is also assisting providers in achieving meaningful use of electronic health records (EHR) within the PCMH model.¹

PCMH employs a comprehensive approach to delivering higher quality primary care.⁶ PCMH models have demonstrated improved health outcomes while reducing the cost of care.⁶⁷ The greatest cost-saving venue in PCMH models have been the reduction in hospital and emergency department admissions.⁶ PCMH focuses on whole-person care by taking into account the emotional and psychosocial aspects of illnesses.⁸⁹ The major components of the PCMH model include:⁵⁻⁷⁻⁸

- Partnerships between the patient, family, and their provider
- Provider-directed, team-based care
- Whole-person orientation
- Care coordination
- Quality and safety
- Enhanced access to care
- Recognition for the value of PCMH utilization through payment

Hamakua Health Center, Inc., a community owned and governed federally qualified health center (FQHC), is one of the HIBC project participating organizations.³⁻¹⁰ Hamakua Health Center, Inc. has two clinical sites: Hamakua Health Center (HHC) in Honoka‘a and the Kohala Family Health Center (KFHC) in Kapa‘au.¹⁰ Both sites are working to implement and/or improve the PCMH components identified above. At the core of patient-centered care is the respect and value for patients. Thus, both clinics believed that it was important to have patient involvement during this transformative process. The purpose of this project was to utilize focus groups to obtain patient perceptions on specific components of PCMH to aid in its implementation at the health centers.

Methods
The HHC and KFHC staff recommended a list of patients whom they believed would be active focus group participants. All individuals recommended were sent an invitation letter followed by a phone call. Eight of the 25 recommended patients from KFHC, and ten of the 34 patients at HHC were participants.

This project was approved by the University of Hawai‘i at Manoa Committee on Human Studies. Four focus groups were conducted, and each participant attended in only one session. All participants received lunch, and a small wooden case with the HHC logo. The questions asked by the moderator were based on the American College of Providers’ PCMH Assessment Tool (See Appendix).¹¹ All participants spoke English, and no interpreters were needed. Focus groups were audio recorded with the participants’ knowledge and consent. All comments were captured through note-taking in a Microsoft Word document that was projected onto a screen. Audio recordings were
transcribed into another Microsoft Word document and analyzed alongside the notes. Themes were generated and determined through consensus between the authors. Illustrative quotes from the participants were selected to highlight key themes.

**Results**

In this sample (N = 18), mean age 62.2 (SD = 14.3) years, there were more females (67%) than males (28%; 5% missing) although relatively equal populations by gender were invited. Participants were asked to select one ethnicity, but some individuals from diverse backgrounds chose multiple options. Therefore, the following breakdown depicts participants who are one or more of these ethnicities: 38.89% Caucasian, 33.33% Hawaiian, 16.67% Japanese, and 5.55% each (Latino, Portuguese, Filipino, Other).

The central themes from the focus groups were quality care, provider/health services accessibility, and communication and coordination with and among providers and staff. Health IT was a topic that was explored in the focus groups, and encompasses all themes. Figure 1 shows a patient-centered care model that is based on the data from the study. This model places the patient at the core of the health centers’ services and integrates the various healthcare professionals desired by the patients around them.

**Quality Care**

The sub-themes related to quality care can be summarized as a desire for quality relationships with providers, continuity of care, and a whole-person approach to receiving care. How the participants perceived the quality of their care was unanimously determined by the patient-provider relationship. Quality was described as the perceived interest the provider has in a patient, which allows one to develop trust and have confidence in the provider’s knowledge and decision making ability. Patients want to feel like the provider is involved and cares about them, which does not occur when the doctor is focused on the computer. Providers improve the patient connection by making eye contact, employing active listening skills, and using effective communication skills. Participants indicated that they want to be part of shared decision making and to gain a greater understanding of what their test results mean.

“Respect and trust. If you have confidence in the physician then you have trust.”

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![Figure 1. A Patient-Centered Care Model that was Adapted from Lumigrate's Model to Reflect Data Collected from the Focus Groups](image-url)
Seeing the same physician instills a perceived continuity of care. While participants acknowledged the difficulties associated with delivering care in the clinics, such as the high turnover rates of providers, they believed that the provider retention issues lead to fragmented care. From a participant perspective, having continuity within care instills the belief that patients are receiving quality care from a physician who knows them and their individual needs.

“If [my] doctor goes on vacation, I don’t see him until he comes back. I don’t want to make another appointment and see another doctor if they don’t know [anything] about me. I would feel very uncomfortable.”

“It’s better to see one doctor because they know the history of your life. When you see a number of different [PCPs] it is complicated, because you have to repeat yourself.”

Participants understood the complexities associated with caring for individuals. They believed a comprehensive diagnosis in which the provider examines the whole person and other health related factors is important.

“I asked if Hamakua [Health Center] could hire an ENT doctor. It’s important, because sometimes it’s not that you need a hearing aid... it’s some kind of hearing disease [or] some kind of medical problem.”

Access
Participants recognize that there is a profound need for specialists. They discussed the physician shortage on Hawai‘i Island, and they feel the resulting burden from the lack of specialist availability. It is a significant problem for patients when they have to travel off-island to receive specialty care. Participants stated that they would appreciate a rotation of specialists coming to them.

“A lot of us are held back from going for that second opinion or for that follow up... to maintain the best possible health, because we [can’t] go to Honolulu... the plane fare is too expensive.”

The majority of the participants agreed that there are long wait times to obtain health center services. Participants discussed that when an appointment has not been made in advance, and a patient would like to seek services on the day that they fell ill, there are often long wait times or no available slots. They recommended increasing urgent slots in the schedule or improving staff triage capabilities.

“The [health centers] are so busy... what do you do? My answer was go to the ER or go to the fire station. Many in our community may be receiving their health care like that... That might not be the way [to do it], but individually for them it works.”

“There’s a point when you just go to the emergency room and you can get it done right now.”

Transportation is another barrier to receiving services, especially for the elderly. Many patients must commute for their care; traveling, even if on-island, presents a challenge. Community members often help transport friends from Kohala to Hilo for appointments, because they are elderly and not well enough to sit on the bus for such a long time.

“Another thing is transportation. They have a bus driver [here], but it’s not that quick. [Elderly] people don’t drive, but some people cannot ride long distances. By the time they go there, they are exhausted, but they need the transportation.”

“The further away I have to go, the worse I’m going to feel.”

“Sometimes it can just be to get from three miles out to the [health center or pharmacy].”

Communication and Coordination
Communication and care coordination include a desire for informed communication and a team approach to care. Front desk staff is seen as having an important role with improving access to care, because they are the first point of contact. Participants believe that proper training and monitoring of staff is important. Some patients feel that receptionists will ignore them if they call too much or become too assertive.

“To get through to the primary care provider, I need to get through the staff. Getting through the wall to the doctor can be a problem.”

“If I were sitting in a reception room waiting to see a doctor and I had a cold, but wasn’t ready to pass out... and I saw somebody and they seemed to be short of breath... the [staff] could say, ‘Excuse me…we seem to have someone here who needs more help’ and I would say ‘Please go ahead’.”

Patients believe that it is important for the staff to communicate about what is happening at the clinic, and to inform patients if they are behind schedule. Participants suggested having options, such as being allowed to leave the clinic and return in an hour. However, they felt that if a patient is late by more than 15 minutes and the doctor is ready, they should be required to reschedule their appointment.

Participants discussed the need to have more health education resources that could be read while waiting for an appointment in the clinic. They reported being interested in such topics as medication reviews and nutrition information.

Participants believe that a team approach to care is important. The expertise they recommended coordinating were primary care providers (PCPs), specialists, nutritionists, social workers, and pharmacists. Specialties identified were chronic pain, women’s health, pediatrics, cardiology, and ENTs. Participants also believe that care should be culturally sensitive, especially for non-English speaking, conservative groups.

“It is very problem oriented now. You come in for the complaint, but you’re never asked about what’s going on in your life. A lot of disease is Dis-Ease…. We need more input about what’s going on in the family.”
Participants acknowledged that they are often their own advocates, which means that they are the ones on the phone coordinating their care. When it comes to coordinated care, there was uncertainty about having doctors share information. They discussed the benefit of having doctors collaborate, especially for complex cases. Registered nurses are seen as an important part of this team to help keep doctors informed. Most patients want to work directly with their PCP, even if their PCP is simply coordinating their care with other providers. However, some patients thought that if the provider has established a long term relationship with them, they might overlook important details that a team of providers would not.

“Maybe one day a week have chart reviews. You should have a flow sheet that tells you what everybody needs every year... and what their [most important] problems are so you know what everybody needs [ahead of time].”

Behavioral health was not widely accepted as a coordinated health service. Patients believed that in a small community it is more difficult to engage in mental health services due to issues surrounding confidentiality and trust. It was believed that in a team setting, personal issues that a patient shares with their provider could become public knowledge in a small town.

**Meaningful Use of Electronic Health Records**

Electronic Health Records (EHRs) are perceived as inevitable, but participants were uncertain of security risks. Questions posed by participants included:

- Who has access to EHRs?
- Does the government have access?
- What will the information be used for?
- How can the health center ensure that the information is not misused or accessed without permission?

Patients believed that they should be able to choose who views their information and how that information is shared. They believed that basic information exchange is acceptable, but are concerned about inappropriate disclosure of personal information (ie, social security number).

Not all patients use computers. For frequent computer users, e-mail would increase their access to healthcare professionals. Participants noted that they would like to correspond with their doctor electronically about how a treatment is working or lab test results. Participants discussed the benefits of a health blog, where they could direct questions to healthcare professionals. Participants even suggested using Skype to increase access to healthcare providers.

“I had a little bout of pneumonia... and I had the [provider’s] e-mail. I could let her know that the antibiotic she gave me was working.”

Figure 2 shows the satisfaction level of the participants. It shows that most patients are satisfied with the clinic’s services.
Discussion
With limited to no knowledge of PCMH, participants were able to discuss vital concepts of patient-centered care. The focus group’s three universal themes (quality care, access, communication, and care coordination) and their inclusive topics are parallel to key concepts of the PCMH model (patient-provider partnership; provider-directed, team based care; whole person orientation; care coordination; quality/safety; and access to care).

When this project was conducted there was no known study that had obtained patient perceptions on PCMH. Since that time, one study was published with patients from an urban academic internal medicine practice. Participants (N = 17) were asked about how patient-centered care should be as defined within the following themes: care quality, teams and access, diabetes self-management, and community connections and services. The overarching themes identified in the study were communication, structure of practice, and ownership of care. Patients within this practice wanted providers to know them personally and to take time to listen to their issues. They felt that there was a lack of access to their providers, and they wanted more time with them. Participants in this study also placed an added emphasis on trust and patient-practice/patient-clinician relationships. The results from this study suggest that PCMH concepts may be understood and applicable in both urban and rural areas. The results from the study on Hawai‘i Island, which collected data from patients of a FQHC in a rural area, aligned well with those obtained from the study conducted by Berckelaer et al, in an urban practice setting.

Technology is appreciated in the way that it can streamline the information exchange process between providers and other health services. Most patients do not like the doctor’s attention being fixated on the portable computers in the exam rooms. They want to feel like the doctor is listening, and it is ultimately the doctor’s body language and behaviors such as making eye contact that suggests the patient has their attention. Among participants, there was unanimous concern regarding confidentiality and privacy. It will become imperative as the health centers move forward in their implementation of PCMH that information is effectively communicated to the patients regarding the EHRs, how it is used, and what it means to patient care.

Limitations
Due to time and budget constraints, only four focus groups were conducted. Participants were a selective sample, chosen by health center staff. More focus groups should be conducted with a randomly generated group of participants until data saturation is achieved. The health centers have many patients who do not speak English, and it would be worthwhile to capture their perceptions. Non-English speaking patients or patients who are younger than this sample population may offer insights that differ from those obtained in this study. For example, younger participants may have different attitudes and beliefs toward technology in health care. Due to work commutes, it was difficult to obtain participants from younger generations. As the Hawai‘i Island healthcare system continues to transform its delivery model it will become important to obtain patient insights from other geographical regions.

While Figure 2 shows overall satisfaction, participants were recommended based on who the health centers believed would be active participants. This may have created a selection bias in the data obtained on patient satisfaction, and non-participant populations may have differing perceptions. However, there was consensus among participants that having the clinics has given them more than they’ve had in the past.

“I’m so grateful to Hamakua [Health Center, Inc.] and the collaboration between Kohala and Hamakua…. It has sustained us from having nothing to having something.”

Conclusion
Based on their own experiences, patients are able to foresee the need to implement PCMH concepts. Building a medical home within the clinic’s practice would strengthen the delivery of primary care and coordinated services for this rural, underserved population. PCMH would increase the patient’s access to services and specialty care. This project serves to illustrate how HHC and KFHC patients perceive PCMH, and what they want from their providers and the clinics. Due to the small sample size, and the geographic region of the clinics, data from this study may be less applicable to other populations. However, it has potential value to other practices on Hawai‘i Island who share similar challenges in providing care. As health care delivery changes, the mainstream of information exchange should become a two-way process between patients and their providers. Patients should be included in this transformative process to ensure that their concerns are addressed, their needs met, and their values upheld.

Conflict of Interest and Disclosure Statement
None of the authors identify any conflict of interest. Susan Hunt reports serving as a former CEO for Hamakua Health Center, Inc. She is currently the CEO for the Hawai‘i Island Beacon Community non-profit corporation.

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Focus Group Questions

Patient-Centered Care & Communication
1. If you could design your own health care system that centered on you as the patient, what would it look like? (*Take Cues from this question)
   a. What for you, is the most important part about the care you receive?

Access & Scheduling
1. What ideas do you have that would improve access to your health care providers?
   a. Do you feel like the providers are available to you?
      i. Are you able to see or speak to your provider when you need him/her?
   b. How much does it matter to you that you see the same provider?
   c. How easy is it to obtain and appointment?
   d. Do you have to wait a long time?

Organization of Practice
1. What do you think about having a team of health care professionals providing your care?
   a. Who would you want on this team?

Care Coordination & Transition in Care
1. If you need care from someone other than your primary doctor, how is this process typically handled by your provider?
   a. What suggestions do you have to improve this process?

Use of Technology
1. How do you feel about the use of electronic medical records?
   a. What other uses of technology do you believe are important in providing care (i.e. sharing info beyond office)?
   b. Are there technologies that you have heard about that you think we should be aware of or use?

Quality Improvement & Performance Improvement
1. In your mind, what determines the quality of the care you receive?

Appendix. Questions Used in Focus Group Discussion.

References
Guaiac Interpretation by non-Certified Clinicians
Kimberly A. Lyons RNC, BSN, CPN, CPEN; Stuart I. Kimura MT(ASCP),CLS(NCA); and Loren G. Yamamoto MD, MPH, MBA

Abstract
Objective: To assess the ability of non-certified clinicians to interpret guaiac test results.
Methods: 50 clinicians were shown photographs of 20 guaiac test cards. They were asked to classify these as positive, negative, or uncertain.
Results: 31 nurses, 4 clinical assistants, 7 emergency attending MDs, 2 resident MDs, and 6 medical students comprised the study group. Mean correct percentages for 15 clearly positive or negative guaiac test cards ranged from 87% to 96% in each of the above groups. Correct results were lower for five of the borderline positive guaiac cards.
Conclusion: This study demonstrates that all clinician groups correctly interpreted the guaiac result most of the time, but there was a moderate error rate. This data supports the Joint Commission standard for this particular point of care test; clinicians interpreting guaiac testing should be trained with demonstrated competency.

Keywords
Guaiac, interpretation, certification

Introduction
Hospital accrediting organizations require clinicians to be certified (documentation that includes training and competency testing) to perform a point of care test (also known as a bedside test) under the provisions known as waived testing. These include glucose measurements, urine pregnancy tests, urine dipsticks, stool guaiac tests, and other tests. The consequence of this is the restriction and reduction of the spectrum of practice by clinicians. The guaiac test is a test for blood in the stool or gastric contents. It is very sensitive and it is commonly used for gastrointestinal cancer screening for occult blood in primary care practices. In emergency departments (ED), it is commonly used to confirm the presence of blood in the stool. It appears to be very simple to interpret as shown in figures 1 and 2. Most or nearly all physicians are aware of how this test is performed and interpreted. Yet regulations restrict the interpretation of guaiac results to personnel who have completed training and are demonstrated as competent to perform this test. While the actual training is not difficult, there are additional administrative burdens to maintain log books with test device serial numbers and the annual demonstration of competency for all the clinicians performing this test. The stat lab will typically provide a guaiac result to ED patients in about one hour. The bedside test result provides a result in about 1 minute. This shorter time could speed patient throughput and reduce costs. The ED at Kapi‘olani Medical Center For Women & Children (KMCWC) currently does not perform bedside stool guaiacs. The lab at KMCWC performs approximately 20 stool guaiac tests per month. We hypothesize that because the guaiac test is simple to interpret, clinicians do not need special training or certification to interpret this point of care test.

The purpose of this study is to assess the ability of non-certified clinicians to interpret guaiac test results.

Methods
A medical technologist who is certified to interpret guaiac results photographed a convenience sample of twenty guaiac cards (Seracult, Propper Manufacturing Company Inc., Long Island City, NY). These were actual lab specimens and the study sample was selected to get some positive, negative, and borderline results. The medical technologist obtained 8 positive results, 5 borderline positive results, and 7 negative results. These 20 photographs were cropped and printed with a photographic printer so that they were roughly the actual size of the original guaiac cards. No identifying information was included in any of the samples.

Potential study subjects were approached by the study investigator to ask if they might be interested in participating in this study. If they were not currently certified to read guaiac cards (had not completed a competency training and testing for this) and if they were willing to participate in the study, the
The convenience sample of fifty non-certified medical personnel consisted of nurses, clinical assistants, attending physicians, resident physicians, and medical students. They were briefly instructed by the study investigator on how to interpret a guaiac card result. They were asked to interpret the guaiac card photographs as positive, negative, or uncertain. The results were then compared for accuracy with the results of the certified medical technologist. These card photographs all included the control test strip that clearly tested positive “blue” on all 20 sample cards.

## Results

“Correct” guaiac result interpretations were defined as a result by the study subject that agrees with the interpretation in the result key. To examine the basic interpretation skill of the study group, the results summarized in table 1 excluded the 5 “borderline positive” guaiac cards so that the 15 remaining guaiac card results were clearly positive or negative.

Nine subjects were previously certified (completed a competency course and test) to interpret guaiac cards but their certification period had elapsed at the time of study participation. Out of the 15 clearly positive or negative cards, the previously certified subjects had a mean of 87% correct, while the subjects who were never previously certified had a mean of 90% correct. Since all the previously certified subjects were nurses (ED and ICU), this can also be compared to the 23 never previously certified nurses who had a mean of 87% correct. None of these are significantly different.

Linear regression determined there to be no relationship between years of experience and the number of correct guaiac interpretations.

The medical group (ED attending MD, resident MD, and medical students) combined to have a mean 95% correct which was higher than the mean 87% correct by the combined nursing group (all RN + clinical assistants) ($P = .01$). While this difference of 7% might seem large, it actually only represents 1 more correct response out of the 15 guaiac results.

In examining the five “borderline positive results”, the results are summarized in table 2. The percentage of correctly interpreted positive results for these five borderline positive guaiacs was lower than the overall percentage of correctly interpreted results for the 15 guaiacs that were more clearly positive or negative.

Following the above results, we asked 13 certified medical technologists to interpret all 20 guaiac cards. They used the same guaiac card images. All 13 medical technologists interpreted all 20 guaiac cards correctly (100%). This included the correct interpretation of the borderline positive guaiac cards.

## Discussion

This study demonstrates that all clinician groups correctly interpreted the guaiac result most of the time, but there was a moderate error rate. These clinicians were not currently “certified” to interpret guaiac cards. In comparison, certified medical technologists were 100% correct in interpreting the guaiac
Table 1. Percentage of 15 clearly positive or negative guaiac cards interpreted correctly among study subject groups.

<table>
<thead>
<tr>
<th>Study Group</th>
<th>n</th>
<th>Mean Correct Percentage</th>
<th>Correct Percentage Range</th>
<th>Number of Subjects with All 15 Correct</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED RN</td>
<td>20</td>
<td>88%</td>
<td>60% to 100%</td>
<td>5</td>
</tr>
<tr>
<td>ICU RN</td>
<td>11</td>
<td>84%</td>
<td>60% to 100%</td>
<td>1</td>
</tr>
<tr>
<td>All RNs</td>
<td>31</td>
<td>87%</td>
<td>60% to 100%</td>
<td>6</td>
</tr>
<tr>
<td>Clinical assistants (CA)</td>
<td>4</td>
<td>88%</td>
<td>73% to 100%</td>
<td>0</td>
</tr>
<tr>
<td>All RN + CA</td>
<td>35</td>
<td>87%</td>
<td>60% to 100%</td>
<td>6</td>
</tr>
<tr>
<td>ED attending MD</td>
<td>7</td>
<td>96%</td>
<td>87% to 100%</td>
<td>4</td>
</tr>
<tr>
<td>Resident MD</td>
<td>2</td>
<td>93%</td>
<td>87% to 100%</td>
<td>1</td>
</tr>
<tr>
<td>Medical Students (MS)</td>
<td>6</td>
<td>94%</td>
<td>80% to 100%</td>
<td>3</td>
</tr>
<tr>
<td>All MDs + MS</td>
<td>15</td>
<td>95%</td>
<td>60% to 100%</td>
<td>8</td>
</tr>
</tbody>
</table>

Table 2. Guaiac card interpretations for 5 borderline positive guaiac cards

<table>
<thead>
<tr>
<th>Study Group</th>
<th>n</th>
<th>Mean Number and Percent of Guaiacs Correctly Marked Positive</th>
<th>Percentage of Subjects Who Correctly Marked All 5 as Positive</th>
<th>Mean Number of Guaiacs Incorrectly Marked Negative</th>
<th>Mean Number of Guaiacs Marked as uncertain</th>
</tr>
</thead>
<tbody>
<tr>
<td>ED RN</td>
<td>20</td>
<td>3.9 (77%)</td>
<td>50%</td>
<td>0.8</td>
<td>0.4</td>
</tr>
<tr>
<td>ICU RN</td>
<td>11</td>
<td>3.4 (67%)</td>
<td>36%</td>
<td>1.4</td>
<td>0.3</td>
</tr>
<tr>
<td>All RNs</td>
<td>31</td>
<td>3.7 (74%)</td>
<td>45%</td>
<td>1.0</td>
<td>0.3</td>
</tr>
<tr>
<td>CA</td>
<td>4</td>
<td>3.8 (75%)</td>
<td>25%</td>
<td>1.0</td>
<td>0.3</td>
</tr>
<tr>
<td>All RN + CA</td>
<td>35</td>
<td>3.7 (74%)</td>
<td>43%</td>
<td>1.0</td>
<td>0.3</td>
</tr>
<tr>
<td>ED MD</td>
<td>7</td>
<td>2.9 (57%)</td>
<td>0%</td>
<td>1.7</td>
<td>0.4</td>
</tr>
<tr>
<td>Resident MD</td>
<td>2</td>
<td>5.0 (100%)</td>
<td>100%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Medical Students</td>
<td>6</td>
<td>2.8 (57%)</td>
<td>0%</td>
<td>2.0</td>
<td>0.2</td>
</tr>
<tr>
<td>All MDs + MS</td>
<td>15</td>
<td>3.1 (63%)</td>
<td>13%</td>
<td>1.6</td>
<td>0.3</td>
</tr>
</tbody>
</table>

cards. Previously certified clinicians in the study group did not perform significantly better than the other clinicians. Physicians performed slightly better than non-physicians.

Although the interpretation of guaiac cards appears to be objective and straightforward, this study demonstrates that consistent and perfect interpretation is not easily achieved. Therefore the certification requirement for clinicians interpreting guaiac testing is supported by this study. If this test is to be useful for clinical decision-making, its interpretation needs to be accurate. While most of the interpretations were accurate, some clinicians had accuracy rates as low as 60%. This potential for error is unacceptable.

This study is not able to address the question of whether the completion of a competency course and test would improve the accuracy rate of the clinicians, but it is clear that amongst this convenience sample of non-certified clinicians, the accuracy rate is not perfect.

In conclusion, this data supports the Joint Commission standard for this particular point of care test; clinicians interpreting guaiac testing should be trained with demonstrated competency.

**Conflict of Interest**

The authors have no financial conflicts of interest.

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**References**
The Hawai‘i Homeless Outreach and Medical Education Project: Servicing the Community and our Medical Students

Jill S.M. Omori MD; Sheldon Riklon MD; Vanessa S. Wong MD; and Damon F. Lee MD; University of Hawai‘i John A. Burns School of Medicine, Honolulu, HI

The Hawai‘i Homeless Outreach and Medical Education (H.O.M.E.) Project was established in 2005 at the John A. Burns School of Medicine (JABSOM). The mission of the program is to improve quality and access to health care for Hawai‘i’s homeless, while increasing student and physician awareness and understanding of the homeless and their healthcare needs. The program was created to provide the medical students with a formal curriculum that addressed underserved and homeless health care, areas that previously were not well represented in the curriculum.

H.O.M.E. Project operates three student-run, free clinics each week at homeless shelters on O‘ahu: the Next Step Shelter in Kaka‘ako, the Pai‘olōu Kaiaulu Shelter in Waianae, and the Onelauna Shelter in Kala‘e‘oa. In addition, the students run a monthly clinic at the First United Methodist Church in Honolulu and conduct outreach services with their mobile health van to service some of O‘ahu’s unsheltered homeless at beaches and parks.

The Need

Over the last 10 years, there has been a dramatic increase in the number of homeless individuals and families in Hawai‘i. According to the Point-in-Time Studies conducted in 2011, there were over 6,100 homeless individuals, with 68% located on the island of O‘ahu. A study in 2008 found that 77% of O‘ahu’s homeless had some type of health insurance and yet these individuals were three times more likely than the general population to rate their health as fair to poor. In addition to inadequate health insurance, Hawai‘i’s homeless face other barriers to accessing quality healthcare. These include general finances, transportation, lack of knowledge of the healthcare system, language and cultural barriers, and personal priorities.

In 2005, JABSOM conducted a needs assessment to examine the amount of education the medical students were receiving in homeless and underserved healthcare and to survey both the students and faculty regarding their perceived need for a formal curriculum in this area. This assessment found that the students were receiving little formal education in underserved health care and almost none in caring for the homeless. Ninety-four percent of the medical students, as well as 88% of the faculty surveyed felt that a formal curriculum in underserved and homeless healthcare was needed at JABSOM.

The Hawai‘i H.O.M.E. Project was created out of the growing health needs of O‘ahu’s homeless and the challenge of improving the curriculum at JABSOM.

The Curriculum

The student-run clinics were introduced as a major portion of the underserved care curriculum. In addition, the curriculum includes:

Community Health Rotations—H.O.M.E. Project Clinics and Hawai‘i Youth Program for Excellence (H.Y.P.E.): All first year students at JABSOM must participate in a yearlong community health course. The goal of this course is for students to explore methods for promoting health and improving the quality of life for patients by working with a community organization. Currently, there are ten site options that the students can select to participate with and H.O.M.E. Project provides two of these options, H.O.M.E. Project Clinics and H.Y.P.E. The first year students that participate with H.O.M.E. Project Clinics acquire experience at the free clinics, performing intake histories and vital signs, and also help in the overall functioning of the clinics. To date, a total of 98 students have participated in the H.O.M.E. Project Clinics community health selective experience (12-15 students per year). H.Y.P.E. was established in 2011 as a sub-program of H.O.M.E. Project, to promote healthy living to homeless teenagers living at the shelters. Students that participate with the H.Y.P.E. selective serve as mentors for the teens, present them with interactive educational experiences, and take them on excursions on a monthly basis. To date, seven students have participated in H.Y.P.E. for their community health selective. Both the H.O.M.E. Project Clinics and H.Y.P.E. students participate in a yearlong seminar series that addresses topics in underserved care. Seminar themes include homeless resources, advocacy, and health disparities.

Second-Year Manager Experience—Students that participate in either H.O.M.E. Project Clinics or H.Y.P.E. as their community health site are given the option to become managers in their second year of medical school. The H.O.M.E. Clinic managers provide stability for the clinics by overseeing the day-to-day operations at all of the clinic sites. As managers, these students help to supervise the first year community health students, provide orientations for the third year students that rotate in and out of the clinics, and are responsible for keeping track of equipment, supplies, and medications. The H.Y.P.E. managers provide guidance and support to the first year H.Y.P.E. students and review lesson plans with them prior to each month’s activity. To date, a total of 61 H.O.M.E. managers and 12 H.Y.P.E. managers have participated with the program.
Problem-Based Learning (PBL) Cases – At JABSOM, PBL is the primary educational method utilized in the first two years of the curriculum. PBL utilizes small-group discussions of clinical cases as the stimulus for learning. Part of the curricular change that occurred was the insertion of homeless healthcare issues into PBL cases. Prior to the start of this new curriculum, there was only one PBL case involving a homeless individual. The patient was a schizophrenic, alcoholic, homeless veteran with cellulitis. While this type of patient is common amongst the chronically homeless, he was not a typical representative of the rapidly growing population of homeless, especially in Hawai‘i. The case was changed to a Chuukese patient that was a member of a family living on the streets. The students process this case in their first curricular unit (MD1) at JABSOM where the focus of their learning is on health and illness. A second case was added to the third curricular unit of the first year (MD3), where the students “meet” the mother and sister of the Chuukese patient who was introduced to them in MD1. In this second case, the family has now moved into the Next Step Shelter and the students learn more about common problems of the homeless and barriers to health care. An addition of a third case, that represents another member of this family, is planned for the second year of the PBL curriculum. This case will focus on another common medical problem that homeless individuals face and will highlight the transition of the family from the shelter into permanent housing.

Third-year clerkship experience – As part of their Family Medicine clerkship, all JABSOM students rotate through the three student-run homeless clinics on O‘ahu. On average, students attend 2-3 clinics per week during their 7-week clerkship experience. These students serve as the main “providers” at the clinics under the supervision of volunteer faculty and community physicians. As part of their experience, they are asked to interview one of their patients to learn more about their “story” of homelessness. At the end of the clerkship, the students write an essay describing their patient’s unique experience with homelessness. The students are prepared for their experience in the clinics through a seminar that educates them about homelessness and the unique aspects of providing health care to this population. Observed Structured Clinical Exams (OSCEs) were also created to evaluate the students’ knowledge, attitudes, and skills in working with the homeless at the conclusion of their clerkship experience.

Fourth-year longitudinal elective – In 2006, a fourth-year elective in homeless healthcare was developed to provide further experiences in underserved care. Students that participate in this elective also serve as “providers” at all of the H.O.M.E. clinic sites throughout their fourth year and serve as mentors for their junior counterparts at the clinics. Requirements for the elective include attending at least 25 clinics by the end of the fourth year, presentation of two teaching topics related to underserved healthcare, and completing a clinic quality improvement project over the course of the year. The elective is open to ten students per year. It has filled every year since it began, with a total of 70 students having participated in this fourth year elective.

Services Provided
The first H.O.M.E. Project clinic opened in the spring of 2006 at the Next Step Shelter in Kaka‘ako, located adjacent to the medical school. The Pai‘olu Kailaulu Shelter clinic in Waianae was added in 2007, followed by the Onelauena Shelter clinic in Kalaeloa in 2008. The clinics provide care for acute and chronic medical problems, health maintenance and preventive health services, minor procedures, vaccinations and TB testing, laboratory testing and diagnostic imaging, health education, dental assessments, and free medications for the uninsured. The students also help to coordinate care for those patients with more complex medical problems. Services range from arranging patient appointments with specialists, coordinating lab and imaging services, to working with the shelter social workers to help patients access much needed resources.

In addition to free clinics, H.O.M.E. Project also organizes annual special events for the shelters, such as Halloween carnivals at the Kaka‘ako and Waianae shelters, Christmas parties at the Kaka‘ako shelter, Angel Tree gifts for the children at all three shelters, school supply drives, and a tri-shelter family fun day at Kaka‘ako park that promotes healthy living and family togetherness. These events provide the children and families at the shelters with a sense of normalcy and help to address their mental well-being.

The H.Y.P.E. Program provides monthly interactive sessions with the teens at the shelters on topics such as drugs, career planning, relationships, family planning, STDs, bullying, environmental stewardship, and other health and wellness topics. The medical students also take the teens on one excursion a month to provide them with some fun activities that may not otherwise be available to them.

Funding for clinic operations, special events, and H.Y.P.E. activities comes from grants, private donations, bake sales, and an annual food and wine tasting fundraiser. All child vaccines and a select number of adult vaccines are provided through the Hawai‘i State Department of Health’s Vaccines For Children Program and Adult Immunization Program. Laboratory services for the uninsured are generously provided free of cost through Diagnostic Laboratory Services, Inc. and Hawai‘i Pathologists’ Laboratory.

Benefits
Patient Benefits
Since the inception of H.O.M.E. Project, over 2000 patients have been served with over 7600 patient encounters. It is very difficult to track patient outcomes to ascertain the long term effectiveness of student-run clinics due to the transient nature of the population served. Currently, there is a paucity of literature regarding the overall impact that these clinics have on homeless health care. It is believed that these clinics have a significant impact in improving an individuals’ quality of health and in decreasing hospitalization rates and Emergency
Department visits. While patient outcome data are lacking, patient satisfaction ratings have been very high and feedback from the shelters served has been extremely positive. Some of the patient comments include:

“I am so thankful that you guys come to the shelter every week. It has been really hard for me to get insurance and I wouldn’t be able to see doctors or get my medicines if it wasn’t for this clinic. The students are so nice and easy to talk to.”

“Thank you for helping me! If it weren’t for HOME clinic, I would not have been able to go back to work. I really hated going to the doctor before and they always treated me like a second class person… but after seeing you guys I have faith in medicine again.”

“My family is so grateful for you and the students. Just knowing that we have somewhere to turn to if we have a health problem or question is wonderful. Everyone is kind and treats us like we actually matter.”

“My daughter anxiously looks forward to the H.Y.P.E. events every month and has really opened up a lot since starting the program. She feels comfortable talking to the students and knows that it is a safe environment for her to share her troubles and concerns.”

**Student Benefits**
The program has been a win-win for both the community and the medical students. As of 2007, over 49 medical schools across the country operated at least one student-run free clinic. There are numerous documented benefits for medical students being involved with free clinics. Some of these benefits include improved clinical skills, improved attitudes towards caring for the homeless, promotion of future volunteerism, increased patient advocacy skills, and even improved knowledge of systems-based practice principles, resource allocation, and cost containment. In addition to these benefits, JABSOM students have also cited the increased interaction amongst the different levels of medical students as being a significant advantage of the program. Students in the fourth year elective have commented on the continuity of care with patients as being extremely helpful and rewarding. Student comments regarding their experiences with H.O.M.E. Project include:

“Working at the H.O.M.E. Project clinics has been a life changing experience for me. It has opened my eyes to the many problems that homeless individuals face in trying to maintain good health and it has also made me realize the importance of physicians giving back to their communities.”

“As a former manager for the H.O.M.E. clinics, I gained a lot of organizational skills and began to understand the intricacies of running a medical clinic. I learned much more about the health care system and how to navigate it during my H.O.M.E. clinics than I did in my other rotations.”

“H.O.M.E. Project was one of the reasons why I chose to attend JABSOM. I think that it is essential for medical schools to have these types of experiences for their medical students.”

It is premature to look at the long term outcomes for the students that have had significant involvement in H.O.M.E. Project clinics throughout their four years at JABSOM (ie, community health, manager positions, and/or 4th year elective) compared to those that have only participated in the clinics during their required 3rd year rotation. The very first H.O.M.E. Project community health students have just finished their residency training programs. In the future, the H.O.M.E. Project alumni will be surveyed to see if they are more likely to care for the underserved as part of their professional careers, whether through their regular scope of practice or through volunteer activities.

An added benefit of the project has been the involvement of non-medical student volunteers who are in charge of the front-desk responsibilities of the clinics and also assist in all of the special events and fundraising activities for H.O.M.E. Project. The majority of these volunteers are pre-medical students. Through their involvement with H.O.M.E. they are given more exposure to JABSOM and underserved care. These pre-med volunteers have the opportunity to interact with many of the JABSOM students who mentor them, give them advice on getting into medical school and provide a sense of what being in medical school will be like. Since the start of the program, H.O.M.E. Project has had over 60 volunteers, of whom 26 have matriculated at JABSOM.

**Physician Benefits**

H.O.M.E. Project also provides physicians in the community with an opportunity to volunteer their time to work with both underserved populations as well as help teach the medical students. Currently there are 11 physicians and one pharmacist, representing JABSOM faculty as well as community physicians, who volunteer their time to supervise the students at the clinics. Of the 11 physicians, eight are JABSOM graduates.

**Future Directions**
The Hawai‘i H.O.M.E. Project has grown significantly over the past seven years. The plan is to continue to expand services, both at the clinics and through increased outreach services to the unsheltered homeless. The program, which started as a small attempt to increase student awareness and interest in caring for the homeless and medically underserved, has grown into three fully functioning free-clinics each week, mobile outreach services, mentoring for homeless teens, and numerous special events for the homeless on O‘ahu. The growth and success of H.O.M.E. Project were possible because of the overwhelming support that it has received from the medical school administration, the entire JABSOM Ohana, and our generous community donors, as well as the interest and dedication of the medical students. In the future, plans are to improve the tracking of patient outcomes and expand services to provide increased specialty care and improved mental and dental health services. The alumni will be surveyed to determine if participation in H.O.M.E. Project has an impact on their scope of practice and

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volunteerism. This service-learning experience has proved to be a significant asset for JABSOM as well as for the community, and has helped nurture the altruism and humanism present in all incoming students at JABSOM as they journey towards their future roles as physicians.

Acknowledgments
The tremendous compassion and dedication of our students, without whom the program could not succeed, is sincerely acknowledged. The overwhelming support that H.O.M.E. Project receives from the entire JABSOM community and its community partners is also gratefully recognized.

References
If Disaster Struck, Would You Be Ready to Respond?

Sarah Y. Park MD, FAAP, State Epidemiologist; and Hawai‘i Department of Health
Disease Outbreak Control Division Public Health Preparedness Program; Honolulu, HI

In accordance with Presidential Policy Directive 8 (PPD-8), the National Preparedness Goal sets forth the vision for a secure and resilient United States. The Goal identifies core capabilities necessary to realize that vision and emphasizes the shared responsibility of all members of society to contribute to the country’s preparedness. The combined efforts of public and private sectors, faith-based and non-profit organizations, businesses, individuals, and communities must come together to ensure effective prevention, mitigation, response, and recovery from all hazards.

An essential component needed to help inform preparedness priorities is an understanding of the risks and vulnerabilities facing the community. On a national level, a Strategic National Risk Assessment has been conducted to help identify hazards and threats posing the greatest risks to the nation. At the state level, our State Civil Defense completed a similar hazard vulnerability assessment in 2010. A quick look at key findings of both clearly demonstrates that Hawai‘i would not be immune to the types of incidents identified:

- Natural hazards, including hurricanes, earthquakes, tornadoes, wildfires, and floods, present a considerable and varied risk across the country. Example: Hurricane Iniki, 1992; Earthquake on Kailua-Kona side of Big Island and subsequent statewide power outage, 2006.

- A virulent strain of pandemic influenza could kill hundreds of thousands of Americans, affect millions more, and result in economic loss. Additional human and animal infectious diseases, including those previously undiscovered, may present considerable risks. Examples: SARS, 2003; 2009 H1N1 influenza pandemic.

- Technological and accidental hazards, such as dam failures or chemical substance spills or releases, have the potential to cause extensive fatalities and have severe economic impacts, and the likelihood of occurrence may increase because of aging infrastructure. Example: Mercury spill in Halawa area on O‘ahu, 2001; Kaloko Dam failure on Kaua‘i, 2006.

- Terrorist organizations or affiliates may seek to acquire, build, and use weapons of mass destruction. Conventional terrorist attacks, including those by lone actors employing explosives and armed attacks, present a continued risk. Example: Thankfully, no recent Hawai‘i examples, but the XEROX shooting, 1999, is a sobering reminder of the possibility.

- Cyber attacks can have their own catastrophic consequences and can also initiate other hazards, such as power grid failures or financial system failures, which amplify the potential impact of cyber incidents. Example: Hacking of computers at East-West Center, late 2011.

Our health system must be prepared to respond to the full range of emergencies and disasters that may threaten the public’s health. Strong healthcare preparedness is critical to an effective response in the event of disaster. Fortunately, hospitals in Hawai‘i did not have to resort to setting up triage tents in their parking lots or other open areas to manage a deluge of patients, both worried well and sick or injured, as several hospitals in Southern California were forced to do during the 2009 H1N1 influenza pandemic. We remain vigilant for hurricanes, and while we have not suffered a natural disaster that demolished our hospitals as with the Joplin, Missouri tornado in 2011 or Hurricane Katrina in 2005, the Kaua‘i healthcare professionals who survived Iniki would probably have a story or two to tell that would illustrate the importance of a resilient healthcare system. Federal, state, and local governmental agencies are tasked with planning, training, and exercising for emergencies and disasters, and the Hawai‘i Department of Health (HDOH) regularly engages with partners such as the Healthcare Association of Hawai‘i (HAH) and other healthcare related agencies to test emergency plans, identify gaps, and improve capabilities.

Yet, it is the individual, whether physician or other healthcare provider, who is the critical component of these healthcare or healthcare related organizations and therefore the determining factor regarding assuring our healthcare preparedness.

The recent 2009 H1N1 influenza pandemic is the most obvious example of why individual healthcare providers must be prepared, whether the emergency is directly health related or not. Fortunately, this pandemic was deemed mild, and yet, were you, your staff, and, especially, your family prepared? Consider that in the early days of the pandemic, pharmacists reported a few physicians submitting prescriptions for themselves for all available oseltamivir courses in the pharmacy. Others reported an exponential increase in prescriptions, usually for individuals who did not otherwise appear ill. Physicians are as human as anyone else so having family and office preparedness plans established in advance can help assure they are more readily able to fill the role that others expect as well as assure the welfare of loved ones. Similar scenes played out across the country with the notable difference that mainland states with their contiguous borders and regional pharmacy storehouses had more ready access to supplies to support the pharmacies’ usual “just-in-time” stock. Hawai‘i, however, was constrained by weekly shipment schedules that limited resupplying as might be available given the increased demand on the mainland and ran into a functional shortage within one week.
<table>
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<th>Item</th>
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| 1. | Above all else, establish your personal preparedness—a plan to assure the safety and needs of your household (i.e., family, pets) during an emergency so that you may respond immediately as needed without concern for them. Useful resources for facilitating personal/family preparedness include:  
  - HDOH Plan to Be Ready family guide for health emergencies  
  - HDOH Public Health Preparedness—Get a Kit website  
  - AMA CitizenReady® guide: How you can prepare for disasters and public health emergencies |
| 2. | Are you knowledgeable about your facility/hospital’s and community’s preparedness and response plans? Routinely review existing in-house emergency plans, policies, and procedures. Establish an emergency response plan including for your clinical office—useful resources may be found on the Centers for Disease Control and Prevention’s healthcare preparedness website for physician’s offices as well as on disaster or emergency preparedness websites of medical professional associations. HAH Emergency Services provides on-site consultation and can provide just-in-time training as well as other resources; they have also produced a brief preparedness orientation video for health professionals: http://www.youtube.com/watch?v=iiGC05w0Ws. |
| 3. | Know how your facility/hospital/office is integrated into various response plans. Review what might be expected of you—e.g., healthcare delivery, and capacity to do so immediately. |
| 4. | Are you familiar with the Incident Command System? Know the incident command structure for your facility/hospital and where you might be in that structure. |
| 5. | Routinely participate in disaster drills and exercises to test response plans; practice flexibility. HAH routinely engages Hawaii hospitals in various exercises. You can and should regularly conduct your own clinical office exercises to test your own response plans—e.g., what would you and your staff do if advised that roads were closed in areas because of flooding; what if a severe pandemic or illness similar to SARS occurred? |
| 6. | Participate in continuing education and training programs to enhance your knowledge, competency, and willingness to respond to an emergency or mass illness situation. |
| 7. | Know the person in charge of response planning and coordination at your facility/hospital; for your clinical office, clarify if this is your role or one of your staff’s. |
| 8. | Know your facility/hospital/office’s emergency communications plan—e.g., what if, as during previous emergencies, cell phones have limited or no coverage? |
| 9. | Identify and know your roles and responsibilities in an emergency response situation; assure that others are also aware of your roles and responsibilities. |
| 10. | Know how to contact local and state health and law enforcement agencies. |
| 11. | Have a plan for mental health support for your staff, family, and especially yourself—healthcare professionals, especially physicians, tend to neglect this particular issue. |
| 12. | Ensure that your response plans address the needs of those who may seek your help and who have special requirements, health or otherwise—e.g., children, elderly, other vulnerable populations (i.e., cannot readily or safely access and use standard resources offered/available in emergencies—may include but not limited to physically or mentally disabled, limited or non-English speaking, geographically or culturally isolated, medically or chemically dependent, and homeless). |
| 13. | Know your facility/hospital’s/office’s standard operating procedures for managing and treating infected and exposed persons; for offices, establish plans, including basic triage and treatment as needed, for managing those who might present to your clinical practice and assure that all staff know those plans. |
| 14. | Know where to readily access quick reference guides and algorithms, if needed, to facilitate emergency triage and treatment of people who might arrive at your facility or hospital; for offices, establish plans, including basic triage and treatment as needed, for managing those who might present to your clinical practice and assure that all staff know those plans. |
| 15. | Know the person(s) in your facility/hospital charged with coordinating and assigning various healthcare responsibilities to assure surge capacity—e.g., if emergency is primarily infectious disease related, who will decide (and how) which resources, staffing, room assignments, etc. would be shifted to cover the potential need for quarantine and isolation but also cover regular healthcare needs adequately? |
| 16. | Know the requirements for laboratory support of diagnostic testing including assuring specimen collection, transport of specimens, and reporting results. |
| 17. | If likely or possible for children to present to your facility/hospital/office, assure there is sufficient pediatric-specific equipment and medications (dosing and formulation) as needed and/or develop and establish plans/agreements to secure them in a timely manner as needed during an emergency. The American Academy of Pediatrics disaster preparedness section can provide many varied resources regarding addressing the needs of children through its website. |
| 18. | Know how to rapidly access both health professional and public resources as needed and via various methods (e.g., phone, internet, hard copy). |
| 19. | Assure that all your critical contact information is regularly updated with all facilities/hospitals/offices where you have privileges/work, and, for all clinicians, with the Department of Health as well (clinicians should email their contact information to ep1@doh.hawaii.gov) to assure timely communication during an emergency. Provide multiple forms of communication, including email, phone, and fax, in case one or more are not accessible during an emergency. |
| 20. | Know your facility/hospital’s security plans in the event of an emergency and ensure that you have appropriate access; for offices, establish a security plan to assure the safety of your staff and your patients. |

The American Medical Association (AMA) among other professional healthcare organizations has compiled and developed resources specifically for physicians and other healthcare professionals to facilitate your preparedness to meet an emergency, whether a pandemic, a natural hazard, or an intentional event. The primer and resource guide for pandemic preparedness that the AMA has published in collaboration with the National Disaster Life Support Foundation contains a particularly useful list of critical preparedness steps for physicians and other healthcare professionals. Although the focus of this list is pandemic preparedness, many of the points can be applied to preparedness for other emergencies. The table above is an adaptation of that list. Hawai’i healthcare professionals are stretched thin on time and energy as well as financially in our challenging healthcare climate and may understandably feel they have competing priorities. However, during an emergency, especially, one that is primarily health-focused, the public will often and inevitably...
Figure. Plan 9 Guide for Personal Preparedness
turn to health and public health communities for guidance and assistance. Resources, some of which have been referenced in the checklist, are already available to help healthcare professionals prepare themselves as well as the communities we all serve. You can start by using the Plan 9 guide (see Figure or go to http://hawaii.gov/health/BT/Documents/plan9a.pdf) to prepare your household and/or provide the guide to your patients to help your community preparedness. Any questions you have may be directed to staff in the Public Health Preparedness Branch via email at phpinfo@doh.hawaii.gov. Ensuring the readiness of healthcare professionals to respond and be able to respond is a top priority to safeguard ultimately everyone’s health.

References
## UPCOMING CME EVENTS

Interested in having your upcoming CME Conference listed? Please contact Brenda Wong at (808) 536-7702 x103 for information.

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<tr>
<td>9/10-9/13</td>
<td>Postgraduate Institute for Medicine</td>
<td>Ritz-Carlton Kapalua, Maui</td>
<td>Imaging in Hawaii: Practical &amp; Clinical Education</td>
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<td>10/3-10/6</td>
<td>UC Davis Health System</td>
<td>Hilton Waikoloa Village, Kohola, Big Island, Hawai’i</td>
<td>32nd Annual Current Concepts in Primary Care Cardiology</td>
<td><a href="http://www.ucdmc.ucdavis.edu/cme/conferences">www.ucdmc.ucdavis.edu/cme/conferences</a></td>
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<td>CMX Travel</td>
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<td>10/13</td>
<td>American Diabetes Association</td>
<td>Queen’s Conference Center</td>
<td>10th Annual Professional Education Symposium - Our Kupuna: Diabetes Issues in the Elderly</td>
<td>Email: <a href="mailto:lduenas@diabetes.org">lduenas@diabetes.org</a></td>
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<td>10/22-10/26</td>
<td>Continuing Education Company</td>
<td>Sheraton Maui Resort &amp; Spa</td>
<td>2nd Annual Primary Care Fall CME Conference: Maui</td>
<td><a href="http://www.cmemeeting.org">www.cmemeeting.org</a></td>
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<td>UC San Francisco School of Medicine</td>
<td>Fairmont Kea Lani, Maui</td>
<td>Abdominal, Thoracic &amp; Women’s Imaging in Maui</td>
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<td>UC San Francisco School of Medicine</td>
<td>Fairmont Orchid, Kohala, Big Island</td>
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<td>UC Davis Health System</td>
<td>Sheraton Maui</td>
<td>D. Eugene Strandness Jr. Symposium: Diagnostic &amp; Therapeutic Approaches to Vascular Disease</td>
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<td>UC San Francisco School of Medicine</td>
<td>Grand Hyatt Regency, Koloa, Kaua’i</td>
<td>20th UCSF International Symposium in Oral &amp; Maxillofacial Surgery</td>
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<td>Mayo Clinic</td>
<td>Grand Hyatt Kaua’i</td>
<td>Hawai’i Heart 2013: Echocardiography &amp; Multimodality Imaging, Case Based Clinical Decision Making</td>
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<td>Wailea Beach Marriott, Waikoloa</td>
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<td>UC San Francisco School of Medicine</td>
<td>Fairmont Orchid, Kohala, Big Island</td>
<td>Current Concept in Neurological &amp; Musculoskeletal Imaging</td>
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<td>JW Marriott Ihilani Resort, O’ahu</td>
<td>High Risk Emergency Medicine Hawai’i 2013</td>
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<td>UC San Francisco School of Medicine</td>
<td>Moana Surfrider Hotel, O’ahu</td>
<td>Pacific Rim Otologyngology Head &amp; Neck Surgery Update Conference</td>
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<td>Moana Surfrider Hotel, O’ahu</td>
<td>American College of Surgeons Thyroid &amp; Parathyroid Ultrasonic Skills-Oriented Course</td>
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<td>2/17-2/22</td>
<td>UC San Francisco School of Medicine</td>
<td>Sheraton Maui</td>
<td>Infectious Diseases in Clinical Practice: Update on Inpatient &amp; Outpatient Infectious Diseases</td>
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<td>2/18-2/22</td>
<td>Continuing Education Company</td>
<td>Westin Maui, Kaanapali</td>
<td>Primary Care Winter CME Conference</td>
<td>Web: <a href="http://www.cmemeeting.org">www.cmemeeting.org</a></td>
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ADVOCATE FOR THE PATIENT, AND LOSE YOUR JOB.
In Arizona, a patient with end-stage liver disease was scheduled for evaluation for major invasive surgery and liver transplant. Night nurse, Amanda Trujillo, believed it was her duty to educate the patient about the extent of surgery and the need for lifetime care and medication. The patient did not know of possible options and asked about a hospice consultation. The nurse documented details of the conversation for the surgeon, noting that the patient no longer wanted the procedure. She requested a social service case-management consultation. The surgeon was enraged, and believed the nurse went beyond her scope of practice. He demanded that she be fired and her license suspended. The nursing director scolded the nurse and said she had “messed up the doctor’s hard work and planning for the surgery.” Her employer fired Trujillo and reported her to the Arizona State Board of Nursing for exceeding her scope of practice. After all, she had screwed up the surgeon’s OR schedule, and deprived him (and the hospital) of a fat reimbursement check.

EVERYONE LOVES HERSHEY’S KISSES. I’M WAITING FOR HERSHY’S GROPS.
A report in the Archives of Internal Medicine has already documented that eating chocolate doesn’t make a person fat. Now Barry Callebaut AG the world’s largest chocolate maker, has demonstrated that cocoa flavanols, compounds found in dark chocolate, can be good for the heart. Last year the Swiss company proved that just 200 milligrams of cocoa flavanols a day contributed to normal blood flow. Flavanols have been shown to lower blood pressure, improve circulation and reduce the risk of heart disease. The company has requested to use a health food label on its products. A final decision by the European Food Safety Authority is expected in early 2013. Nestle SA and Kraft Foods Inc., may soon have authority to make a health claim on product labels.

PART OF THE ORM CHECK LIST, DOC — BLOW IN THIS BREATHLYZER.
A research group at the University of Washington sent out a survey to more than 25,000 surgeons. Questions were asked about work, mood, lifestyle, and several were used to screen for alcohol use and dependency. The study, published in the Archives of Surgery, was limited because only 7,000 responded. Still, it is interesting to find that 15% of respondents showed signs of alcohol dependency. Interesting, because other studies have found that among the general population the figure is 9%. About 14% of male surgeons and 25% of female surgeons were believed to have booze problems. The study did not attempt to determine why surgeons are more vulnerable, nor to offer reasons why females are especially at risk. Lead author, Michael Orescovich, believes it is possible that the surgeon alcohol disorder is even greater than 15%. He wrote, “I think the people less likely to respond may have shame and guilt associated with their alcohol disorder, with a double event. The Georgia Supreme Court ruled unanimously that the statute violated the First Amendment that bans laws “abridging the freedom of speech.” The ruling is unlikely to have much impact because the law was an outlier. No other state targeted speech about assisted suicide rather than the act itself. Rita Marker, the executive director of Patients Rights Council, a group that opposes assisted suicide said, “It’s now open season on vulnerable people in Georgia.”

HELLO, KITTY.
Orville, Bart Jansen’s pet cat, was run over and killed by an automobile. Wanting him to live on, artist Jansen had Orville stuffed. A technician friend helped Jansen install an engine and radio in Orville’s flattened carcass. With extremities stretched and extended Orville lives on as a helicopter and can fly at art shows.

ADDENDA
- The National Youth Risk Behavior Survey for 2011 found that 33% of high school students texted or e-mailed while driving, at least once in the previous month.
- Lloyd’s of London has issued 100,000 policies covering alien abduction, with a double payout for any impregnation occurring therein.
- Congress wants tougher laws on corporations. Now when they buy a senator they have to provide a receipt.
- If we were meant to pop out of bed we would all sleep in toasters.
- Alcohol kills brain cells. We take the only organ in our body that can’t regenerate and we kill it just for fun.

NO ONE WANTS TO CRITICIZE DEFENDING A CHILD.
In Lavaca County, Texas, a child and her brother were playing in a barn while adults were working nearby. It was claimed that a 47 year-old man grabbed the 4-year-old girl and was sexually assaulting her. Another child saw what was happening and ran to tell the girl’s 23-year-old father. He pulled the man off his daughter and beat him to death. County Sheriff Micah Harmon told the Associated Press it appeared the father’s story was accurate and he did not arrest the man. The case will be presented to the grand jury to determine what, if any, charges will be filed.

SUCIDE IS A WAY OF TELLING GOD, "YOU CAN'T FIRE ME. I QUIT."
In 1994, Georgia legislature passed a law prohibiting the promotion of assisted suicide. The law does not ban all assisted suicide, but only those which advertise or when steps were taken to help carry out the event. The Georgia Supreme Court ruled unanimously that the statute violated the First Amendment that bans laws “abridging the freedom of speech.” The ruling is unlikely to have much impact because the law was an outlier. No other state targeted speech about assisted suicide rather than the act itself. Rita Marker, the executive director of Patients Rights Council, a group that opposes assisted suicide said, “It’s now open season on vulnerable people in Georgia.”

A BOY, A GIRL, A BARN, A DADDY, AN ALIEN, A IRONING BOARD.

typos are not my biggest problem — Thinkos are.

THE WEATHERVANE
RUSSELL T. STODD MD: CONTRIBUTING EDITOR

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