Cultural Issues in Pediatric Asthma Care

Applying the PACE Program to Underserved Communities

(APPUC) Study

Institute for Health Policy Studies
UCSF School of Medicine

Regional Asthma Management and Prevention

October 2010
Background: Why Cultural Competency?

- Limited information about cultural responses to ill health can contribute to patient-provider miscommunication
- Differences between the clinician and patient view of health and illness may lead to poor adherence

“Culture and language can profoundly affect Latino children’s health, but not enough cultural competency training of health care professionals and provision of linguistically appropriate care occur.” – Cross, et al


Flores G. et al. The Health of Latino Children: Urgent priorities, unanswered questions, and a research agenda (2002). JAMA.
Background: Why Cultural Competency?

- One out of every 8 children in the United States lives in California
- Nearly half of the children in California are Hispanic and/or have a foreign-born parent.
- Currently one of three of families speak a language other than English
- It is projected that by 2020, 76% of our children will be from “ethnic or racial minority” groups

National Disparities

• Prevalence of Asthma
  – Non-Hispanic blacks (9.3%)
  – Non-Hispanic whites (7.6%)
  – Hispanics (5.0%)

• ED Utilization for Asthma
  – Greatest for non-Hispanic blacks (37.2%)
  – Hispanics (26.0%)
  – Non-Hispanic whites (14.5%)

Background: Disparities in California

• Blacks have a disproportionate share of the asthma burden:
  – Asthma prevalence among Blacks is 30 percent higher than Whites.
  – Rates of ED visits, hospitalizations, and mortality are two to three times higher among Blacks than the next highest race/ethnicity groups.

Background: Disparities in California

- American Indians/American Natives have the highest rate of asthma compared to all groups

Background: Disparities in California

- Low income was found to be associated with severe asthma symptoms and hospitalizations

Background: Social Determinants of Health

- Can affect individual and community health directly, through an independent influence or an interaction with other determinants.

- Can indirectly affect individual and community health through their influence on health-promoting behavior.
  - For example:
    - Whether a person has access to food or a safe environment in which to exercise can be related to obesity.


Background: Definitions

**Culture***
“The thoughts, communications, actions, customs, beliefs, values and institutions of racial, ethnic, religious, or social groups.”

**Cultural and Linguistic Competence in Health***
“A set of congruent behaviors, attitudes and policies that come together in a system, agency, or among professionals that enables effective work in cross-cultural situations.”

**CLAS Standards***
“The collective set of culturally and linguistically appropriate services (CLAS) mandates, guidelines and recommendations issued by the United States Department of Health.”

**Social Determinants of Health**
Social determinants of health broadly include both the societal conditions and psychosocial factors, such as opportunities for employment, access to health care, housing quality, access to transportation, the environment and freedom from racism.


Background: Requirements of Cultural Competency?

Cultural Competency Requires

• Knowledge of other cultures and acceptance of cultural differences
  – Cultural knowledge provides a framework to understand, without stereotyping
  – Cultural knowledge acknowledges that diversity exists within ethnic groups

• Development and practice interpersonal skills, self-awareness and sensitivity
  – An in-depth exploration of one’s own cultural background can help the provider understand one’s own prejudices and biases as well as cultural assets


Developing Organizational Knowledge and Practices that are Culturally Competent
Cultural Competency at the Organizational Level

CLAS

• Culturally and Linguistically Appropriate Services

• Standards for what constitutes culturally and linguistically appropriate service and care
  – Developed by the U.S. Department of Health and Human Services to address health care disparities
  – CLAS mandates are current Federal requirements for all recipients of Federal funds (Standards 4, 5, 6, and 7)

• Primarily directed at health care organizations
  – However, individual providers are also encouraged to use the standards to make their practices more culturally and linguistically accessible.
• **Standard 4**
  Health care organizations must offer and provide language assistance services, including bilingual staff and interpreter services, at no cost to each patient/consumer with limited English proficiency at all points of contact, in a timely manner during all hours of operation.

• **Standard 5**
  Health care organizations must provide to patients/consumers in their preferred language both verbal offers and written notices informing them of their right to receive language assistance services.

• **Standard 6**
  Health care organizations must assure the competence of language assistance provided to limited English proficient patients/consumers by interpreters and bilingual staff. Family and friends should not be used to provide interpretation services (except on request by the patient/consumer).

• **Standard 7**
  Health care organizations must make available easily understood patient-related materials and post signage in the languages of the commonly encountered groups and/or groups represented in the service area.
Cultural Competency at the Organizational Level

At the Institutional Level

• Implement a standard of cultural and linguistic competence in the workplace

• Improve ability to deal with language barriers
  – Find quality interpreter services and them in the practice
  – Ask interpreters to write out instructions at the end of each visit

• Encourage continuous professional growth to advance cultural and linguistic competence
  – Provide training and technical assistance (i.e., seminars, classes, discussion sessions, etc.)

• Increase staff diversity in key providers to reflect the populations served by the clinic


Cultural Competency at the Organizational Level

At the Practice Level

- Display posters representing a variety of cultures, races, and ethnicities
- Use education materials that match literacy, cultural appropriateness and language needs


Social Determinants of Health: Patient Outcomes and Asthma Care

- Consider a comprehensive approach to asthma management that includes clinical assessment as well as environmental assessment.

- Identify precipitating factors for episodic symptoms (e.g., exposure at home, work, daycare, or school to allergens or irritants).

- Identify co-morbid conditions that may impede asthma management (e.g., sinusitis, rhinitis, GERD, obesity, stress, depression).

- Work with patient to control environmental factors
  - Evaluate the potential role of allergens and irritants.
  - Refer patients to community organizations and resources that may be able to assist with control and remediation of environmental factors.

- Use culturally competent communication techniques to discuss environmental exposures with patients in order to gain a fuller picture of the factors that impact their asthma outcome.
  - Develop and/or utilize a checklist of environmental exposure related questions to discuss with patients.

Social Determinants of Health: Helping Patients Overcome Obstacles

- Integrate community health workers into your practice to help patients navigate local health system
  - Community health workers (CHWs) are trained, non-health professionals who are peers of the patients that they serve. They act as a bridge between services and can support families with home management of asthma symptoms and connection to resources and services.

- Build relationships with community organizations that serve different patient populations and refer patients to them


Social Determinants of Health: Resources

- RAMP: Regional Asthma Management and Prevention
  - http://www.rampasthma.org/
- Standard 1
  Health care organizations should ensure that patients/consumers receive from all staff member's effective, understandable, and respectful care that is provided in a manner compatible with their cultural health beliefs and practices and preferred language.

- Standard 2
  Health care organizations should implement strategies to recruit, retain, and promote at all levels of the organization a diverse staff and leadership that are representative of the demographic characteristics of the service area.

- Standard 3
  Health care organizations should ensure that staff at all levels and across all disciplines receive ongoing education and training in culturally and linguistically appropriate service delivery.

- Standard 8
  Health care organizations should develop, implement, and promote a written strategic plan that outlines clear goals, policies, operational plans, and management accountability/oversight mechanisms to provide culturally and linguistically appropriate services.

- Standard 9
  Health care organizations should conduct initial and ongoing organizational self-assessments of CLAS-related activities and are encouraged to integrate cultural and linguistic competence-related measures into their internal audits, performance improvement programs, patient satisfaction assessments, and outcomes-based evaluations.

- Standard 10
  Health care organizations should ensure that data on the individual patient's/consumer's race, ethnicity, and spoken and written language are collected in health records, integrated into the organization's management information systems, and periodically updated.

- Standard 11
  Health care organizations should maintain a current demographic, cultural, and epidemiological profile of the community as well as a needs assessment to accurately plan for and implement services that respond to the cultural and linguistic characteristics of the service area.

- Standard 12
  Health care organizations should develop participatory, collaborative partnerships with communities and utilize a variety of formal and informal mechanisms to facilitate community and patient/consumer involvement in designing and implementing CLAS-related activities.

- Standard 13
  Health care organizations should ensure that conflict and grievance resolution processes are culturally and linguistically sensitive and capable of identifying, preventing, and resolving cross-cultural conflicts or complaints by patients/consumers.

- Standard 14
  Health care organizations are encouraged to regularly make available to the public information about their progress and successful innovations in implementing the CLAS standards and to provide public notice in their communities about the availability of this information.
Developing Cultural Knowledge
Carlos is a 7 year old child you are seeing for the first time. His parents are originally from Puerto Rico, and the family (mom, dad, Carlos and a 3 year old sister) moved to Oakland when Carlos was two.
The reason Carlos is in the office today is because of asthma, which was diagnosed in infancy. His asthma is usually worse during the cold weather. During those times he has frequent coughing and wheezing, often necessitating a visit to the doctor’s office or ED. Attacks are usually easily controlled by 2 or 3 “breathing treatments”. He has been hospitalized once for asthma (5 yrs ago).
Last PCP diagnosed Carlos’ asthma as mild to moderate intermittent, with a strong seasonal component. Acc’d to mom, therapy usually consists of “la maquina” whenever he gets sick. Further questioning reveals that the mom is referring to nebulized albuterol. He has not required oral or inhaled steroids.
In an attempt to elicit the mother’s understanding of asthma, you take a health beliefs history. According to mom, what happens inside the body when Carlos has an “asthma attack” is that his breathing tubes “tighten down”, and his lungs get filled with phlegm.
This can be caused by cold air or rapid changes in temperature, exercise, or strong emotions. The first thing mom notices before he has an “attack” is that he becomes less active and “his eyes look tired.”
Developing Cultural Knowledge:
Case Study cont.

Shortly afterwards Carlos begins to cough, and then begins to wheeze. His chest goes “in and out” as well. When she notices these signs she has him sit down and rest. She often rubs his shoulders, back and chest.
Developing Cultural Knowledge: Case Study cont

If after a few minutes this doesn’t relieve the symptoms she gives him a syrup that her mother told her was good for asthma. If after taking the syrup he doesn’t get better and he still looks bad, she gives him “la maquina”
Developing Cultural Knowledge: Cultural Beliefs and Practices

Key Points:

• Cultural beliefs and practices form part of an individual's approach to illness

• Individual patients combine personal, cultural, and biomedical beliefs & practices

• Ethnocultural beliefs and practices are based on coherent and internally logical belief systems

• Clinicians can & should try to combine biomedical & ethnomedical beliefs and practices in order to make our care fit within the patient's life and worldview
Developing Cultural Knowledge:
Culturally Sensitive Health Care

• Respects the beliefs, attitudes, and lifestyles of patients

• Acknowledges that health and illness are in part molded by variables such as cultural values, ethnic orientation, religious beliefs, and linguistic considerations

• Acknowledges that in addition to the physiological aspects of disease, the culturally-constructed meaning of illness is a valid clinical concern

• Sensitive to intragroup variations in beliefs and practices; avoids labeling and stereotyping

Pachter, JAMA 1994
Developing Cultural Knowledge: Variations in Asthma Beliefs and Practices

• Community cross-sectional survey of asthma beliefs (e.g., causes, symptoms) and treatments
  – Participants: 160 Latino adults in Connecticut, Texas, Mexico and Guatemala
  – Analyses of overall consistency and consensus

• Overall consistency intra-culturally and to a lesser extent inter-culturally

• Caution in using over-inclusive terms such as “Latino”, as there is variation among different ethnic groups with regard to health beliefs

## Developing Cultural Knowledge: Asthma Causes

<table>
<thead>
<tr>
<th>Puerto Ricans</th>
<th>Mexican-Americans</th>
<th>Mexicans</th>
<th>Guatemalan Ladinos</th>
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<tbody>
<tr>
<td>low resistance</td>
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<td>air pollution</td>
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<td>cigarette smoking</td>
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<td>weak lungs</td>
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<td>untreated cold/flu</td>
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<td>untreated cold/flu</td>
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<td>breathing smoke</td>
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<td>drafts</td>
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<td>dust</td>
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</tr>
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<td>improperly dressed</td>
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</tr>
<tr>
<td>animal hair</td>
<td>animal hair</td>
<td>animal hair</td>
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<tr>
<td>cold weather</td>
<td>cold weather</td>
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</tr>
</tbody>
</table>

Pachter, et. al., J Asthma 2002
## Developing Cultural Knowledge: Asthma Causes

<table>
<thead>
<tr>
<th>Puerto Ricans</th>
<th>Mexican-Americans</th>
<th>Mexicans</th>
<th>Guatemalan Ladinos</th>
</tr>
</thead>
<tbody>
<tr>
<td>being overweight</td>
<td></td>
<td>drinking cold/sweating virus</td>
<td>drinking cold/sweating virus</td>
</tr>
<tr>
<td>overexertion</td>
<td></td>
<td>no shoes on cold floor</td>
<td>being overweight</td>
</tr>
<tr>
<td></td>
<td></td>
<td>wet/sweating</td>
<td>no shoes on cold floor</td>
</tr>
<tr>
<td></td>
<td></td>
<td>bath during cold/flu</td>
<td>wet/sweating</td>
</tr>
<tr>
<td>unclean house</td>
<td></td>
<td></td>
<td>overexertion</td>
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<tr>
<td>strong emotions</td>
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<td>bath during cold/flu</td>
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<tr>
<td>nerves</td>
<td></td>
<td></td>
<td>lack of vitamins</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>bathing alot</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>anemia</td>
</tr>
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</table>
## Developing Cultural Knowledge: Cultural Practices

### During an Attack (n=117)

- Keep child calm: 97%
- Give medicines: 96%
- Have child rest: 95%
- Rub chest and back: 93%
- Give fluids: 91%
- Use a vaporizer: 34%
- Home remedies: 21%
- Breathing/relaxation exercises: 15%

Pachter, et. al., Arch Ped Adol Med, 1995
# Developing Cultural Knowledge: HOME BASED TREATMENTS

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Have tried</th>
<th>Is effective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pray to God</td>
<td>73%</td>
<td>75%</td>
</tr>
<tr>
<td>Baños (spiritual baths)</td>
<td>21%</td>
<td>24%</td>
</tr>
<tr>
<td>Azabache</td>
<td>15%</td>
<td>2%</td>
</tr>
<tr>
<td>Pray to the Saints</td>
<td>12%</td>
<td>10%</td>
</tr>
<tr>
<td>Prayer candles</td>
<td>8%</td>
<td>6%</td>
</tr>
<tr>
<td>Azogue</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>Pray to the Orishas</td>
<td>2%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Pachter, et. al., Arch Ped Adol Med, 1995
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### Developing Cultural Knowledge: HOME BASED TREATMENTS

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Have tried</th>
<th>Is effective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vicks/camphor</td>
<td>74%</td>
<td>62%</td>
</tr>
<tr>
<td>Siete jarabes</td>
<td>25%</td>
<td>21%</td>
</tr>
<tr>
<td>Aloe vera</td>
<td>15%</td>
<td>19%</td>
</tr>
<tr>
<td>Cod liver oil</td>
<td>15%</td>
<td>20%</td>
</tr>
<tr>
<td>Agua maravilla</td>
<td>11%</td>
<td>10%</td>
</tr>
<tr>
<td>Te de manzanilla</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>Garlic</td>
<td>6%</td>
<td>8%</td>
</tr>
<tr>
<td>Te de eucalyptico</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>Jarabe maguey</td>
<td>2%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Pachter, et. al., Arch Ped Adol Med, 1995
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Regional Asthma Management and Prevention
Developing Cultural Knowledge:

Siete Jarabes ("seven syrups")

sweet almond oil (Prunis amygdalus)
caster oil (Ricinus communis)
tolu (Myroxylon balsamum)
wild cherry (Prunus serotina)
licorice (Glycyrrhiza glaba)
cocillana (Guarea rusbyi)
honey
Applying the PACE Program to Underserved Communities (APPUC) Study

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Regional Asthma Management and Prevention
Developing Cultural Knowledge: Botanica recipe

- agua maravilla (Hamamelis virginiana, 14% alcohol)
- aloe vera juice (A. vera, A. barbadensii)
- cod liver oil
- egg white
- onion
- boiled garlic
- honey
### Developing Cultural Knowledge: Botanica recipe

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Effect</th>
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<tbody>
<tr>
<td>agua maravilla</td>
<td>astringent (bitter)</td>
</tr>
<tr>
<td>(Hamamelis virginiana; 14% alcohol)</td>
<td></td>
</tr>
<tr>
<td>aloe vera juice</td>
<td>purgative</td>
</tr>
<tr>
<td>(A. vera; A. barbadensii)</td>
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<tr>
<td>cod liver oil</td>
<td></td>
</tr>
<tr>
<td>egg white</td>
<td>demulcent</td>
</tr>
<tr>
<td>onion</td>
<td></td>
</tr>
<tr>
<td>boiled garlic</td>
<td></td>
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<tr>
<td>honey</td>
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</table>
Developing Cultural Knowledge:

Obtain a health beliefs history
Developing Cultural Knowledge: Health Beliefs History

Obtain a health beliefs history

• What do you think is wrong with your child?
• What do you think caused it?
• Why did your child get sick?
• What do you think is happening inside his/her body?
• What problems does this illness cause your child?
Developing Cultural Knowledge: Health Beliefs History cont.

- How do you know when your child is sick with this illness?
- How do you treat it?
- What do the treatments do?
- What happens if it’s not treated?
Practicing Cultural Competency: Tool

Asthma Health Beliefs History

- What do you think is wrong?
- Why do you think you have this illness?
- What do you think caused it?
- Why do you think it started when it did?
- What do you think happens inside your body when you have an asthma attack?
- What are the symptoms that make you know that you’re going to have an asthma problem?
- What are you most worried about with asthma?
- What problems does it cause you?
- How long do you expect it to last?
- How do you treat it?
- What will happen if it is not treated?
- What do you expect from the therapies?

Developing Cultural Knowledge:

- Ask about home remedies
Preface conversation with something along the lines of “It is common for families to treat asthma with effective remedies not prescribed by a physician…”

- Have you heard of any of these treatments for asthma?
- What are they?
- Do you think they work?
- Have you tried them?
- Did they work?
- Are you using them now?
- Are they helping your asthma?

Developing Cultural Knowledge:

- Include non-harmful remedies in the treatment plan
Developing Cultural Knowledge:  
Siete Jarabes (“seven syrups")

- sweet almond oil (Prunis amygdalus)  
- tolu (Myroxylon balsamum)  
- castor oil (Ricinus communis)  
- wild cherry (Prunus serotina)  
- licorice (Glycyrrhiza glabra)  
- cocillana (Guarea rusbyi)  
- honey
Developing Cultural Knowledge: Cultural Beliefs and Practices

Key Points:

Cultural beliefs and practices regarding asthma seem to reflect the traditional Latino ethnomedical belief system.

Cultural beliefs & practices are almost always combined with biomedical beliefs & practices.

Remedies and therapies may not be biomedically effective, but when viewed from within the cultural belief system, may be considered effective.
Practicing Cultural Competency: Addressing Differences in Perceptions about Illness

- Patients have explanatory models of illness that are influenced by culture
- Can be challenging when the provider is not familiar with patient’s background
- Differing perceptions about illness affect treatment by...
  - Preventing the sharing of information during visit (e.g., history of symptoms, etc.)
  - Posing challenges to the development of a feasible plan
  - Convincing the patient about the importance of adherence to a plan

Practicing Cultural Competency: Addressing Challenges Tool: Awareness-Assessment-Negotiation Technique

- **Become Aware** of the commonly held ethnomedical beliefs of the group in your community
- **Assess** the likelihood that a particular patient may act on these beliefs during a particular illness episode
- **Negotiate** between the biomedical and ethnomedical belief systems
Practicing Cultural Competency: Tools for Challenges

Addressing Challenges Tool:
Awareness-Assessment-Negotiation Technique

Provider

Become aware of commonly held beliefs in the community

Assess whether the patient applies or adheres to these culturally-oriented beliefs. Take a health belief history;

Negotiate and potentially integrate practices

Community beliefs

If there is a conflict, negotiate focusing on higher priorities

Patient

Become aware of commonly held beliefs in the community

Assess whether the patient applies or adheres to these culturally-oriented beliefs. Take a health belief history;

Negotiate and potentially integrate practices

Practicing Cultural Competency: Tool

Non-Verbal Communication Skills

- Learn about your patient’s cultural norms regarding personal distance, gestures, eye contact and posturing

- Speak directly to your patient and don’t interpret lack of eye contact as a lack of interest

- Be aware that use of an interpreter (or other qualified translator) can change the dynamics of the provider-patient relationship and affect the sharing of sensitive personal info
Credits

• **Institute for Health Policy Studies, University of California, San Francisco**
  – Michael Cabana, MD, MPH, Professor Biostatistics and Epidemiology
  – Cristina Delgado, BA, Project Manager, APPUC Study

• **Regional Asthma Management and Prevention**
  – Anne Kelsey Lamb, MPH, Director
  – Jessica Peters, Project Associate

• **Johns Hopkins Children’s Center**
  – Sande Okelo, MD, Assistant Professor, Pulmonary Medicine

• **St. Christopher’s Hospital for Children**
  – Lee Pachter, DO, Chief of the Section of General Pediatrics, Professor Pediatrics Drexel University College of Medicine

CONTACT IHPS – UCSF:
APPUC Study
3333 California Street, Suite #265
San Francisco, CA 94143

Email: cabanam@peds.ucsf.edu
Phone: 1-866-913-8477

CONTACT RAMP:
Regional Asthma Management and Prevention
180 Grand Ave., Suite 750#
Oakland, CA 94612
Tel: (510) 302-3365
info@rampasthma.org
Credits: Reviewers

- **Brenda Rueda-Yamashita**
  - Chronic Disease Director, Alameda County Public Health Department

- **Hali Sherman, MD**
  - Physician, La Clinica de la Raza

- **Shannon Thyne, MD**
  - Medical Director of the Children’s Health Center at SFGH

- **Susan Janson, RN, ANP, DNSc, FAAN**
  - Professor and Harms/Alumnae Chair, Dept. of Community Health Systems, UCSF School of Nursing