San Francisco General Hospital

It’s as real as it gets
San Francisco General Hospital

Family Health Center

47,000 patient visits annually
<table>
<thead>
<tr>
<th>Ethnicity/Race</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>15%</td>
</tr>
<tr>
<td>African-American</td>
<td>12%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>43%</td>
</tr>
<tr>
<td>Asian/Pacific Islander</td>
<td>27%</td>
</tr>
<tr>
<td>Other</td>
<td>3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Insurance</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medicaid</td>
<td>53%</td>
</tr>
<tr>
<td>Medicare</td>
<td>15%</td>
</tr>
<tr>
<td>Uninsured/Healthy SF</td>
<td>25%</td>
</tr>
<tr>
<td>Private Insurance</td>
<td>3%</td>
</tr>
<tr>
<td>Other</td>
<td>3%</td>
</tr>
</tbody>
</table>
Case Study:
Improving the Health of an Adolescent with Obesity-Related Type II Diabetes

- Lots of evidence, guidelines, models on appropriate treatment
  - Behavior change for weight loss (nutrition, physical activity)
  - Medications

- The challenge of translation and implementation in real world settings
Figure: "The Breakeven Point" (for a drug that reduces mortality by 20%)

From: Woolf SH, Johnson RE. The breakeven point: when medical advances are less important than improving the fidelity with which they are delivered. Ann Fam Med 2005:3:545-552.
Translational Research: T1 and T2

- **T1**: “The transfer of new understandings of disease mechanisms gained in the laboratory into the development of new methods for diagnosis, therapy, and prevention and their first testing in humans.”

- **T2**: “The translation of results from clinical studies into everyday clinical practice and health decision making.”

Translation and Health Delivery System Transformation

Patient-Centered Medical Home
AKA Advanced Models of Primary Care
The Team Huddle
Making changes in complex adaptive organizations
Transformation is hard work
“Health Coach” Team Model
Developed by Tom Bodenheimer
FHC Diabetes Improvement

Percent of all FHC diabetic patients (1198 in 2009)
Obtaining a Refill for Narcotic Pain Medication in FHC

Chronic Pain Management
Triplicate Refill Process - Current Process
Part I - Initiation of Process and Call-In Flow
09/2003

Patient needs a Refill

Patient has a pre-planned, scheduled apppt

Patient calls the clinic

Patient comes into clinic

See Drop-In Flow

Primary's Voice
Mail

Team Clerk

Patient Leaves Message

Consult Attending

Schedule Appt

Note in Mail Box

Refill Clinic

Gathers Information

Primary

Pages Primary

Reviews Contract Book

Reviews LCR

Requests Chart

Refills Medication

Makes Decision Based on Available Information

Does Not Refill Medication

See Scheduled Appt Flow

Timeliness of message and retrieval
Completeness of Information

See Drop-In Flow

See Scheduled Appt Flow
Reengineering Specialty Referrals at SFGH: Transformation of the Medical Neighborhood

• EHR-embedded “eReferral” system

• Home grown product developed by SFGH-UCSF gastroenterologist, Hal Yee, MD
Description of eReferral

• HIPAA compliant web-based referral system
  – Linked to EMR, with auto-population of relevant EMR data
  – Free text referral questions
  – Mandatory use for enrolled specialty clinics and certain imaging studies
Description of eReferral

• Individualized review and response by specialist
  – Specialists can:
    • Redirect referral if inappropriate for clinic or other options available
    • Request clarification of question or additional work-up prior to specialty appointment
    • Provide information for PCP management of condition, with or without an appointment
    • Overbook appointment if clinically warranted
  – Ability for iterative communication between referring and reviewing clinicians
Improved Timing of Consultations Resulting in Reduced Waiting Times for Specialty Visits

- Not Scheduled: 30%
- Scheduled: 30%
- Overbooked: 40%
eReferral Evaluation: PCPs

Primary Care Provider Survey
81% response rate (298 of 368)

“Overall, how has eReferral changed clinical care for your patients?”

- **Worse**: 17% (Consortium), 8% (COPC), 4% (SFGH), 7% (Overall)
- **No Difference**: 30% (Consortium), 24% (COPC), 16% (SFGH), 21% (Overall)
- **Better**: 50% (Consortium), 68% (COPC), 79% (SFGH), 71% (Overall)
Proportion of specialists reporting it somewhat/very difficult to identify the consultation/clinical question

- Medicine
- Surgical

- eReferral
- Prior Method
The Bauhaus of Health Delivery
System Reform
Form follows function

Lifelong Learning: Cooperative Extension Service educators such as Dallas Mount, who serves Platte County, are available in every Wyoming county to help you.
Diffusion of Innovation

Population Health Perspective
<table>
<thead>
<tr>
<th>Fitness and Nutrition</th>
<th>San Francisco County</th>
<th>Greater Bay Area Region</th>
<th>Statewide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physically fit children</td>
<td>31%</td>
<td>31%</td>
<td>28%</td>
</tr>
<tr>
<td>Children who never exercise</td>
<td>72%</td>
<td>71%</td>
<td>71%</td>
</tr>
<tr>
<td>Children who ate fast food in the prior day</td>
<td>20%</td>
<td>26%</td>
<td>34%</td>
</tr>
<tr>
<td>Overweight children</td>
<td>27%</td>
<td>29%</td>
<td>33%</td>
</tr>
</tbody>
</table>
## Fitness and Nutrition in SF Children 2007

<table>
<thead>
<tr>
<th>Fitness and Nutrition by Race/Ethnicity</th>
<th>African American</th>
<th>Asian</th>
<th>Latino</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physically fit children</td>
<td>18%</td>
<td>39%</td>
<td>18%</td>
<td>38%</td>
</tr>
<tr>
<td>Children who never exercise</td>
<td>*</td>
<td>80%</td>
<td>70%</td>
<td>72%</td>
</tr>
<tr>
<td>Children who ate fast food in the prior day</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>Overweight children</td>
<td>37%</td>
<td>21%</td>
<td>40%</td>
<td>23%</td>
</tr>
</tbody>
</table>
Ecological Model

- County
- Housing
  - Workplace
    - Family
      - Individual
    - Daycare
  - School
    - Availability of health services
  - National
    - Politics
  - Jobs
  - State
  - Community
  - Policies
  - Legal System
  - Healthcare Provider
- City
- Laws
- County
- State
- National
- Politics
- Community
- Jobs
- State
- Policies
- Legal System
- Healthcare Provider
Life Course Model

Mother
overweight/diabetic

Poverty/fast
food/food habits in young woman

Adolescent with increased # fat cells/abnormal GT

School with no PE, unsafe parks latch key child watches TV / gets more overweight

Infant born
LGA/Abnormal GT

Working Mom-Infant Fed Formula

Family Culture - high fat, high sugar diet-child overweight
Larger Dimensions of Basic Science

- Epidemiology
- Biomedical science and technology
- Behavioral science
- Simulation & modeling
- Psychology
- Communication and information technology
- Political science and sociology
- Cognition
- Social marketing
- Economics
Multi-level Interventions to Improve Nutrition
SACRAMENTO — Angered by increases in tuition and cuts in state financing, thousands of students, parents and faculty members protested across California on Thursday at colleges, universities and even elementary schools to plead for help with the state’s education crisis.

Demonstrators in Sacramento on Thursday protested education cuts.

By JESSE McKINLEY
Published: March 4, 2010
What is the measure of success of translational research?
A Cross Cutting New Aim for the UCSF CTSI

• “The CTSI will challenge, encourage, and support UCSF researchers to take our research capital—the great wealth of clinical research discoveries, knowledge, and know-how at UCSF—and link it with our community partners’ expertise and priorities to effectively translate this research capital into interventions that can be scaled to make a measurable impact on the health of our local community.”

<table>
<thead>
<tr>
<th>Rank</th>
<th>Underlying Cause of Death</th>
<th>Years of Life Lost</th>
<th>Average Years of Life Lost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Violence/assault, all mechanisms</td>
<td>2879.9</td>
<td>25.0</td>
</tr>
<tr>
<td>2</td>
<td>Drug overdose, unintentional</td>
<td>2908.1</td>
<td>21.7</td>
</tr>
<tr>
<td>3</td>
<td>HIV/AIDS</td>
<td>6464.6</td>
<td>20.3</td>
</tr>
<tr>
<td>4</td>
<td>Self-inflicted injuries, all mechanisms</td>
<td>3026.2</td>
<td>19.9</td>
</tr>
<tr>
<td>5</td>
<td>Alcohol use disorders</td>
<td>2228.5</td>
<td>17.4</td>
</tr>
<tr>
<td>6</td>
<td>Cirrhosis of the liver</td>
<td>1586.9</td>
<td>16.4</td>
</tr>
<tr>
<td>7</td>
<td>Liver cancer</td>
<td>2035.6</td>
<td>13.2</td>
</tr>
<tr>
<td>8</td>
<td>Hypertensive heart disease</td>
<td>3379.0</td>
<td>11.8</td>
</tr>
<tr>
<td>9</td>
<td>Diabetes mellitus</td>
<td>1656.5</td>
<td>11.3</td>
</tr>
<tr>
<td>10</td>
<td>Lung, bronchus and trachea cancers</td>
<td>4134.3</td>
<td>10.7</td>
</tr>
</tbody>
</table>

T. Aragon. BMC Public Health 2008, 8: 116

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<td>823.6</td>
<td>22.9</td>
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<tr>
<td>2</td>
<td>Drug overdose, unintentional</td>
<td>843.8</td>
<td>22.8</td>
</tr>
<tr>
<td>3</td>
<td>Self-inflicted injuries, all mechanisms</td>
<td>992.9</td>
<td>20.7</td>
</tr>
<tr>
<td>4</td>
<td>Breast cancer</td>
<td>2975.1</td>
<td>13.4</td>
</tr>
<tr>
<td>5</td>
<td>Pancreas cancer</td>
<td>1122.4</td>
<td>10.7</td>
</tr>
<tr>
<td>6</td>
<td>Lung, bronchus and trachea cancers</td>
<td>3376.2</td>
<td>10.4</td>
</tr>
<tr>
<td>7</td>
<td>Lymphomas and multiple myeloma</td>
<td>852.0</td>
<td>9.9</td>
</tr>
<tr>
<td>8</td>
<td>Colon and rectum cancers</td>
<td>1407.7</td>
<td>9.2</td>
</tr>
<tr>
<td>9</td>
<td>Diabetes mellitus</td>
<td>1207.9</td>
<td>8.6</td>
</tr>
<tr>
<td>10</td>
<td>Hypertensive heart disease</td>
<td>2214.9</td>
<td>8.2</td>
</tr>
</tbody>
</table>

T. Aragon. BMC Public Health 2008, 8: 116
SF Bay Health Improvement Program (SF Bay HIP)
Lost In Translation