

Improving Health and Health Care: A View From the Trenches

IBM Almaden Institute
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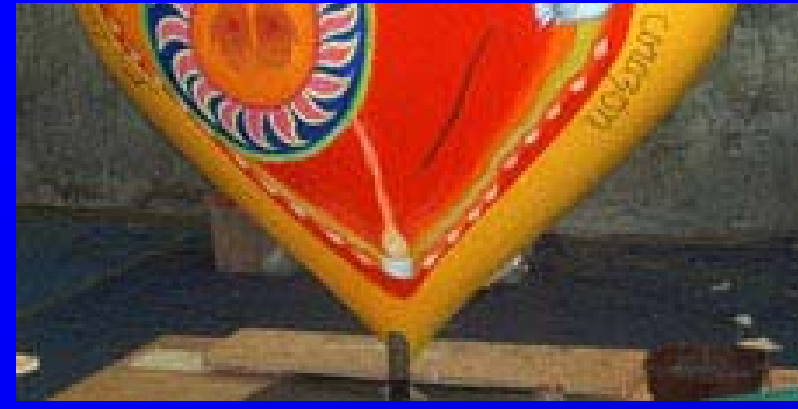
San Francisco General Hospital





San Francisco General Hospital

It's as real as it gets



San Francisco General Hospital



Family Health Center

47,000 patient visits
annually

SFGH Family Health Center Patients

Ethnicity/Race

15%	White
12%	African-American
43%	Hispanic
27%	Asian/Pacific Islander
3%	Other

Insurance

53%	Medicaid
15%	Medicare
25%	Uninsured/Healthy SF
3%	Private Insurance
3%	Other

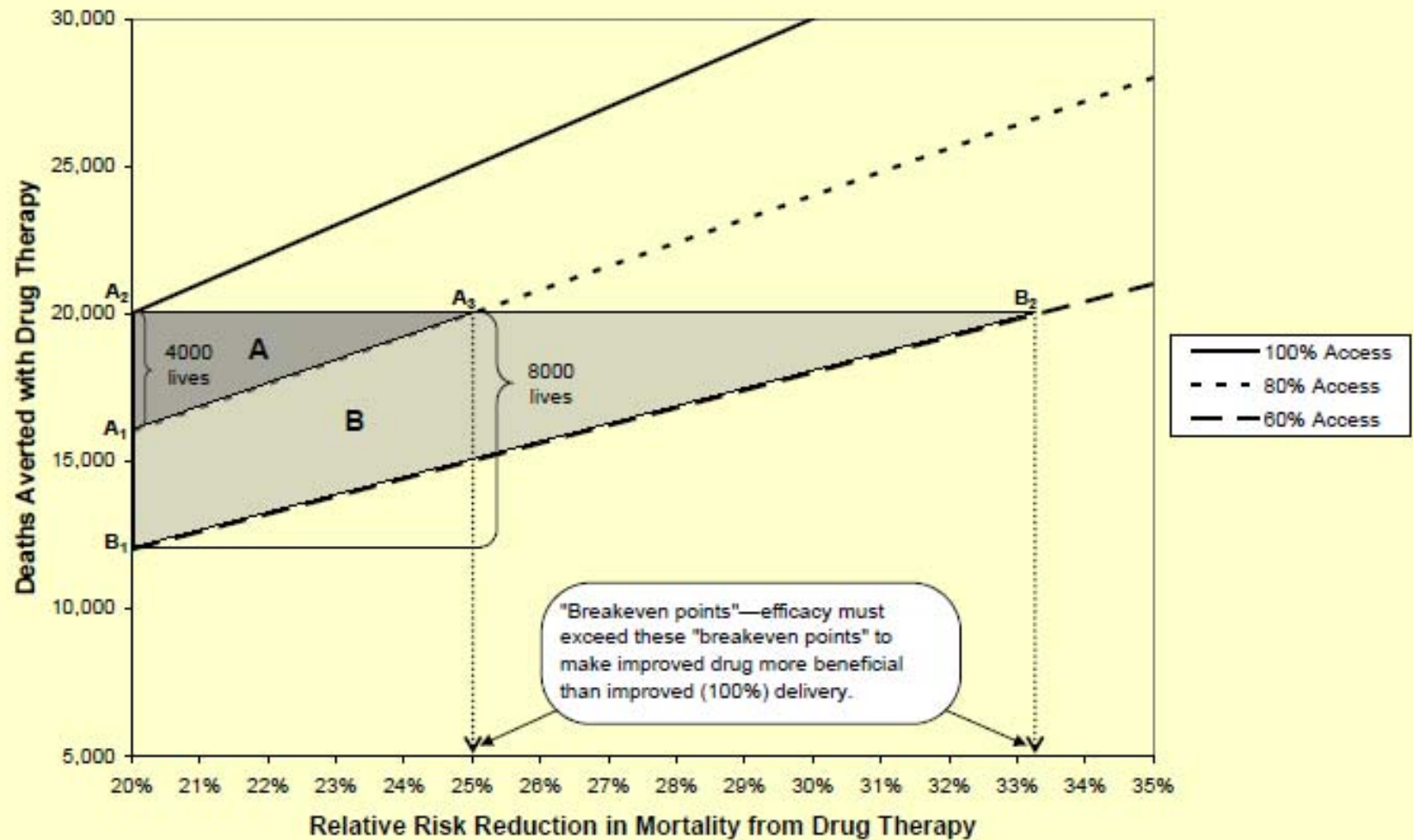


Case Study:

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.”

Sung, N. S. et al. JAMA 2003;289:1278-1287.

Translation and Health Delivery System Transformation

Patient-Centered Medical Home
AKA Advanced Models of Primary Care

FHC Retreat

Multidisciplinary
Task Force
Formed

Work Groups

Mission Statement

Teams

Needs Assessment

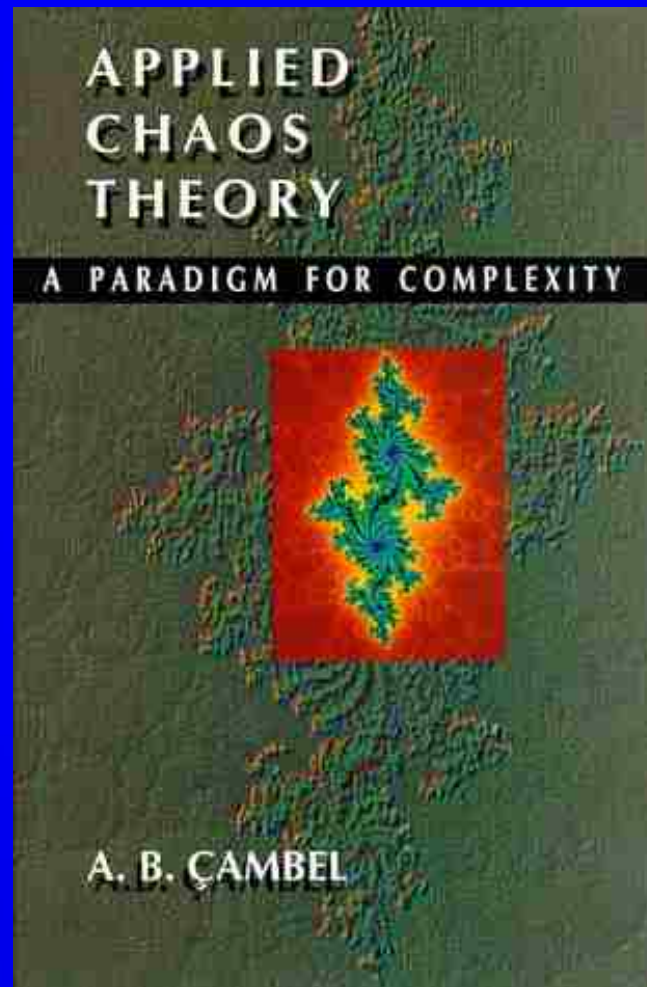
Access

Education

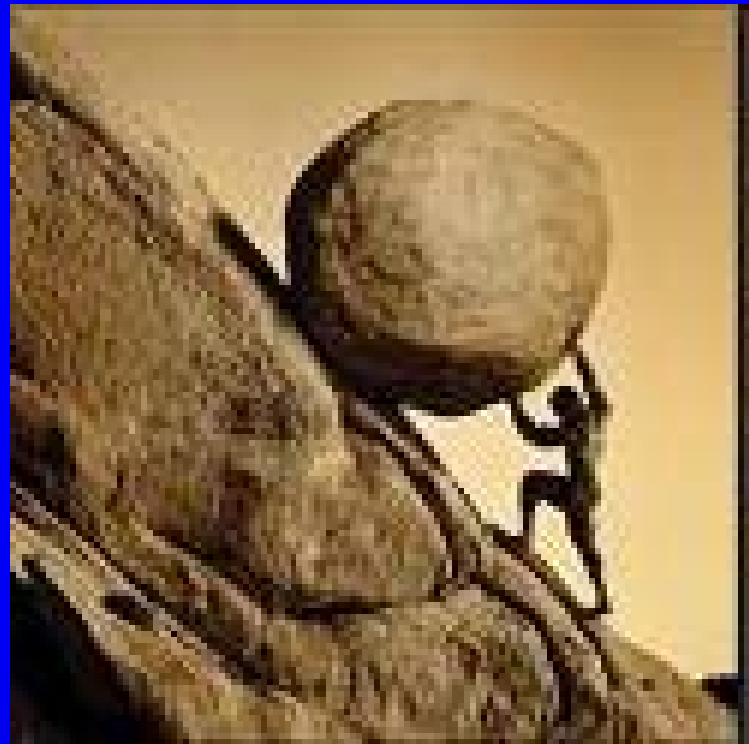
The Team Huddle



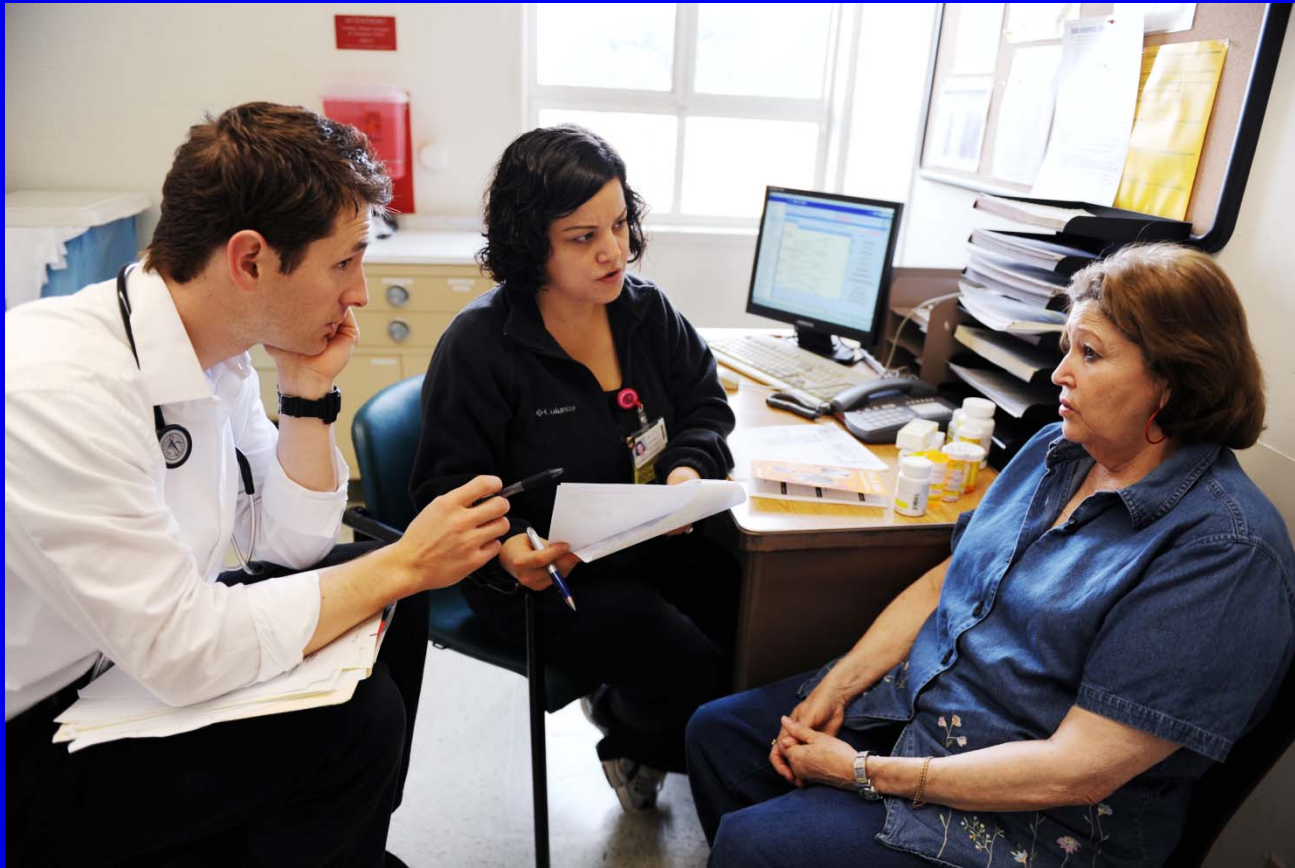
Making changes in complex adaptive organizations



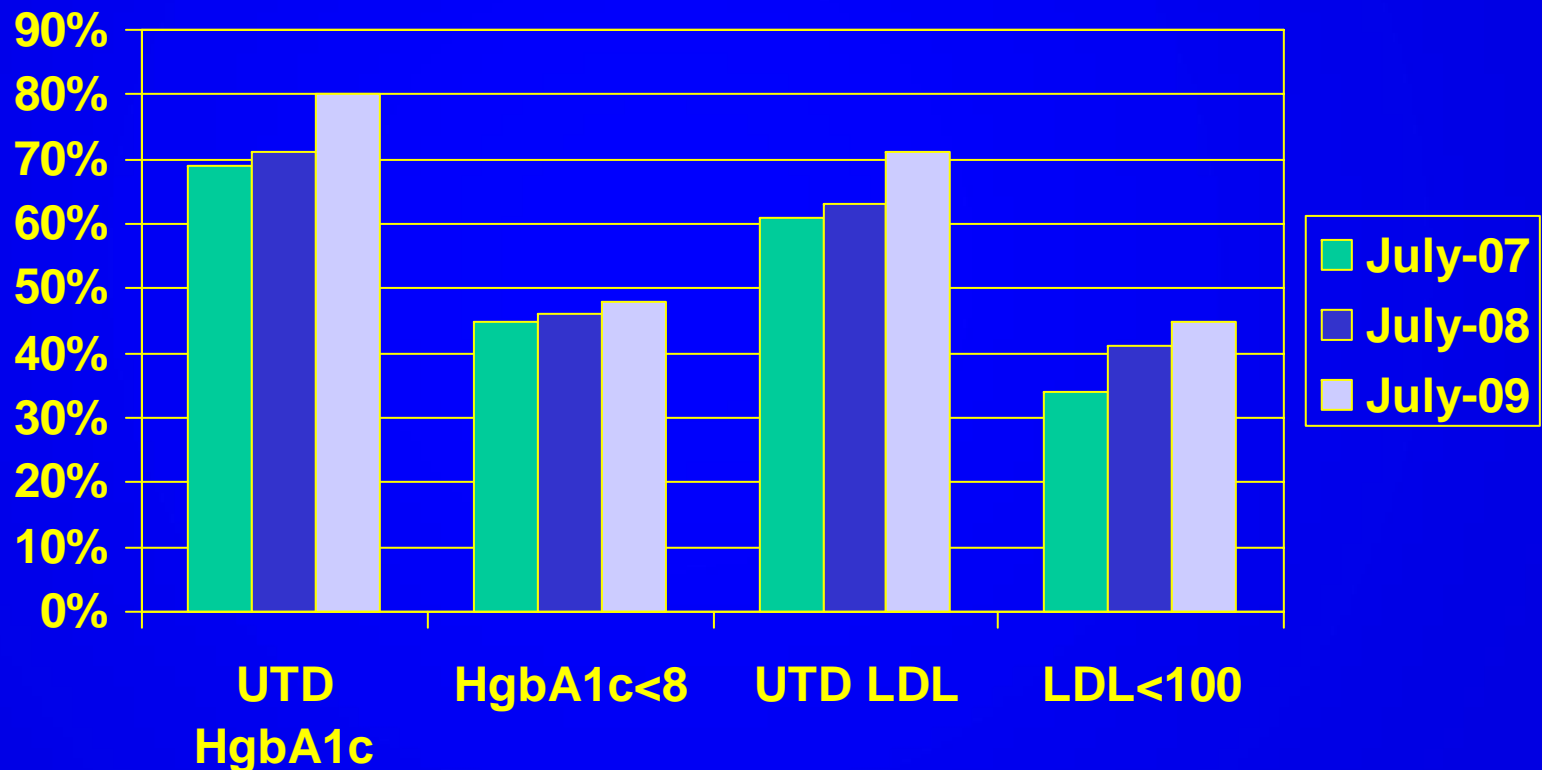
Transformation is hard work



“Health Coach” Team Model Developed by Tom Bodenheimer



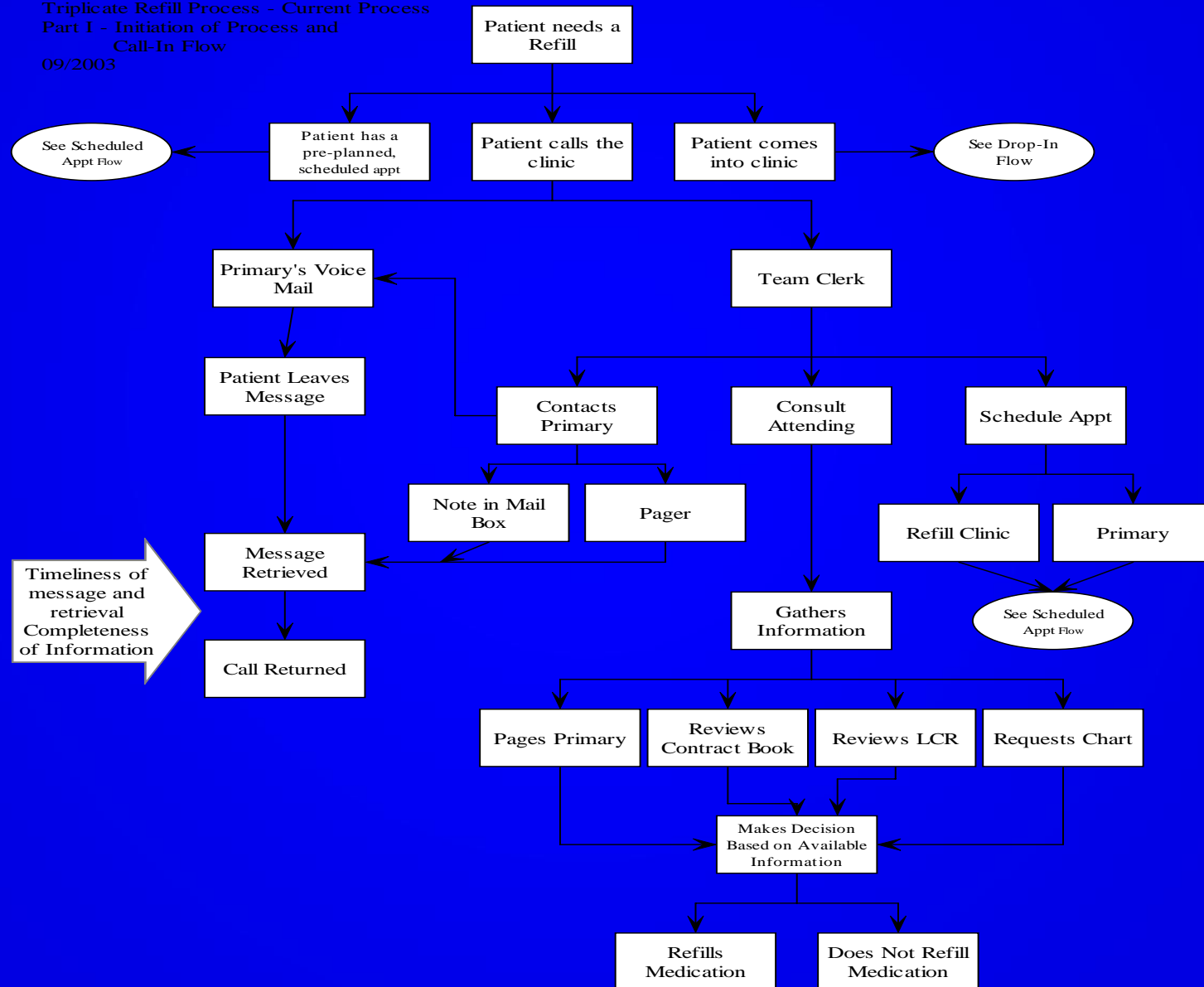
FHC Diabetes Improvement



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



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

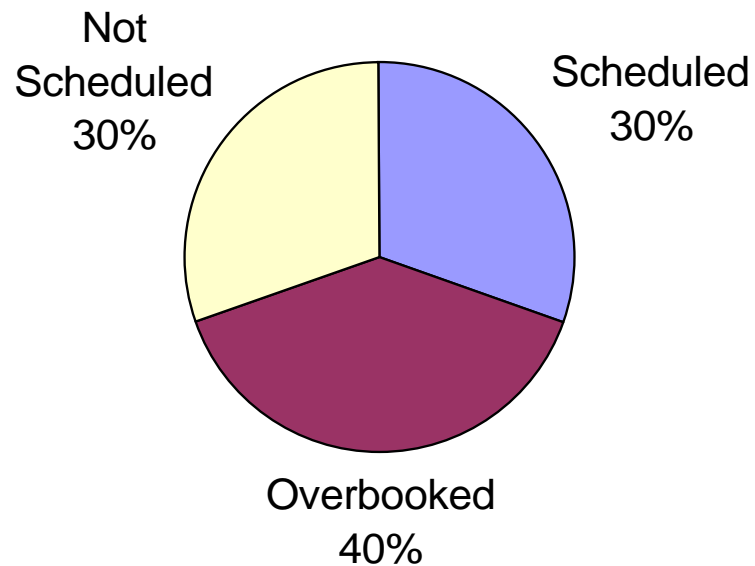
Description of eReferral

- **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

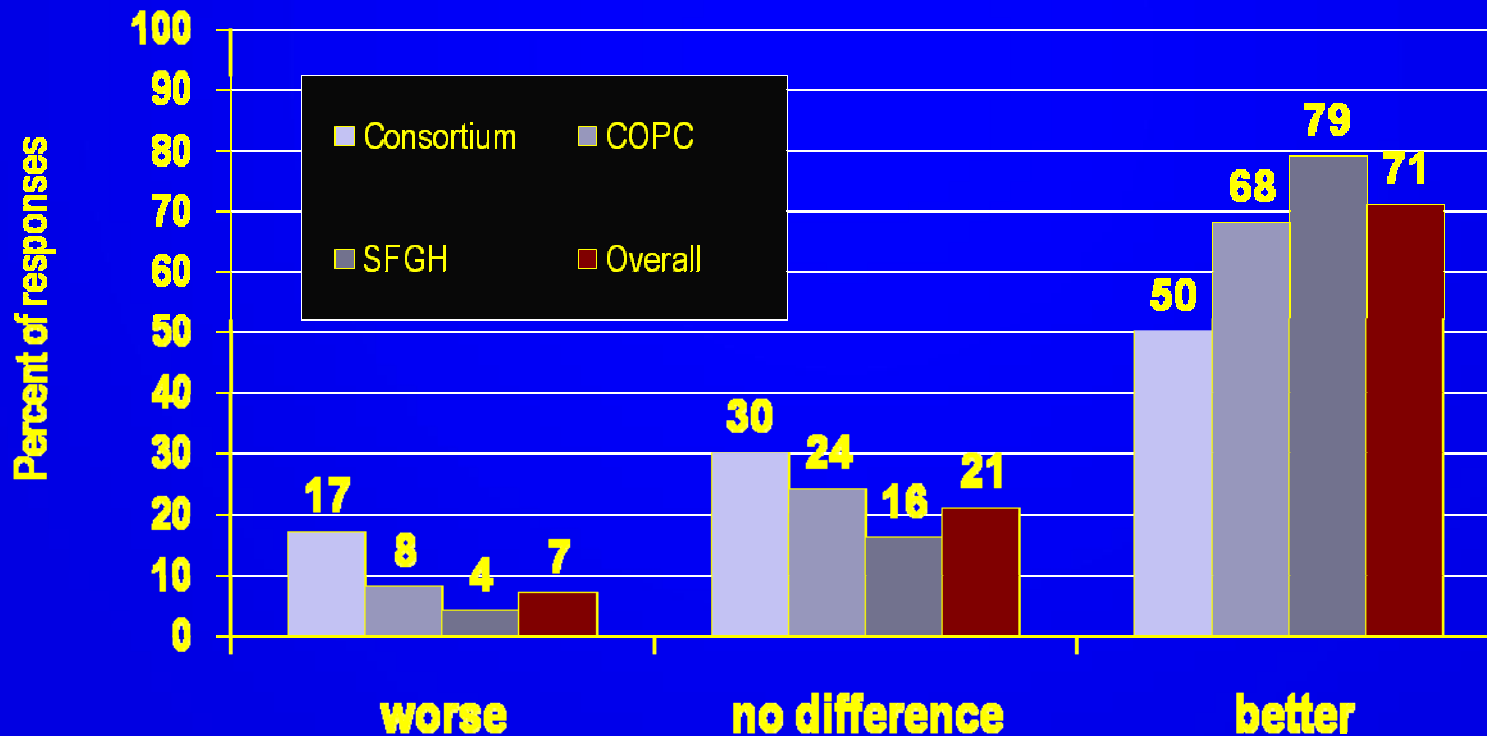


eReferral Evaluation: PCPs

Primary Care Provider Survey

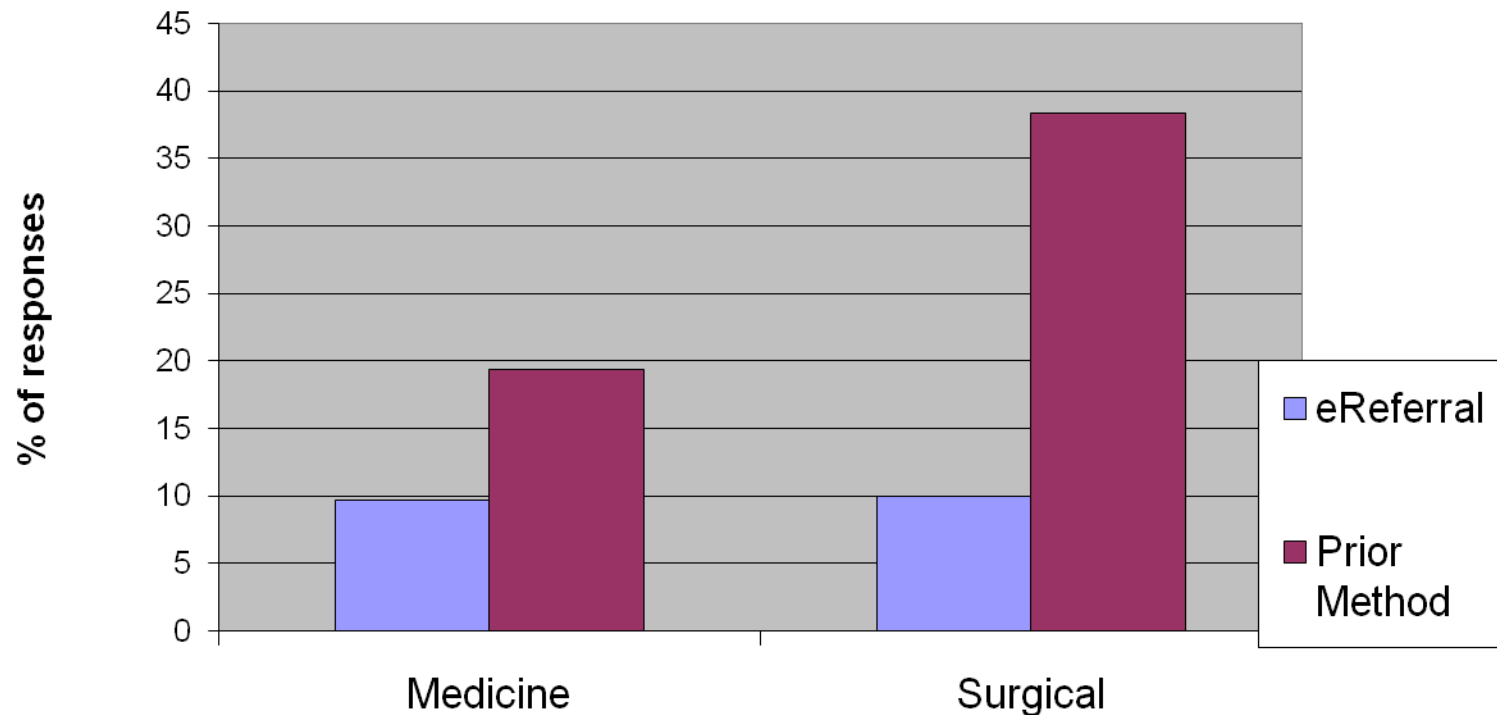
81% response rate (298 of 368)

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



eReferral Evaluation: Specialists

Proportion of specialists reporting it somewhat/very difficult to identify the consultation/clinical question





The Bauhaus of Health Delivery System Reform

Form follows function

K Grumbach, JAMA 2009, Dec 2;302(21):2363-4.

UNIVERSITY OF WYOMING

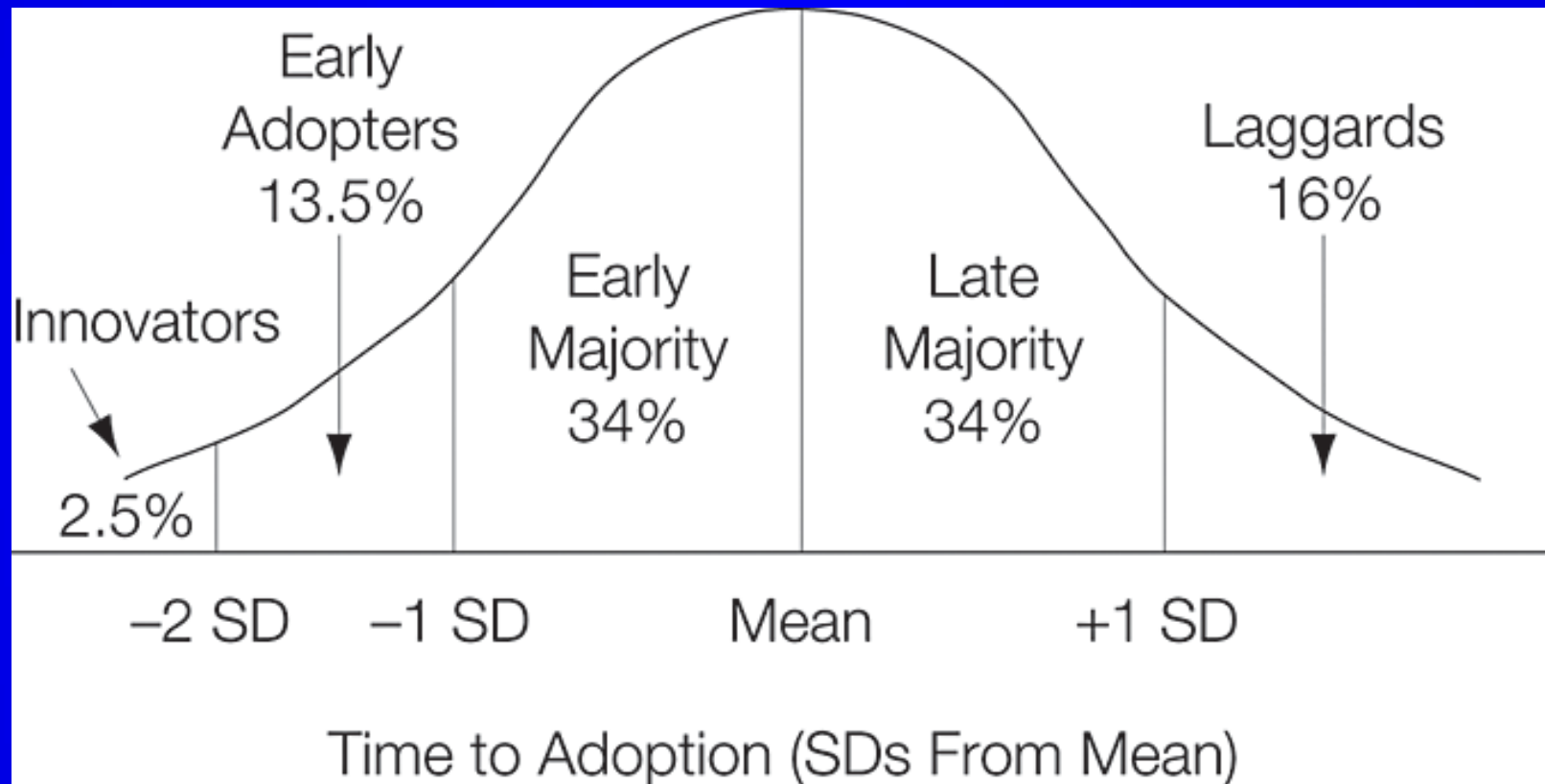
College of Agriculture

Cooperative Extension Service



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



Rogers EM. *Diffusion of Innovations*. New York, NY: Free Press

Population Health Perspective



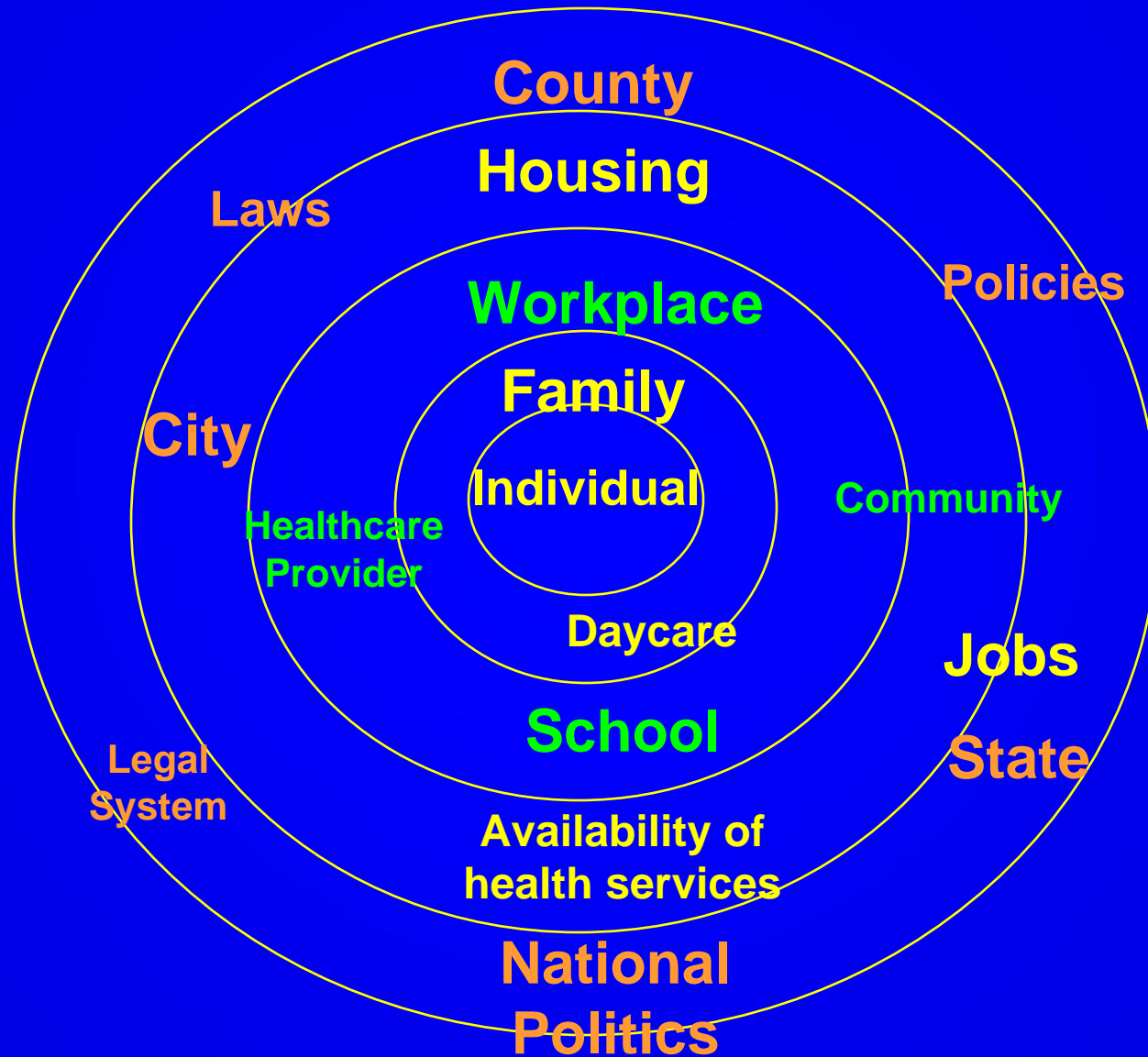
Fitness and Nutrition in SF Children 2007

Fitness and Nutrition	San Francisco County	Greater Bay Area Region	Statewide
Physically fit children	31%	31%	28%
Children who never exercise	72%	71%	71%
Children who ate fast food in the prior day	20%	26%	34%
Overweight children	27%	29%	33%

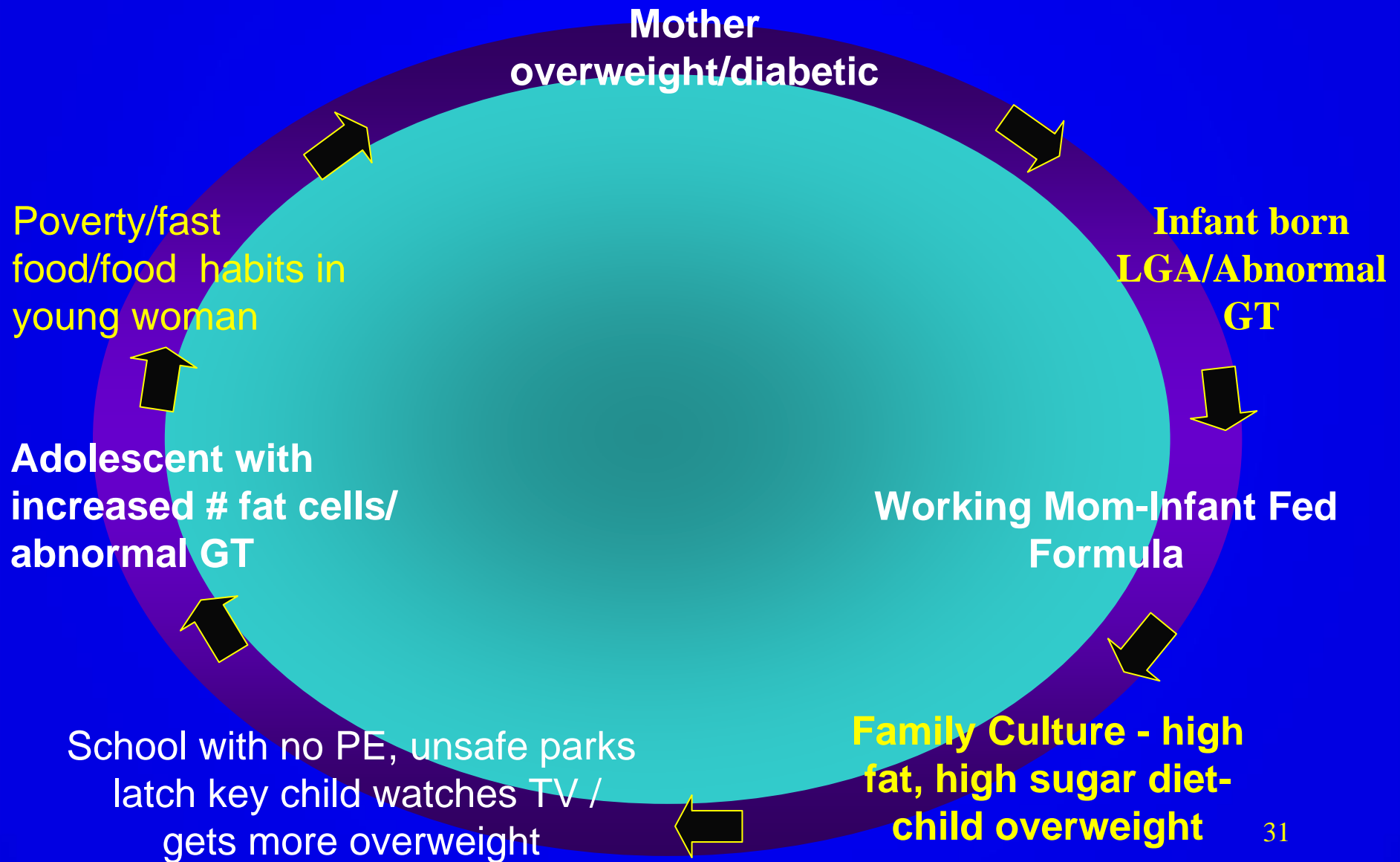
Fitness and Nutrition in SF Children 2007

Fitness and Nutrition by Race/Ethnicity	African American	Asian	Latino	White
Physically fit children	18%	39%	18%	38%
Children who never exercise	*	80%	70%	72%
Children who ate fast food in the prior day	*	*	*	*
Overweight children	37%	21%	40%	23%

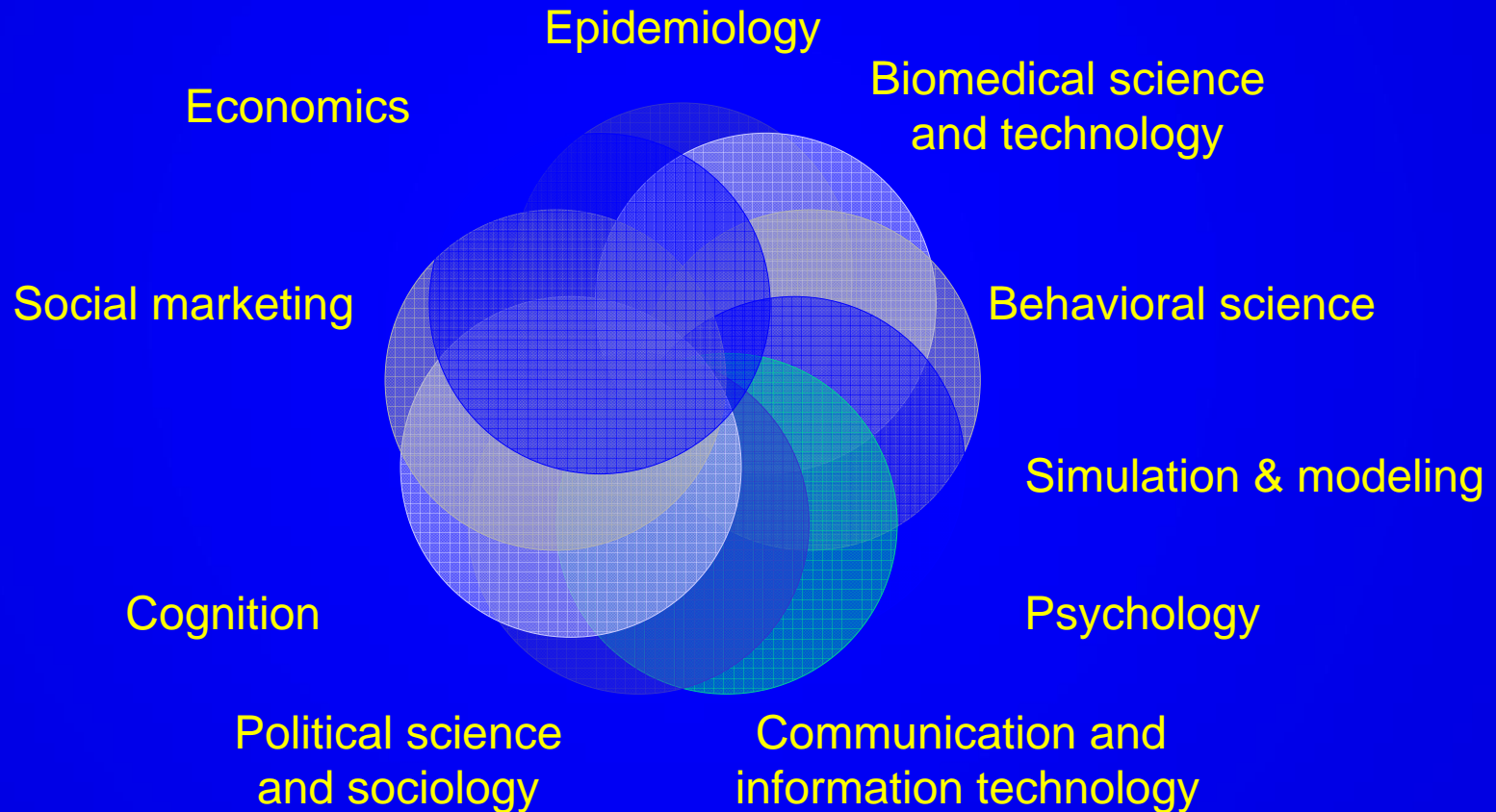
Ecological Model



Life Course Model



Larger Dimensions of Basic Science



Multi-level Interventions to Improve Nutrition



Investing in Public Education

The New York Times

California Students Protest Education Cuts



Jim Wilson/The New York Times

Demonstrators in Sacramento on Thursday protested education cuts.

By JESSE MCKINLEY

Published: March 4, 2010

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.



UCSF Clinical and Translational Science Institute: NIH Funded



What is the measure of success of translational research?

A Cross Cutting New Aim for the UCSF CTSI

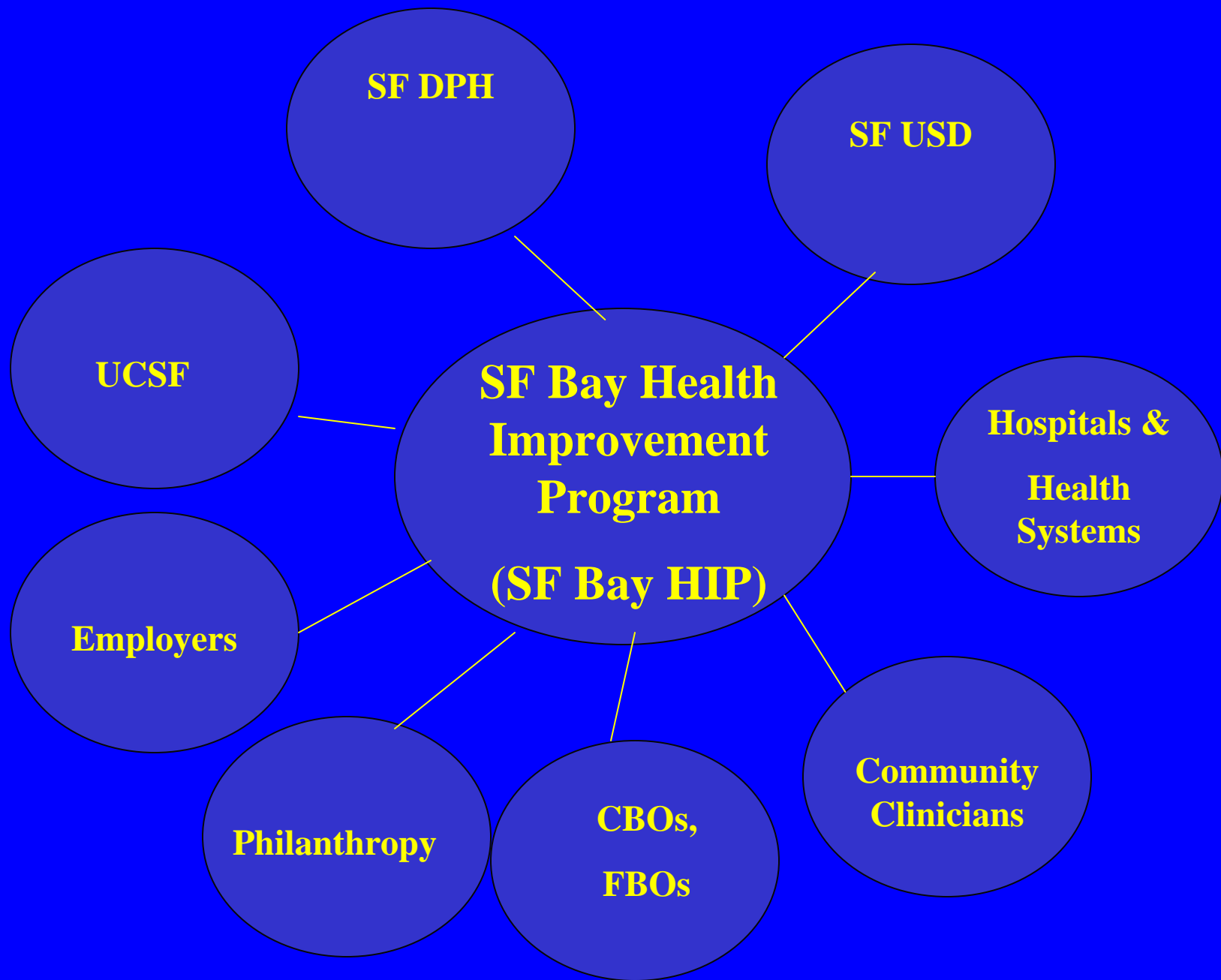
- “The CTSI will challenge, encourage, and support UCSF researchers to take our research capital—the great wealth of clinical research discoveries, knowledge, and know-how at UCSF—and link it with our community partners’ expertise and priorities to effectively translate this research capital into interventions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

Leading Causes of Premature Death for San Francisco, 2003 – 2004, Men

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

Leading Causes of Premature Death for San Francisco, 2003 – 2004, Women

Rank	Underlying Cause of Death	Years of Life Lost	Average Years of Life Lost
1	HIV/AIDS	823.6	22.9
2	Drug overdose, unintentional	843.8	22.8
3	Self-inflicted injuries, all mechanisms	992.9	20.7
4	Breast cancer	2975.1	13.4
5	Pancreas cancer	1122.4	10.7
6	Lung, bronchus and trachea cancers	3376.2	10.4
7	Lymphomas and multiple myeloma	852.0	9.9
8	Colon and rectum cancers	1407.7	9.2
9	Diabetes mellitus	1207.9	8.6
10	Hypertensive heart disease	2214.9	8.2



BILL MURRAY SCARLETT JOHANSSON

Lost In Translation

