



Cambridge Health Alliance



# Highly Organized Primary Care Improves System Performance

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Cambridge Health Alliance

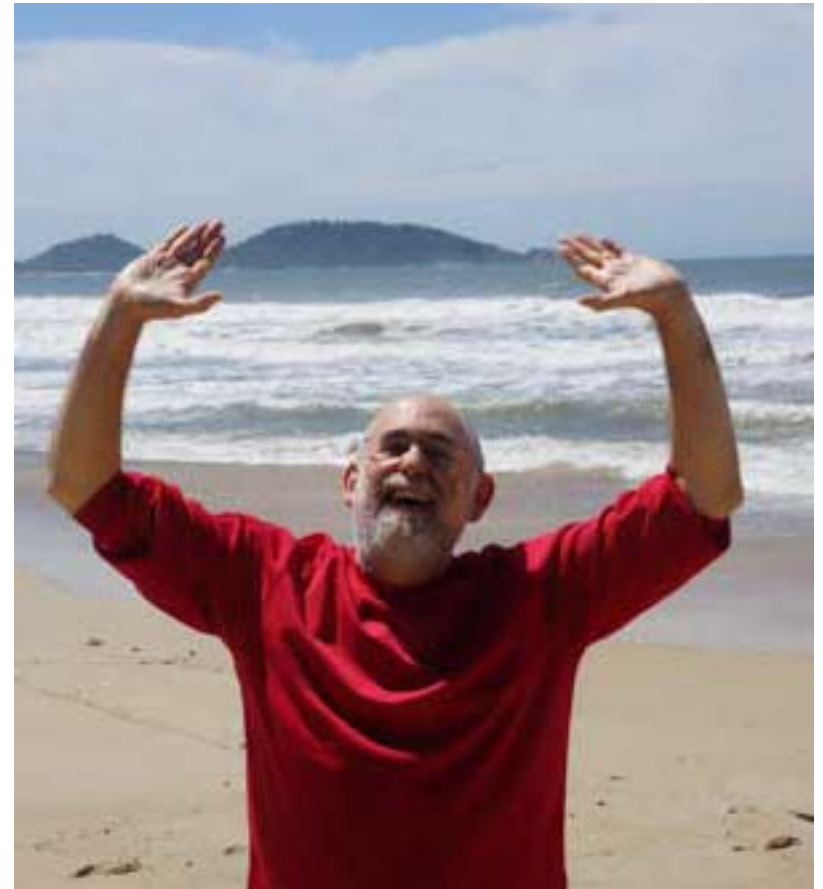
# Archeologic Evidence of Climate Change















The alcohol triplica le capacité  
di parlare other languages.





If you want to change the outcomes,  
change the system.



# Cambridge Health Alliance

## Introduction

- Tenth largest healthcare system in Massachusetts
- Academic public health care system
  - 17,000 admits
  - 600,000 outpatient visits
  - over 80,000 Emergency Room visits
- Two acute care hospitals, each with 24-hour emergency services and inpatient psychiatry
- Community-based primary care and mental health services at over 12 sites, including 3 in schools and a senior citizens center
  - 90,000 primary care patients







# Improving the health of our communities

- Massachusetts' only public hospital system
- The largest provider of mental health and substance abuse services
- More than 85% of its funding from public sources
- Half of our care is delivered to low-income patients
- 33% of all patients were non-English speaking



NÃO POSSO  
ATENDER SEU  
FILHO, SOU  
PEDIATRA!

MAS QUANDO  
ENTREI NA FILA  
DO ATENDIMENTO,  
ELE AINDA ERA  
UMA CRIANÇA!



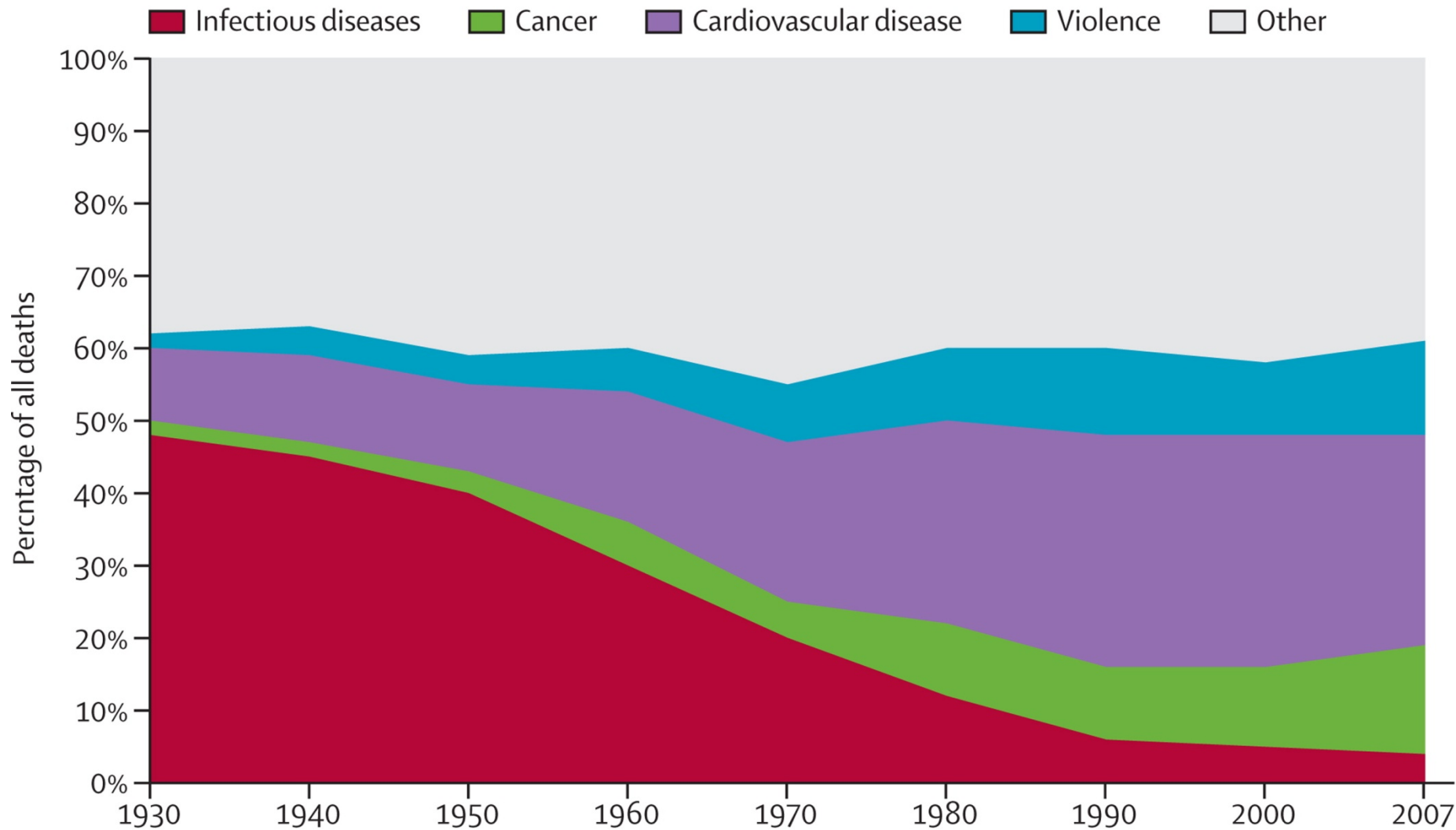




2014/02/02



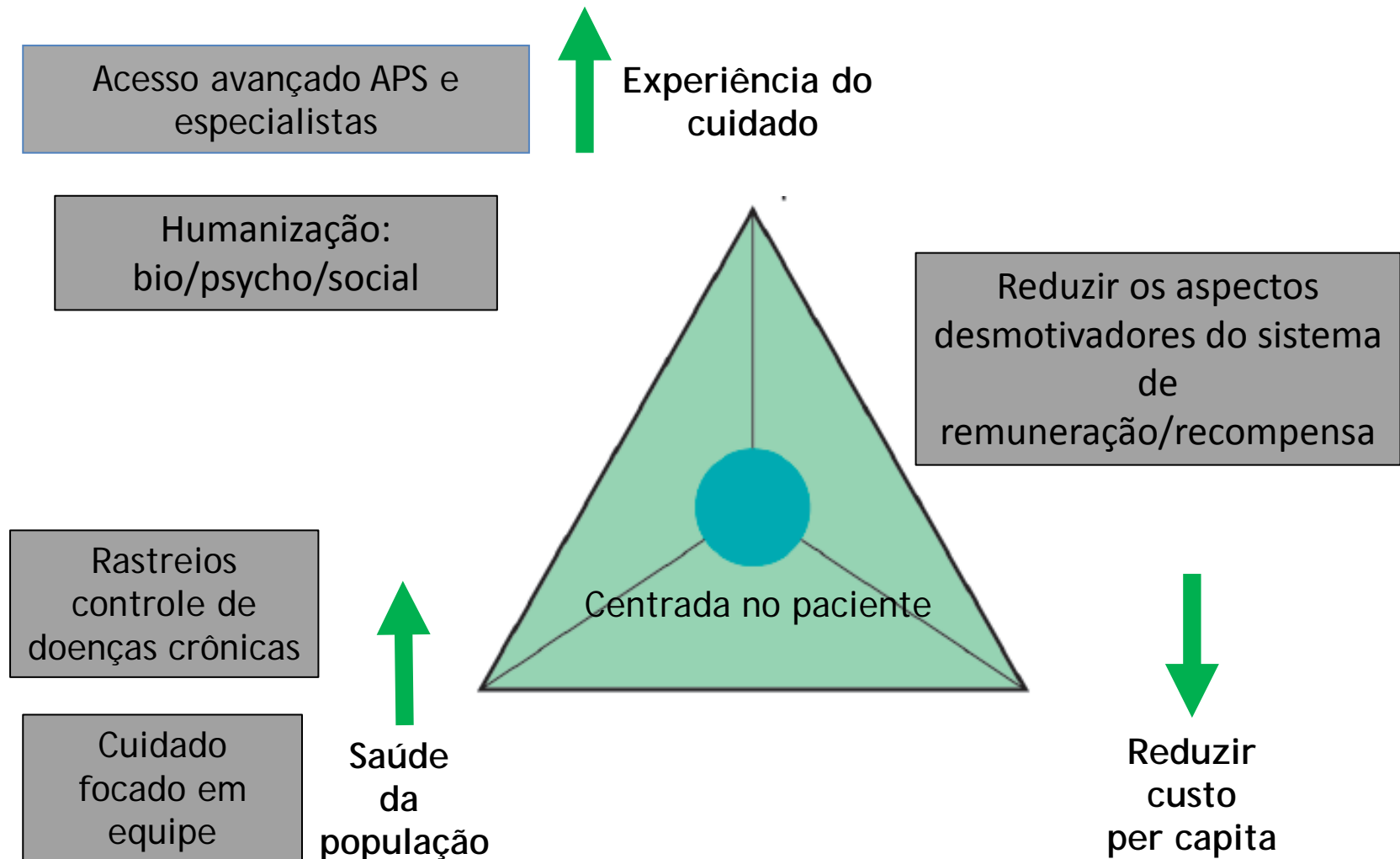
# A All deaths between 1930–2007



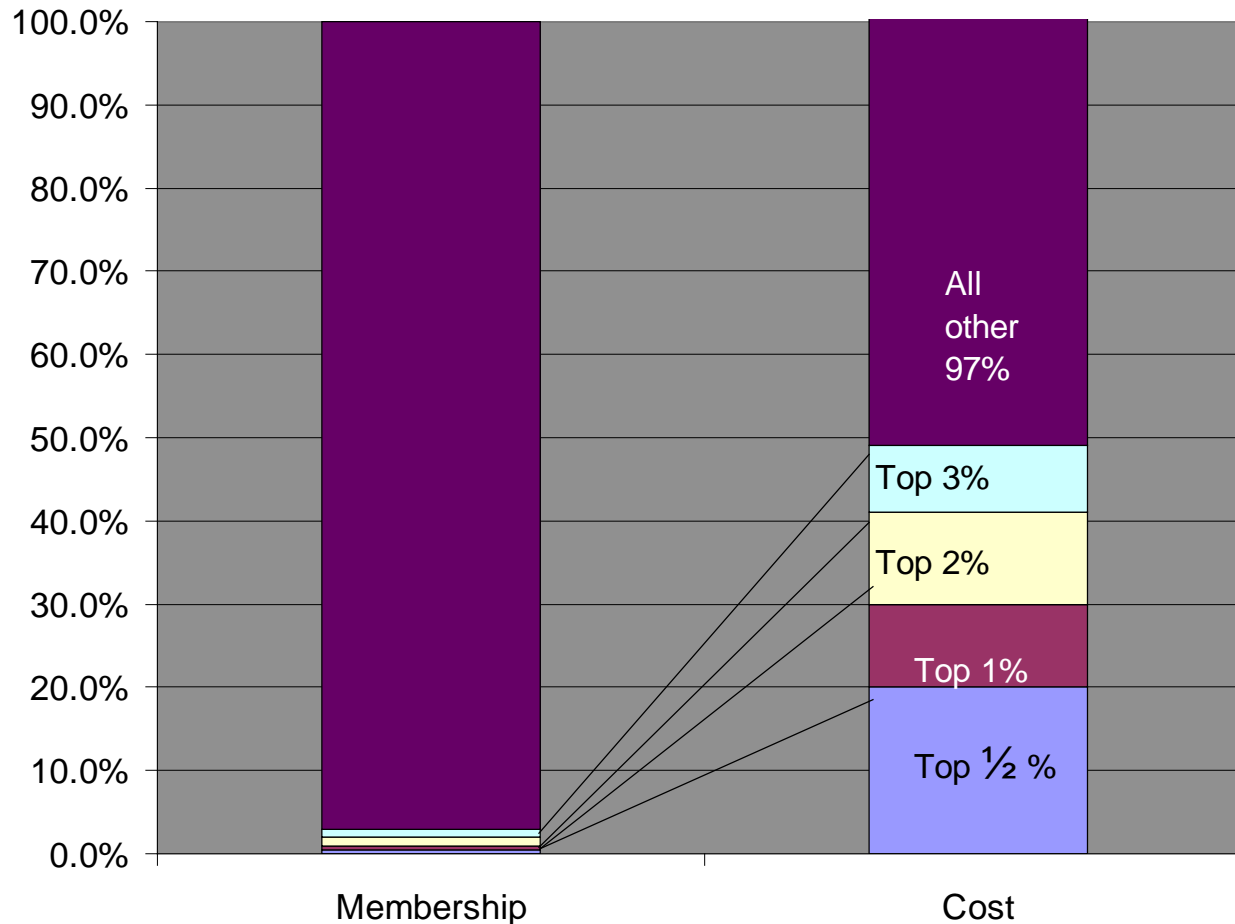


# Triplo objetivo (Triple Aim)

Segura, acesso, eficiente, eficaz, equitativa.



# A small number of patients are responsible for a large portion of medical cost



Data from a large Massachusetts HMO--2000





# South Florida

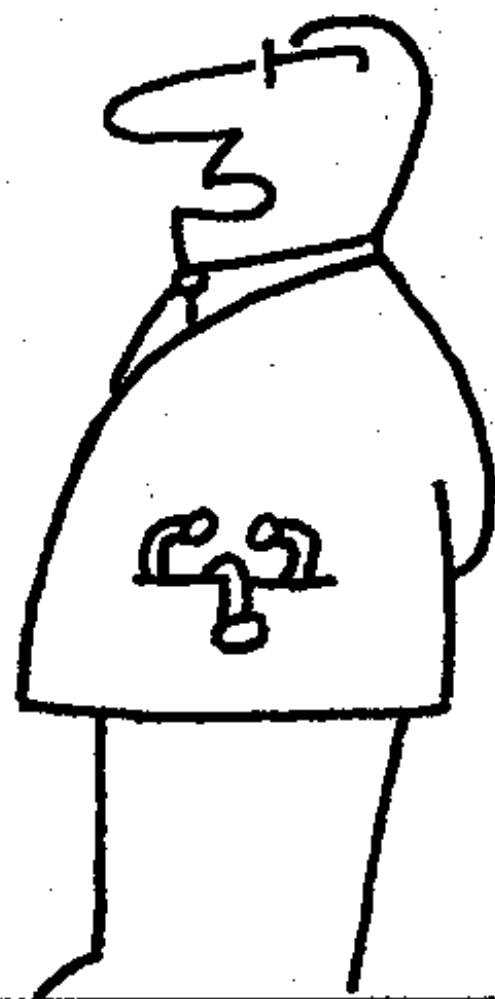
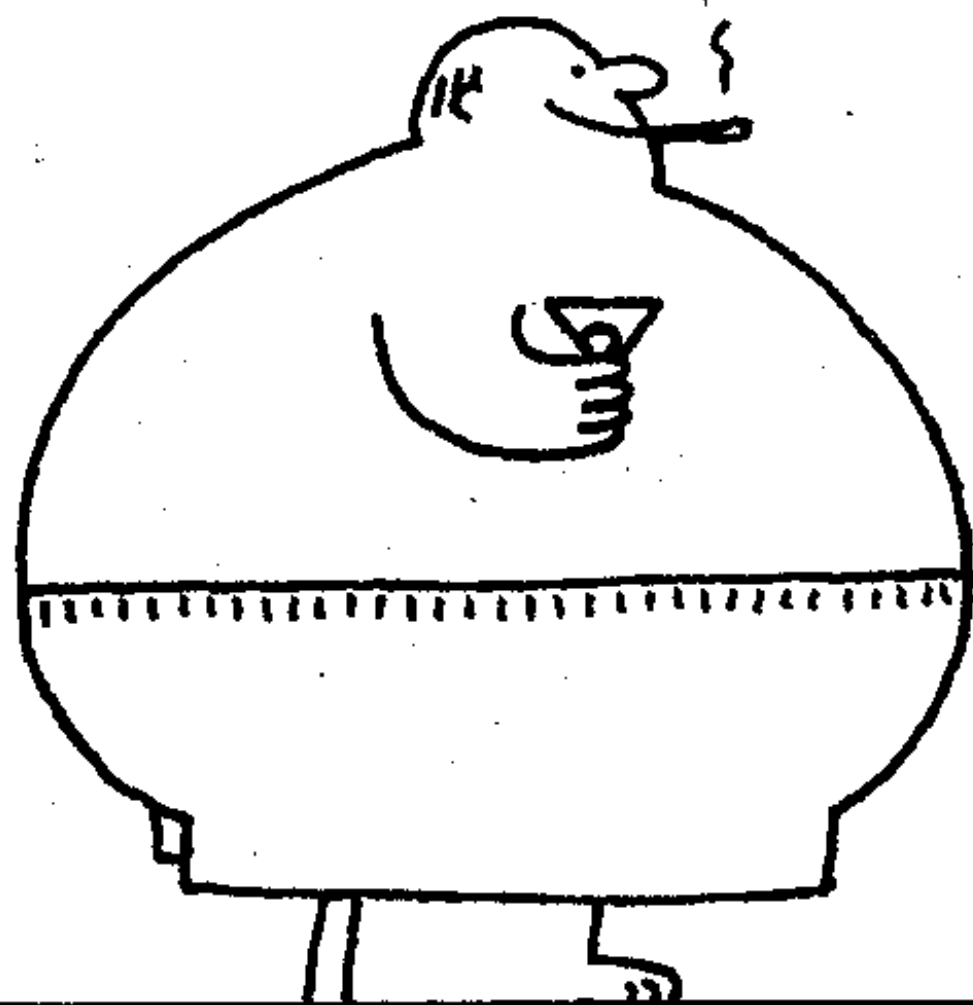


- **Highest cost** region of the USA
- **Higher mortality**
- **Lower Primary Care:**  
**Specialty Care ratios**



# Why do I love primary care?

- People, families, society
  - Not a collection of organs, lab tests, or diseases
- Guiding perplexed people through a complex system
- Understanding what motivates people
- Helping people make smart choices about their health
- Recognition and acknowledgement that I can never know everything, but I know how to find good information



*C. Barnett*

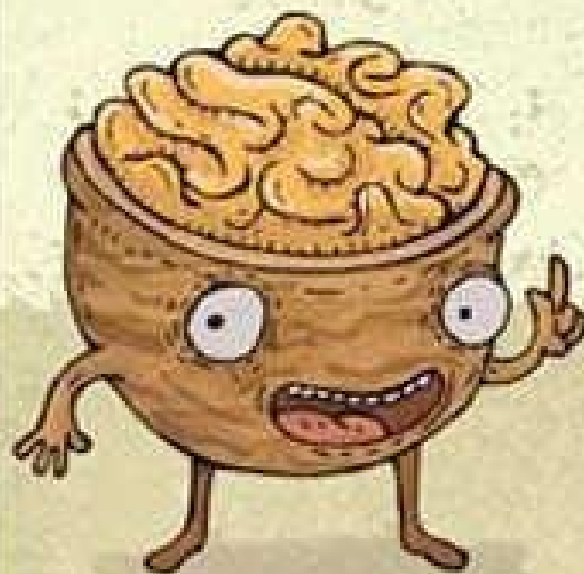
*"All these years, and you haven't listened to a damn thing I've said, have you?"*



SOU UM BRÓCOLI  
E PAREÇO UMA ÁRVORE...



SOU UMA NOZ  
E PAREÇO UM CÉREBRO...



SOU UM COGUMELO  
E ODEIO ESSA BRINCADEIRA.

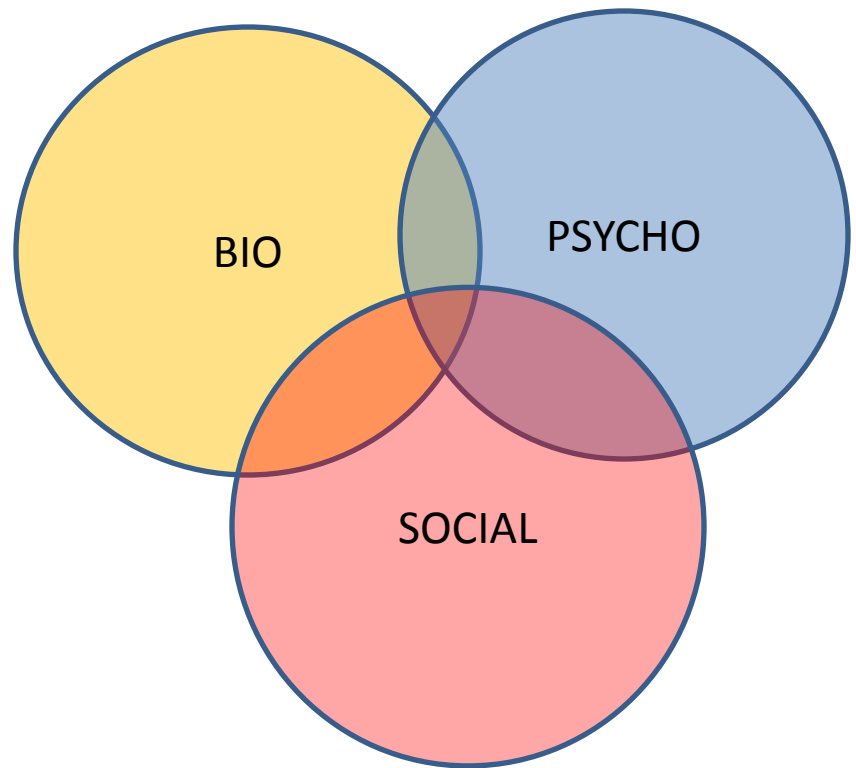


# First Contact Care

- Patients are perplexed
  - Sick, and do not know where to turn for help
- Why do so many use emergency rooms?
- How does traditional office practice arrange the physician's schedule?
  - Why?
- Imagine that a patient would prefer to see someone who already knows him
- Imagine open access

# The Whole Patient

- Not a collection of organs or a series of biochemical reactions
- Modern understanding of the causes of disease and disability.
- Even if you can alter the biology, you cannot achieve change unless you can influence behavior



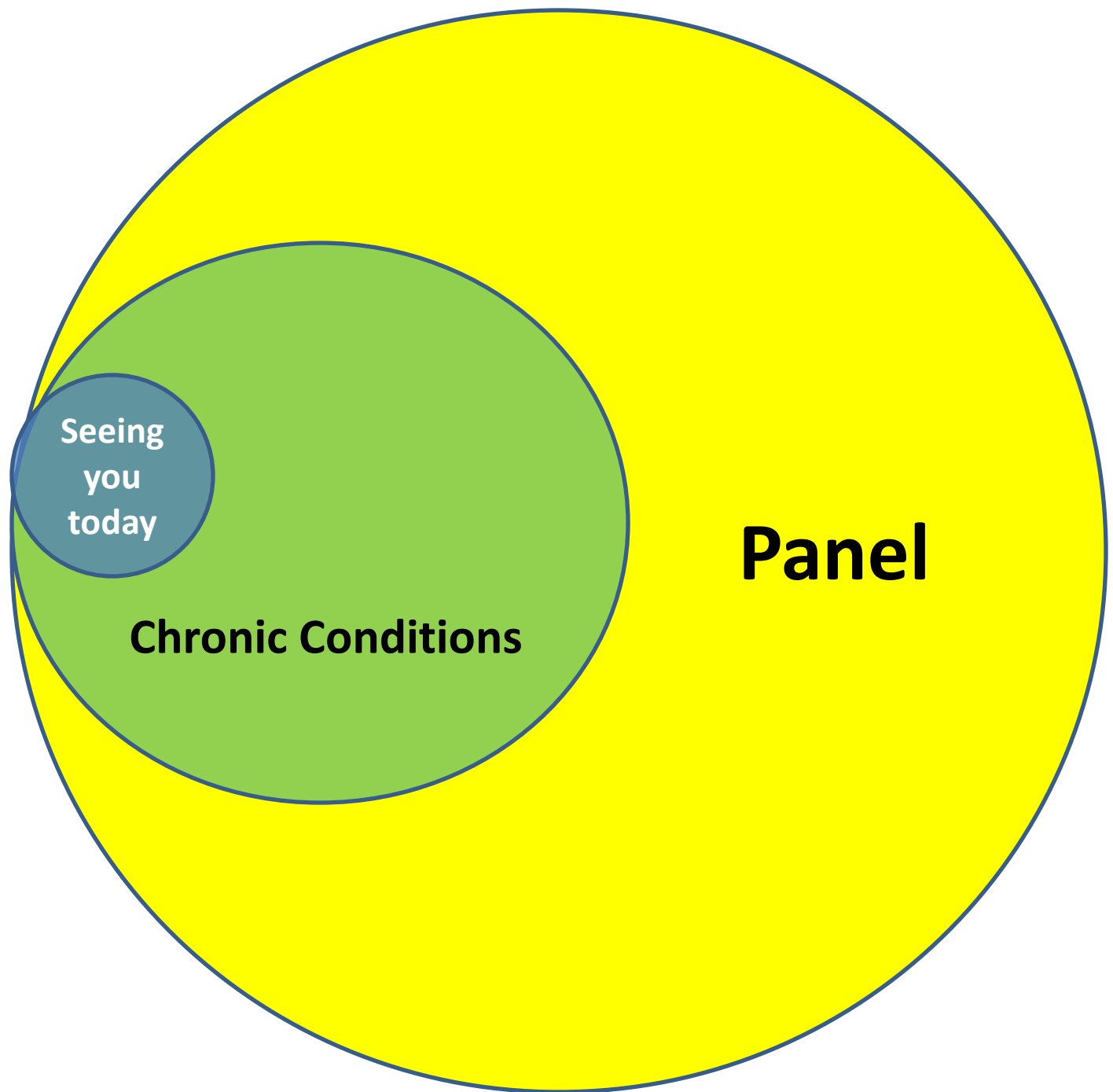
# Care coordination

- In chronic illness, patients typically consult 4 to 16 specialists per year
- Who keeps track of competing care plans
- Drug interactions
- Who understands the big picture and can serve as advocate and guide?
- How much care is wasted due to duplication of services, testing, over-treatment?





*"I'm sorry—I'm a left-foot podiatrist."*



Seeing  
you  
today

**Chronic Conditions**

**Panel**



# Individual-care ➡ Population-based care

- The past: “What can I do to maximize the care of the 25 patients on **my** schedule today?”

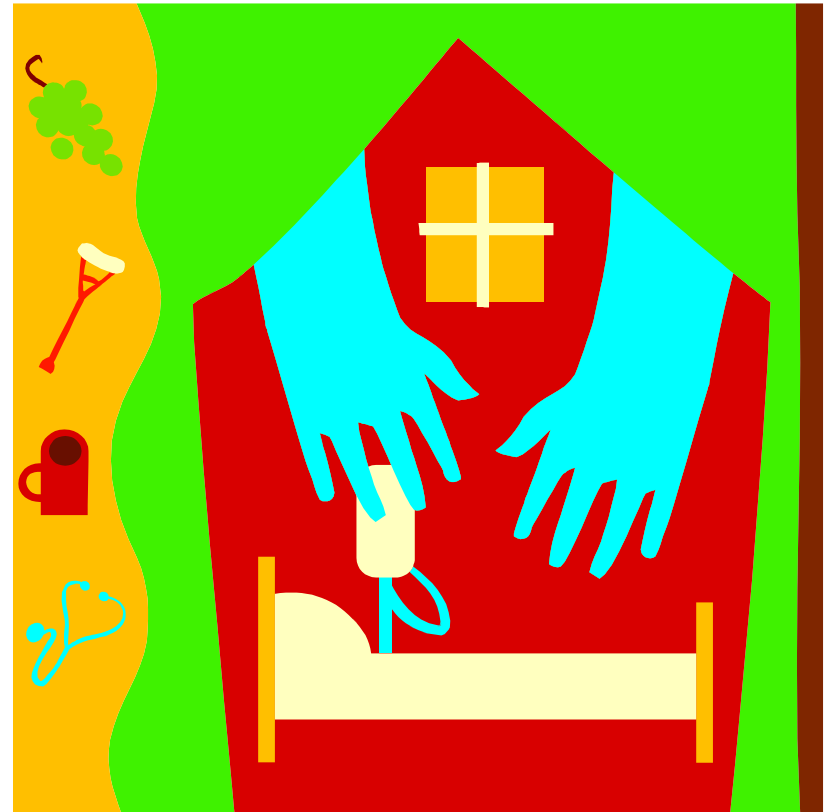
Monday	Patients
8:00AM	Ms. Ngo
8:15AM	Mr. Barnes
8:30AM	Ms. Reilly
8:45AM	Mr. Padilla

- 
- The future: “What can **we** do today to maximize the care of the 1500 patients in **our** panel?”



# Patient Centered Medical Home

- Team care
- Setting patient-specific health goals
- Reminders for providers and patients
- Outreach to patients who do not visit the doctor
- Coordination of all care
- Patients and providers serve on practice improvement committees











# Health Screening

- Preventable morbidity and mortality
- An example of an 'under-used' service
- Done by protocol
- The roles of:
  - check-list
  - patient registry
  - team-work



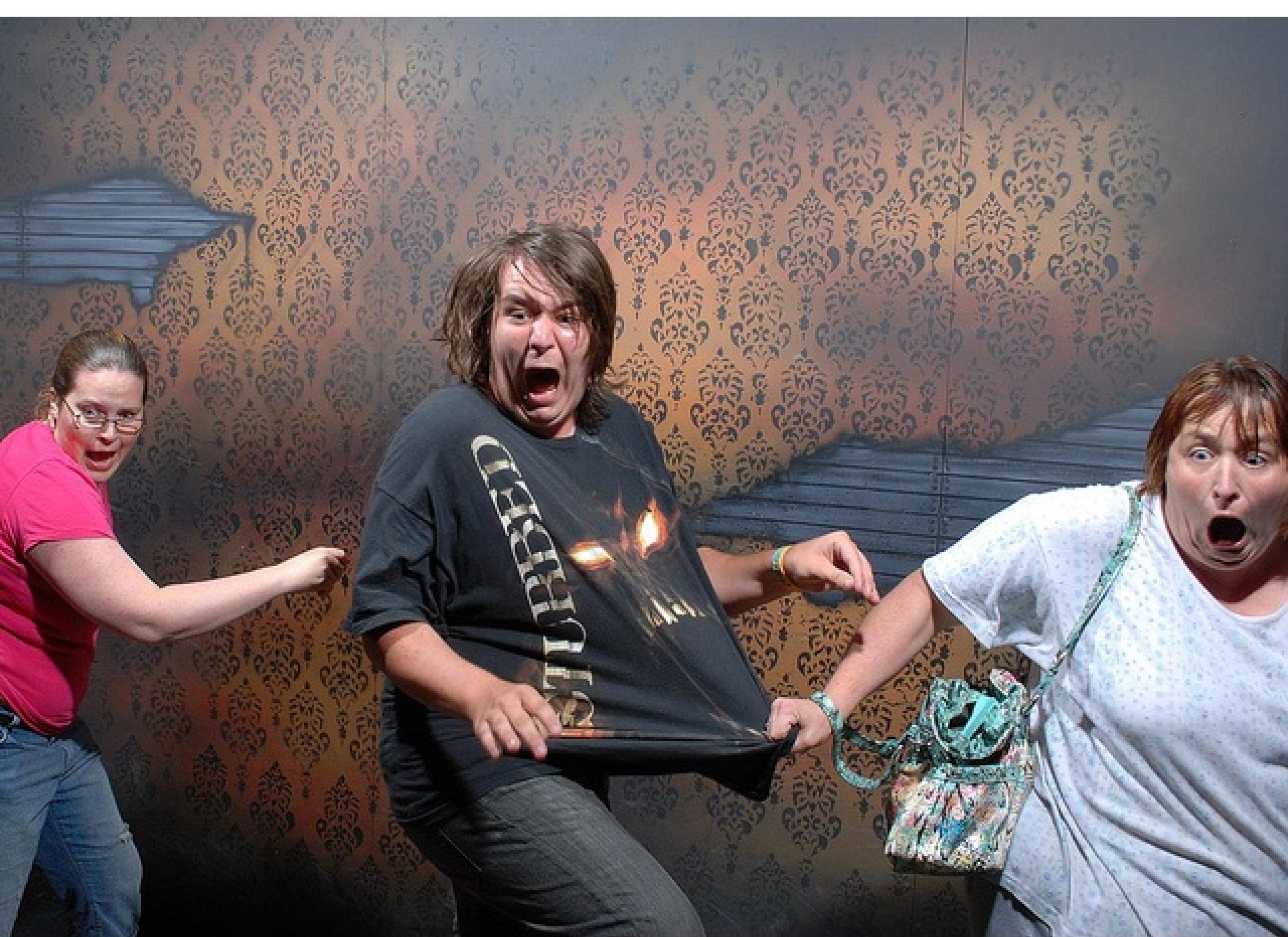
# Chronic Disease

- Evidence based care
- Planned care
  - Anticipating patient's needs
  - Team based care
    - You can't do it alone!
- Focusing care on patient's goals and realistic expectations
- Avoiding the predictable 'secondary complications' of chronic illness

QUAL PARTE DÓI?

A REALIDADE





# Planned Care Model

- Manage chronic and intensive conditions
- Reduce low-acuity non-emergent emergency visits
- Avoid secondary complications of the underlying chronic disease



pic

Demographics

Dept Appts

Patient Lists

Review

Encounter

Telephone Call

Refill Enc

Print

Secure

Log Out

Epic

test,Dirtnap

DOB: 06/09/1972

MT Account : None

Care Lang: English ...

PCP: DEKOW,...

Inf: None

EDD: 8/20/11

Pregn

0000913645

Age/Sex: 40 year old / F

Allergies: No Known Allergies

Ins: SELF PAY

Code: None

LMP: 12/14/2010

GA: 101w4d

HM: D

Health Maintenance

Postpone

Override

Remove Override

Edit Modifiers

Report

Update HM

ClinKB

Send Letter

Telephone Call

More

	Due Date	Topic	Date	Date
	6/9/1972	ABNORMAL LAB RESULT 06 MO F/U		
	6/9/1985	HIV SCREENING		
	6/9/1988	TETANUS (16 AND OVER)		
	6/9/1990	DM COMPLETE FOOT EXAM		
	6/9/1990	HEP B HIGH RISK VACCINE EVAL (ONCE)		
	6/9/1990	DM LDL SCREEN (YEARLY)		
	6/9/1990	PHQ-9		
	6/9/1990	HEALTH CARE PROXY		
	6/9/1990	OPHTHALMOLOGY REFERRAL		
	6/9/1990	DM FASTING LIPID PROFILE		
	6/9/1990	DM HEMOGLOBIN A1C		
	6/9/1990	DM DENTAL REFERRAL( EVERY 6MO)		

Health Maintenance Modifiers

CHA TEST PATIENT

Diabetes - Adult 18 and over

HIV Screen Yearly

Abnormal Lab Result 06 Month F/U

Health Maintenance Plans

ABNORMAL LAB RESULT 06 MO F/U

DIABETES - ADULT (18 AND OVER)

HEALTH CARE PROXY

HEP B HIGH RISK VACCINE EVAL (ONCE)

HIV SCREEN YEARLY

MAMMOGRAPHY( 40-75 YEARLY)

PAP EVERY 3 YEARS (30-70YRS)

PHYSICAL EXAM (40-49)

TETANUS (16 AND OVER)

Legend

Overdue

Due On

Due Soon

Postponed

Override Type Abbreviations

Declined

SEXUALLY INA

NOT INDICATE

DISCUSSED

APPT

COMPLET

appt out cha

LOW RISK

OTHER - SEE

Discussed/Declined

Sexually Inactive

Not Indicated

Discussed/Patient Education

Completed at CHA

Completed outside CHA

Low Risk

Other - See comments

Activities





Back



Forward



Stop



Refresh



Home



Search



Favorites



Media



History



Tools



Mail



Print



Edit



Discuss



Copy



Address http://staffnet/apps/registry/regDiabetesDashboardRpt.asp

Go

E2 Last Visit PCP Date

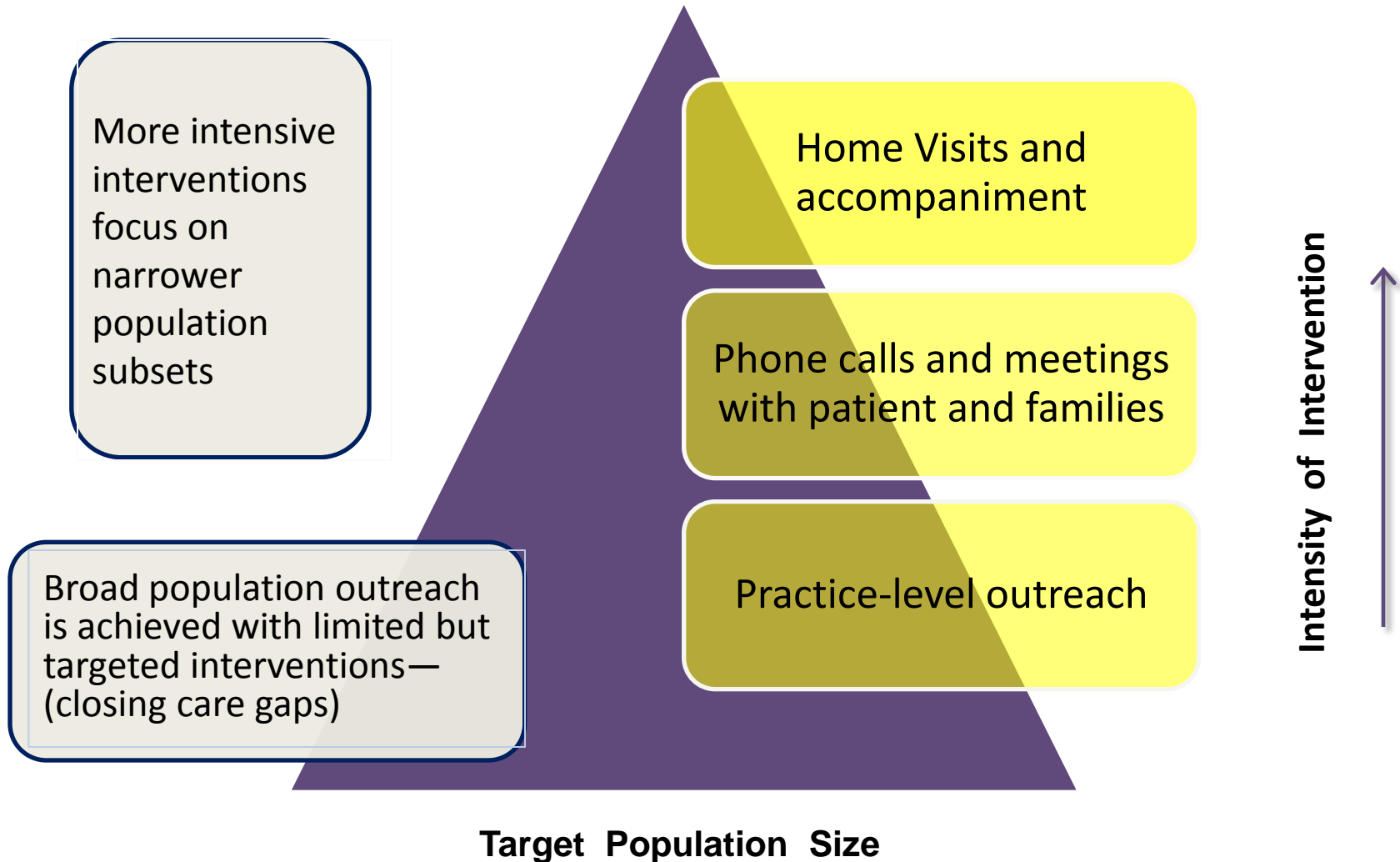
	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
	Age	Telephone	Last Visit PCP Date	Last Visit PCP	Next Visit PCP Date	Next Visit PCP	Eye Exam Date	Last LDL Date	Last LDL	Last A1c Date	Last A1c	Last Malbumi n Date	Last Malbumi min	Last BP Date	Last BP	Last PHQ9	Last PHQ9 Date
2																	
3	40	617-240-9906	12/05/07	NEM			11/27/07	11/27/07	158	11/16/07	11	11/27/07	*RATIO 7	12/05/07	115/70		
4	53	617-389-0118	12/05/07	ATK	02/19/08	ATK	12/05/07	11/19/07	138	11/19/07	6.7	07/09/07	*RATIO 12	12/05/07	152/90		
5	81	617-625-4914	10/01/07	ATK	05/01/08	ATK	10/22/03	02/01/08	142	02/01/08	6.4	02/01/08	*RATIO 282	02/01/08	150/90		
6	51	617-628-7614	11/30/07	ATK	03/06/08	ATK	06/21/07	06/01/07	86	09/05/07	5.9	03/01/07	*RATIO 379	11/30/07	140/90		
7	53	978-667-9747	10/17/07	ATK			06/27/07	06/20/07	105	10/17/07	11	06/20/07	*RATIO 11	10/17/07	100/66		
8	28	617-387-3493	10/17/07	ATK			11/06/07	06/22/07	94	09/10/07	6.3	06/22/07	*RATIO 7	10/17/07	130/88		
9	53	857-888-9639	01/09/08	ATK	03/05/08	ATK	01/11/08	12/26/07	63	12/19/07	6.4	12/26/07	*RATIO 5	01/09/08	120/82		
10	86	781-771-5473	01/17/08	ATK	02/14/08	*TOR,M AR	07/19/06	09/05/07	104	01/17/08	7.6	09/05/07	*RATIO 46	01/17/08	130/78		
11	40	617-417-5683	12/27/07	ATK	04/29/08	ATK	06/20/07	12/27/07	95	12/27/07	6.8	12/27/07	*RATIO 2	12/27/07	100/80		
12	60	617-625-5658	11/21/07	ATK	02/28/08	ATK	10/24/07	01/09/08	48	01/09/08	11.5	02/23/07	*RATIO 12	11/21/07	120/80		
13	43	617-625-8543			02/12/08	ATK		07/12/07	174	07/12/07	6.9	03/20/07	*RATIO 6	07/12/07	110/70		
14	63	617-201-6251			02/11/08	ATK	05/01/06	04/18/07	79	09/19/07	7.2	09/19/07	*RATIO 55	09/19/07	140/80		
15	74	617-628-2460	12/12/07	ATK	05/27/08	ATK	03/10/08	05/30/07	73	12/12/07	5.7	05/30/07	*RATIO 8	12/12/07	120/68		
16	71	617-628-4688	10/22/07	ATK	05/05/08	ATK	02/15/08	11/09/07	80	02/04/08	5.7	02/04/08	*RATIO 57	02/04/08	144/74		
17	62	781-391-3802	11/06/07	ATK	02/19/08	ATK	10/31/07	11/06/07	106	11/06/07	9.2	11/06/07	*RATIO 163	10/10/07	120/80		
18	68	617-776-3716	01/24/08	ATK	05/23/08	ATK	07/21/07	01/24/08	102	01/24/08	6.4	01/24/08	*RATIO 4	01/24/08	130/80		
19	58	617-460-6219	11/15/07	ATK	02/13/08	ATK	09/07/07	09/27/07	97	09/27/07	6.2	07/05/07	*RATIO 62	11/15/07	110/70		
20	39	857-204-2949			02/12/08	ATK		05/21/07	85	06/08/07	10.5	06/08/07	*RATIO 95	06/28/07	120/80		
21	56	781-322-8631	01/09/08	ATK	05/07/08	ATK	03/10/08	01/09/08	149	01/09/08	7.3	01/09/08	*RATIO 3	01/09/08	110/80		
22													*RATIO				

regDiabetesDashboardRpt

# Teams

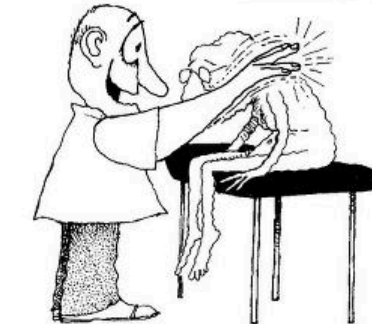
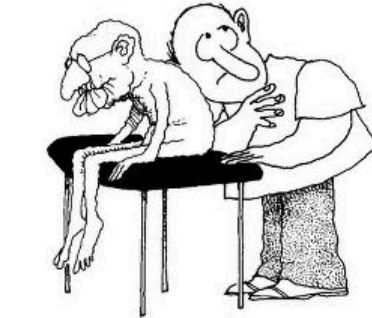
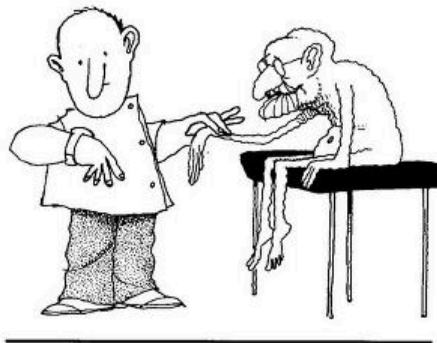
- The doctor is not the center of the universe
- Delegation of routine tasks to others
  - Allows the doctor to focus on the complex challenging problems that face us every day
- Trust
- Move some tasks to the telephone and internet

# Complex Care Management



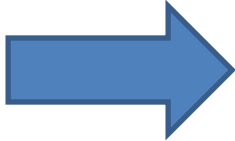
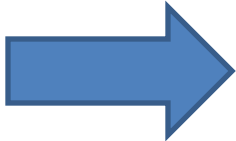
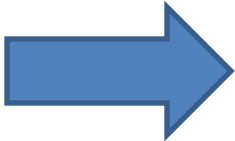
# Change in focus: Accountability

- Outcomes
- Quality as defined by the community
- Avoiding care that is avoidable
- Motivating the patient
- Team responsibility for population care
- Defect reduction
- Success of the group



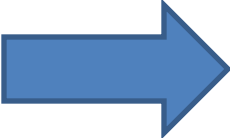
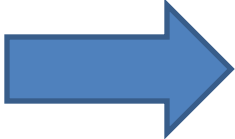
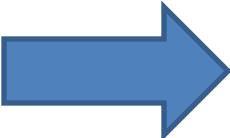


# Change in culture of accountability

- “Quality is what I define it to be” 
  - Meeting quality metrics and expectations
- “It’s the patient’s problem” 
  - If I am not creative enough to engage and motivate the patient, we both lose
- “It’s the patient’s right to choose” 
  - Can I guide the patient to help her make smart choices?



# More culture change

- “It’s all the doctor’s responsibility” 
  - It’s the team’s responsibility
- “Poor outcomes are due to poorly educated patients” 
  - Learning how to motivate patients through techniques of motivational interviewing, outreach and reminders
- “All that matters is what I do in my office.” 
  - The group’s success is my success



“First we’re going to run some tests to  
help pay off the machine.”

# Payment Reform

- Investment model
- Understanding the true incentives of fixed payment (capitation):
  - Provide every needed service
  - Eliminate services and activities that are wasteful
- Larger bonuses for:
  - Quality
  - Citizenship
  - System performance



# Accountable Care Organization

A provider group that is accountable for:

- Outcomes of care
- Costs of care
- Quality of care



# Organizações Responsáveis pelo Cuidado (ACO)

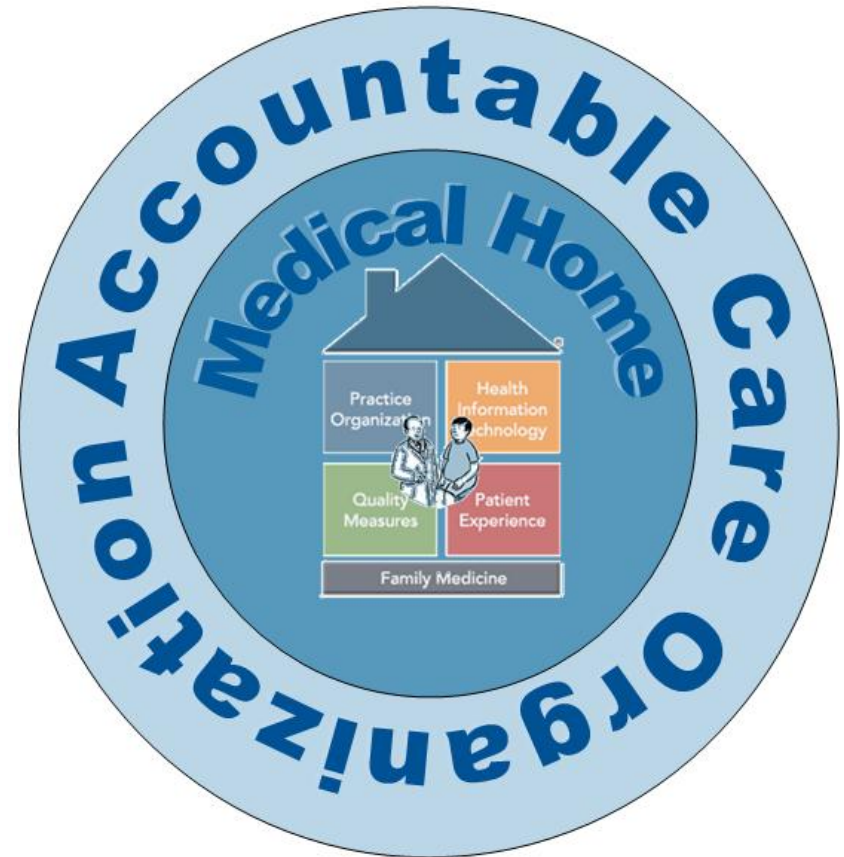
- Organizações que podem prover (ou efetivamente gerenciar) o cuidado contínuo, através de uma rede assistencial integrada (real ou virtual)

## **Pré-requisitos:**

- Devem incluir em sua rede, prestadores de atenção primária;
- Dispor de estrutura de gestão que possua sistemas administrativos e clínicos;
- Possuir informações sobre custo e qualidade( médicos e demais prestadores) ;
- Aceitar princípios de medicina baseada em evidências , engajamento de pacientes (auto-cuidado) e foco no paciente.

# Accountable Care & Medical Homes

- A series of highly organized primary care centers
- Electronic record to link with specialists, hospitals, labs, x-ray, pharmacy
- Reinvest financial savings in the care network





**Quality Performance**

**Financial performance of the system**

**Mixed payment of salary and fee for service**

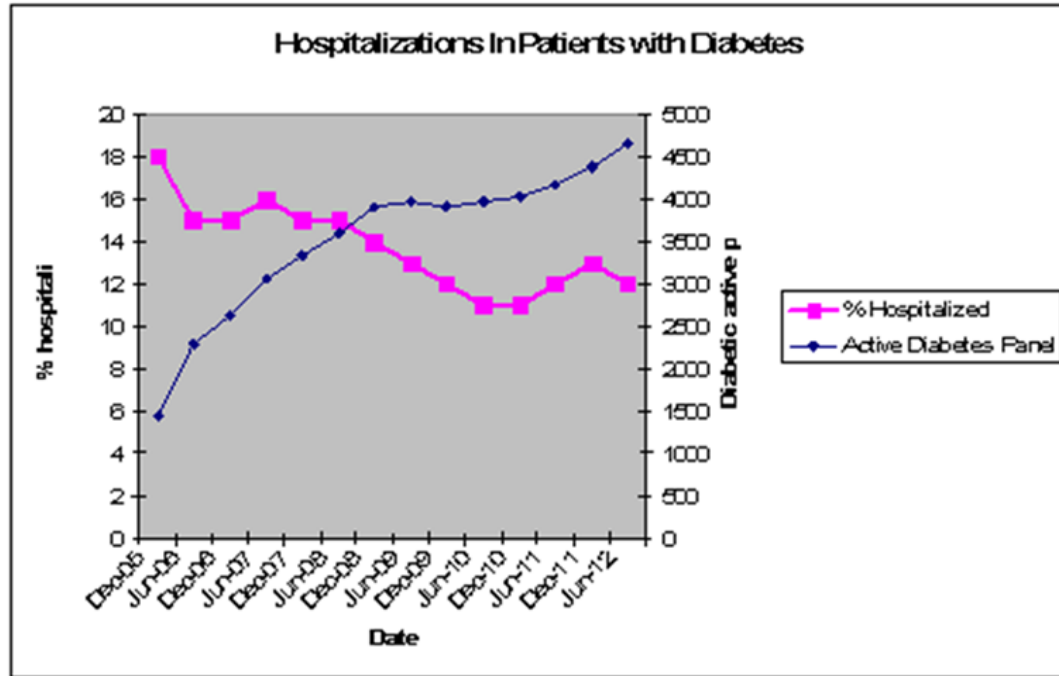
# Models that work

- Well designed delivery system
  - Working in teams
  - Ease of access for patients
  - Centered on the needs and values of the patient
  - Defect-free care
  - Fed by information
  - Focused on quality and continuous improvement of performance



# Results

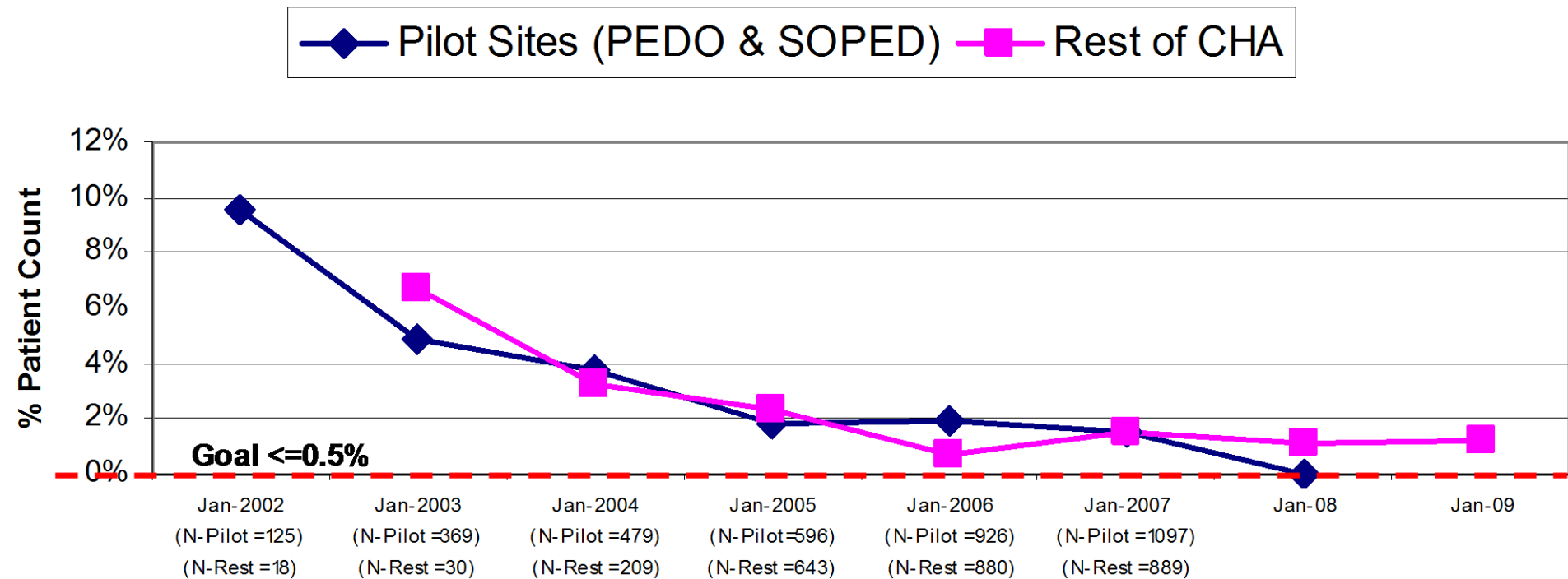
- Sharply improved quality metrics for chronic disease and preventive screening
- Reduce the need for hospital care
- Cost savings
- Beneficial impact on revenue in a capitation model





# Childhood Asthma:

## % Patients with Asthma Admissions

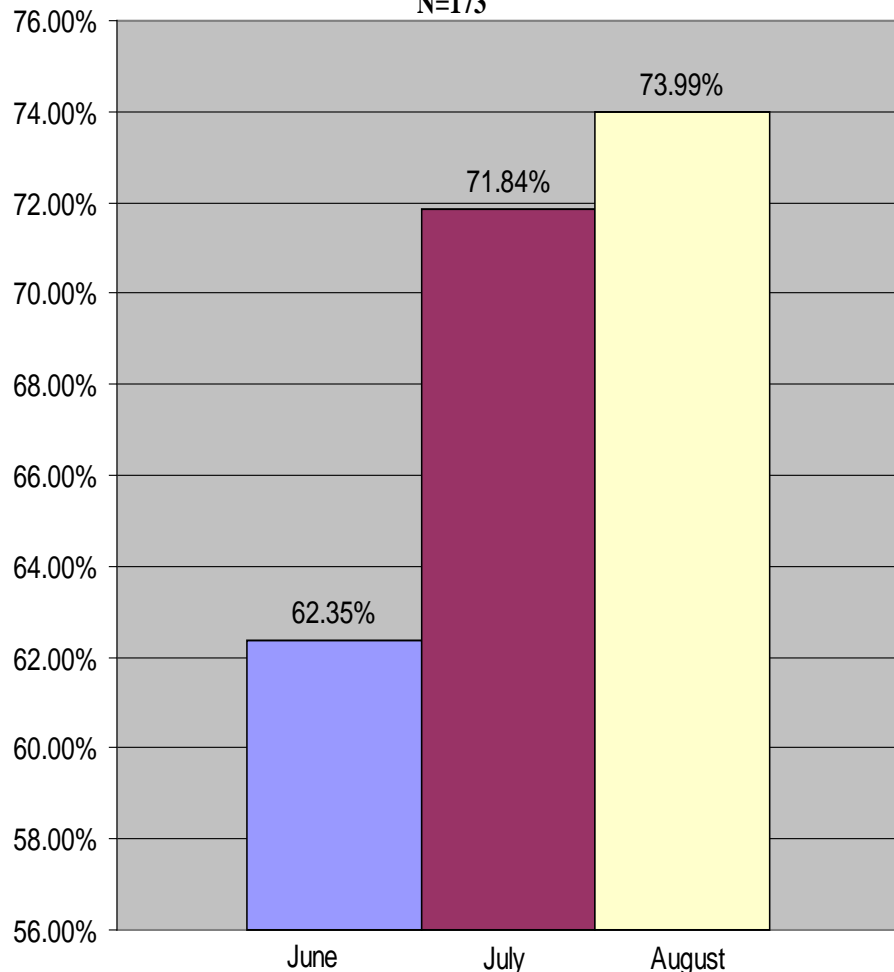




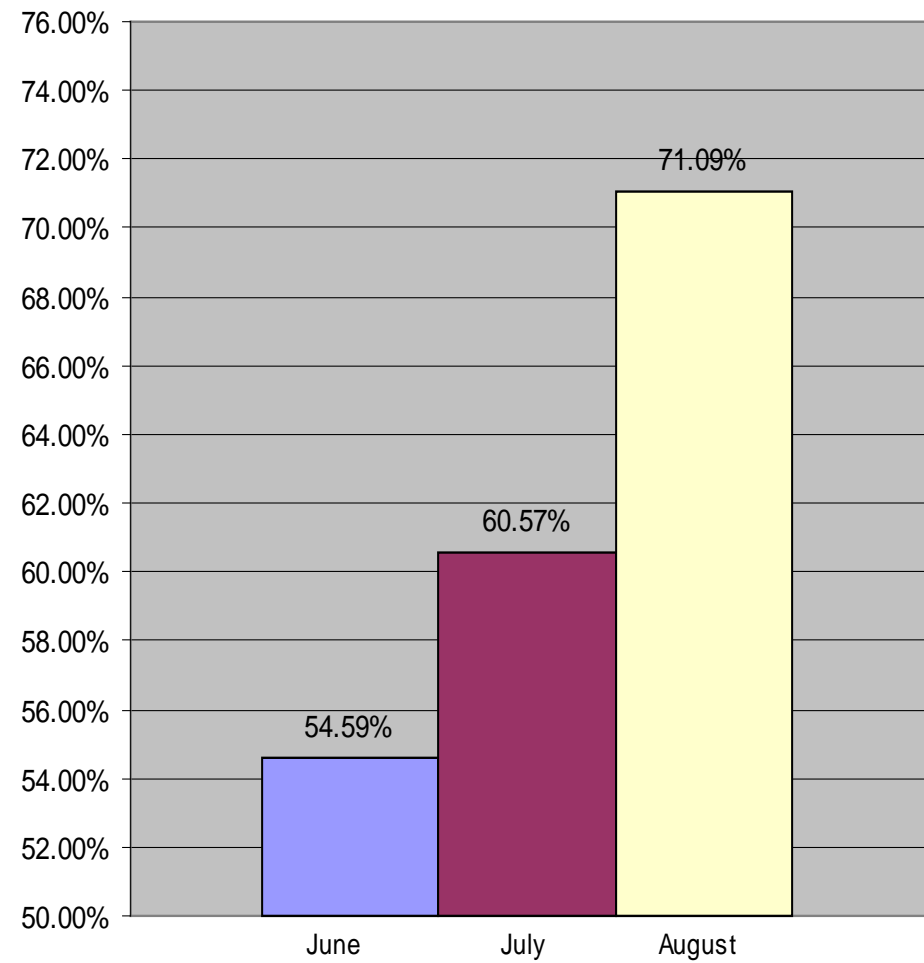
# 1<sup>st</sup> Planned Care Site Coordinator Arrives at East Cambridge Health Center

## June 2005 (N=173)

**% of Patients with an A1C Done in the Past 6 Months**  
N=173



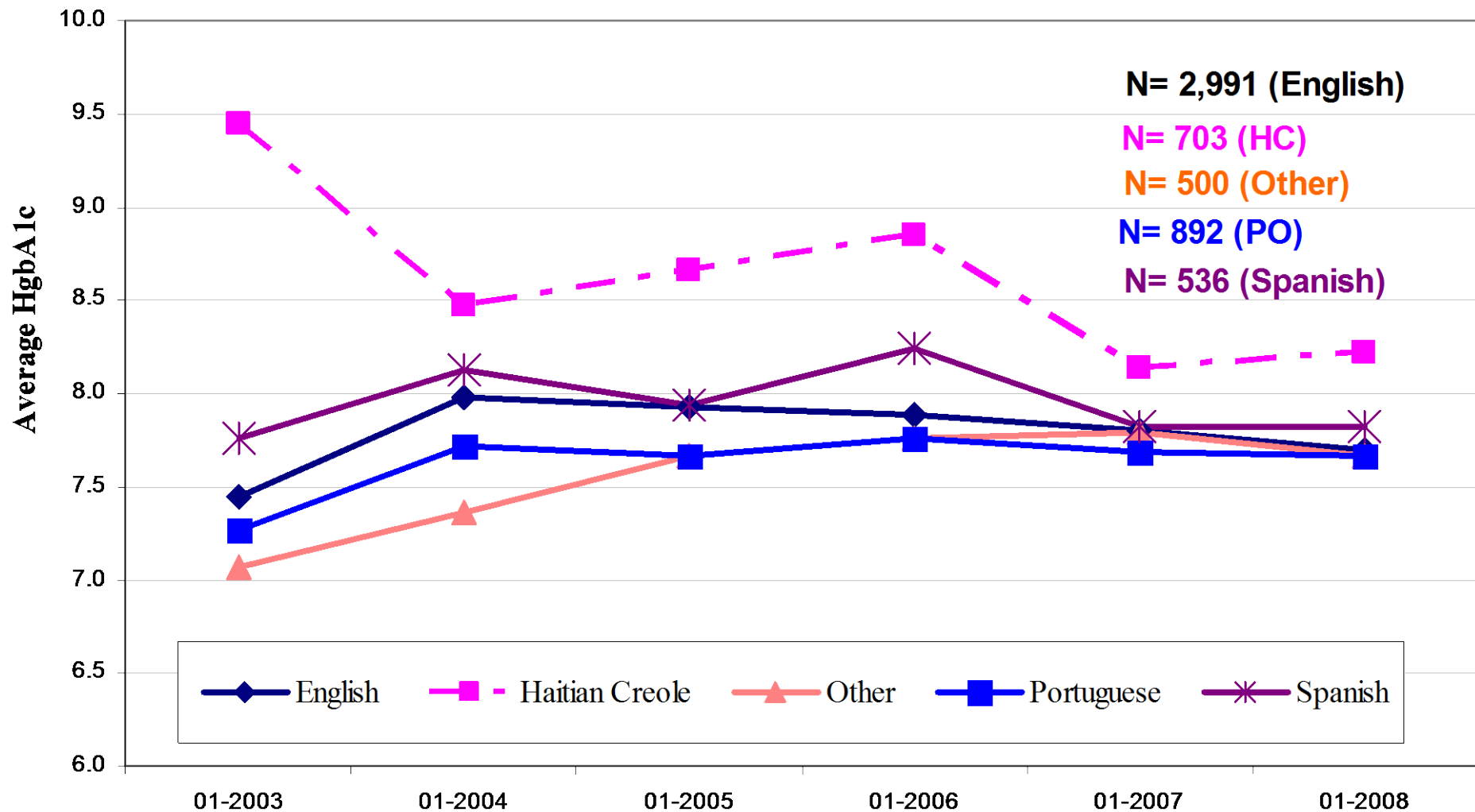
**% of Patients with an Eye Exam in the Past Year**  
N=173





# Average HgbA1c by Language

Haitian Creole speakers: improving HgbA1c results



# National results of the new primary care model

- 36.3% Reduction in hospital days
- 32.2% Reduction in emergency room use
- 18.9% Reduction in ancillary costs
- 12.8% Increase in chronic medication use
- 15.6% Total cost reduction

# Primary care reform in Brazil

- Primary care should be among the most prestigious specialties with specialized skills and competencies.
- Re-organize the primary care delivery model, and position it at the heart of the delivery system.
- Move the focus from the provider to the patient.
- Payment reform. Enhance primary care physician income, and also reinvest health savings that primary care will yield for everyone.





**ME FALA ALGUMA COISA  
DE CORAÇÃO, AMOR!**

**VALVA MITRAL**







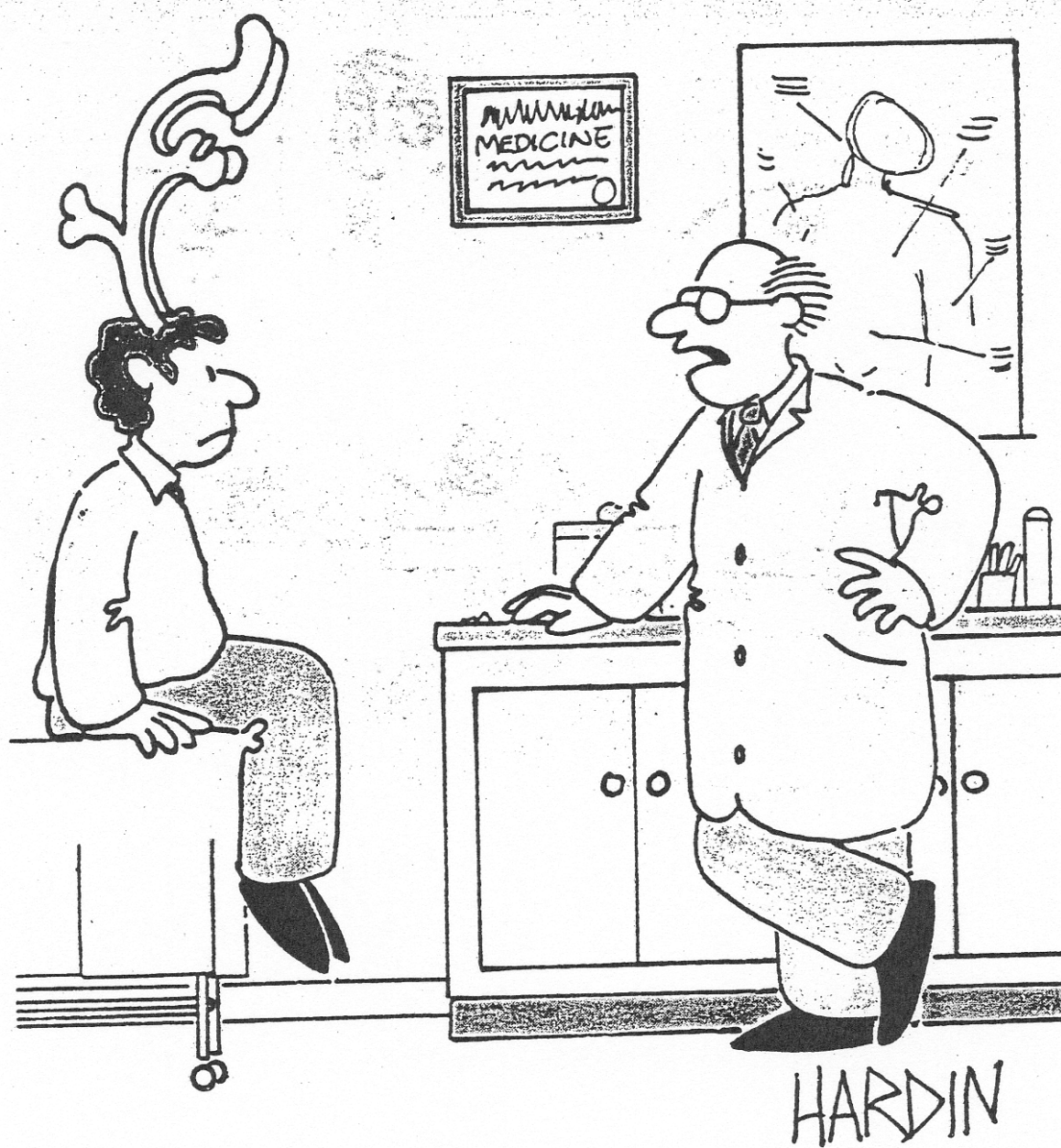












*"Before trying surgery, I'd like to wait and see if  
you just shed them in the spring."*

