



## ***Clinical Integration in Health Care: a Check Up***

***Federal Government Initiatives to Improve Health Care Delivery  
through Collaboration among Health Care Providers***

## ***The Veterans Health Administration Experience***

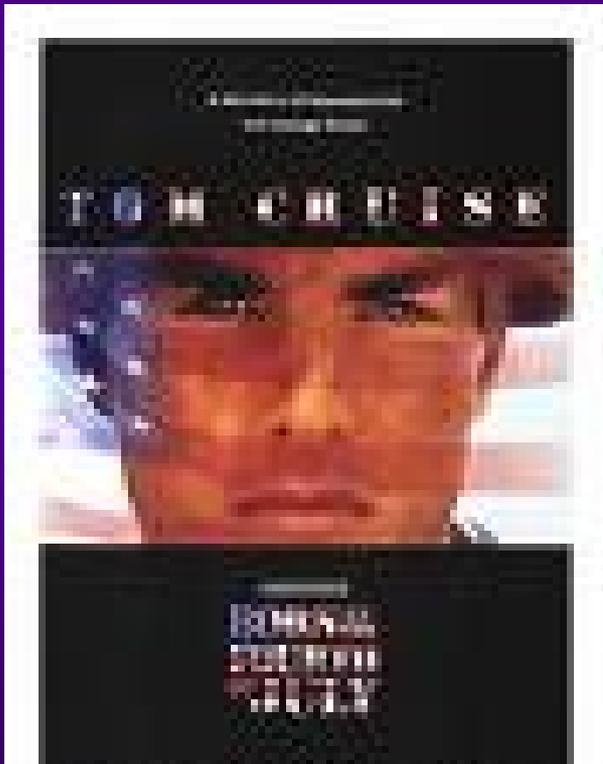
***Thomas L. Garthwaite, MD***  
***Executive VP & Chief Medical Officer***  
***Catholic Health East***

***Under Secretary for Veterans Affairs, 1999-2002***  
***Deputy Under Secretary for Veterans Affairs, 1995-1999***





# ***What Changed the Veterans Health Administration Beginning in 1995 ?***



***Born on the Fourth of July  
1989***





***“All organizations are perfectly designed to get the results they get.”***

*David Hanna*  
*Designing Organizations for High Performance*  
*1988*



# ***VA Structural Advantages***

- IT focused on Care not Billing
- 108 Medical School Affiliations (10,000 Residency slots): Faculty, Fellows, Residents, Students
- Strong Clinical and Health Services Research
- Employed physicians
- Saved \$\$'s stay in VA

***BUT these were true pre-1995,  
what ELSE changed***



# ***The Environment*** (1994)

- **President/Vice President**
  - Healthcare agenda
  - Reinventing Government Initiative
- **Secretary of VA**
  - Combat injured war veteran
  - Demanded change
  - New **Under Secretary** from outside
- **New Congress** – “Contract with America”
  - Fewer veterans in Congress
  - Continued calls to privatize VA
  - **Burning Platform**



# 21 Veterans Integrated Service Networks

VISNs are the Funding & Accountability Unit in VA

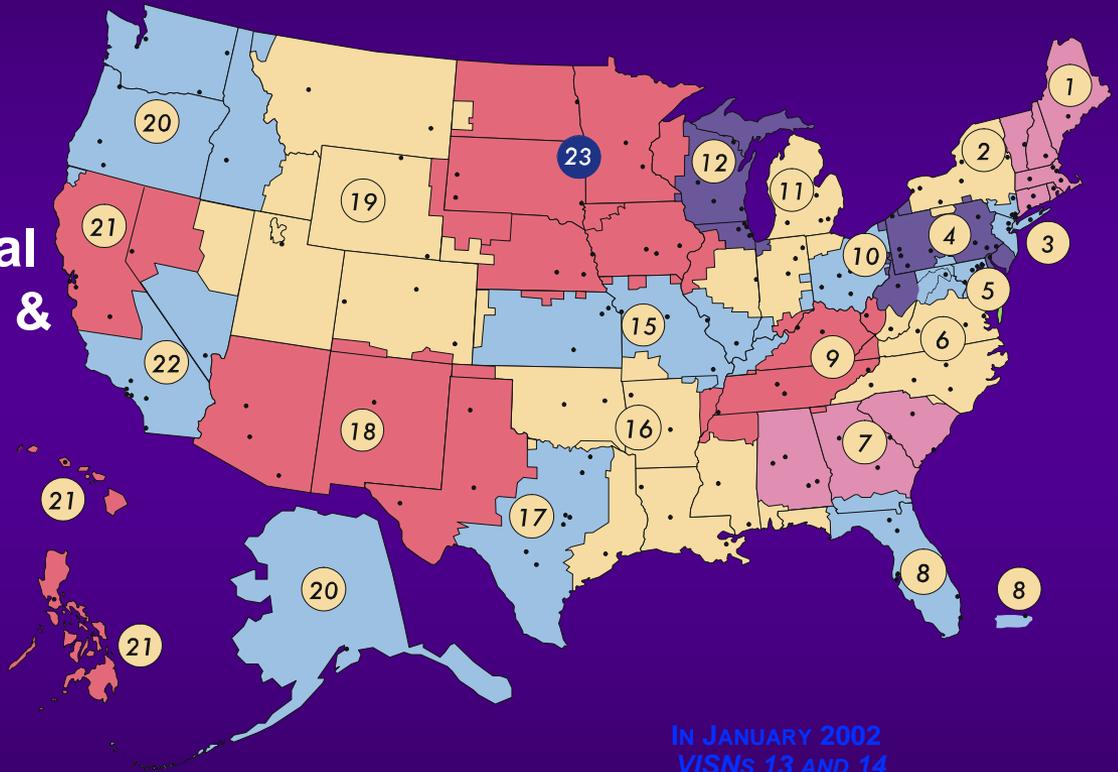
⇒ *The Structure*

⇒ Objective was to transform from “Hospital focus” to a “Population & Health System”

⇒ From “Safety Net” to “Health Promotion & Disease Prevention”

⇒ 22 Carefully selected leaders for the new VISNs

⇒ Half the beds, twice the access

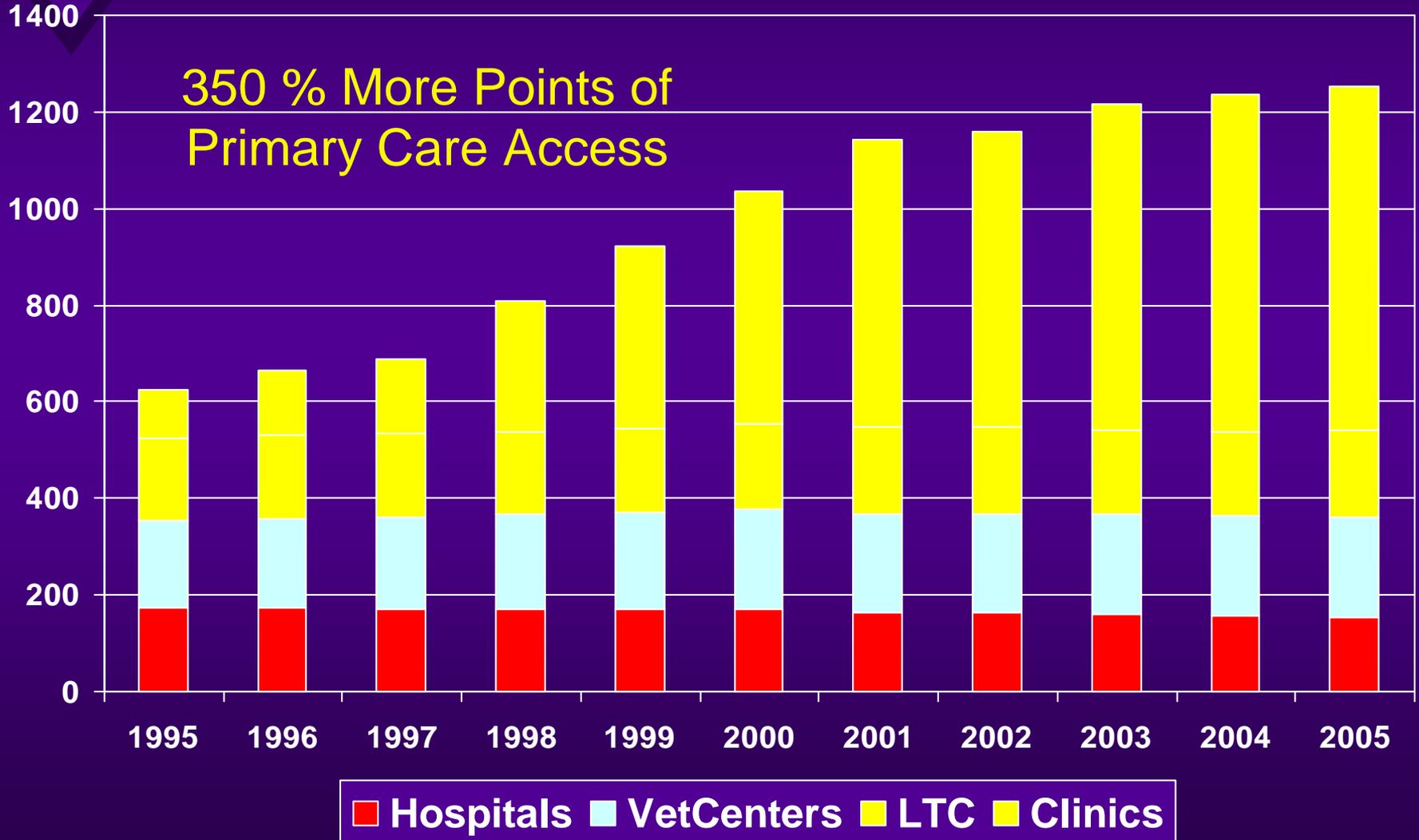


IN JANUARY 2002  
VISNs 13 AND 14  
WERE INTEGRATED AND  
RENAMED VISN 23





# 1. ACCESS: *Number of VA Hospitals & Clinics Nationally: 1995-2005*



## 2. TECHNICAL QUALITY:

IMPROVING PATIENT CARE | Quality of Care in the Veterans Health Admin

**“VA scored significantly higher... on 294 quality metrics”**

Table 4. Adjusted Adherence to Indicators by Category\*

Indicator Category	VHA Sample				National Sample				Difference (95% CI), percentage points
	Indicators, n†	Patients, n	Eligible Events, n‡	Mean Score, %	Indicators, n†	Patients, n	Eligible Events, n‡	Mean Score, %	
Overall	294	596	11 449	67	330	992	18 961	51	16 (14 to 18)
Chronic care	202	561	5924	72	222	824	7396	59	13 (10 to 17)
COPD	17	103	465	69	19	62	668	59	10 (-2 to 23)
Coronary artery disease	31	93	557	73	37	179	1117	70	3 (-3 to 16)
Depression	14	96	266	80	14	131	497	62	18 (11 to 26)
Diabetes	13	232	1309	70	13	186	1683	57	13 (8 to 18)
Hyperlipidemia	7	169	256	64	7	204	346	53	11 (1 to 21)
Hypertension	24	405	1147	78	24	468	1681	65	13 (8 to 20)
Osteoarthritis	3	173	216	65	3	154	236	57	8 (-1 to 18)
Preventive care	27	596	4721	64	32	991	9169	44	20 (12 to 28)
Acute care	60	153	804	53	76	334	2396	55	-2 (-9 to 4)
Screening	15	597	2254	68	16	991	5598	46	22 (20 to 26)
Diagnosis	145	594	3762	73	139	992	6502	61	12 (8 to 16)
Treatment	103	596	3155	56	126	992	4845	41	15 (12 to 18)
Follow-up	37	477	2016	72	43	524	2278	58	14 (10 to 18)
VHA performance measures	26	596	3976	67	26	992	6699	43	24 (21 to 26)
VHA performance conditions	144	596	5875	70	152	992	8590	58	12 (10 to 15)
Non-VHA performance conditions	124	394	1598	55	152	579	3672	50	5 (0 to 10)

\* Adjusted for age, number of chronic conditions, number of acute conditions, and number of outpatient visits. COPD = chronic obstructive pulmonary disease; VHA =

## IMPROVING PATIENT CARE

Improving Patient Care is a special section within *Annals* supported in part by the U.S. Department of Health and Human Services Agency for Healthcare Research and Quality (AHRQ). The opinions expressed in this article are those of the authors and do not represent the position or endorsement of AHRQ or HHS.

## Comparison of Quality of Care for Patients in the Veterans Health Administration and Patients in a National Sample

► Steven M. Asch, MD, MPH; Elizabeth A. McGlynn, PhD; Mary M. Hogan, PhD; Rodney A. Hayward, MD; Paul Shekelle, MD, MPH; Lisa Rubenstein, MD; Joan Keeseey, BA; John Adams, PhD; and Eve A. Kerr, MD, MPH

21 December 2004 | Volume 141 Issue 12 | Pages 938-945

**Background:** The Veterans Health Administration (VHA) has introduced an integrated electronic medical record, performance measurement, and other system changes directed at improving care. Recent comparisons with other delivery systems have been limited to a small set of indicators.

**Objective:** To compare the quality of VHA care with that of care in a national sample by using a comprehensive quality-of-care measure.

**Design:** Cross-sectional comparison.

**Setting:** 12 VHA health care systems and 12 communities.

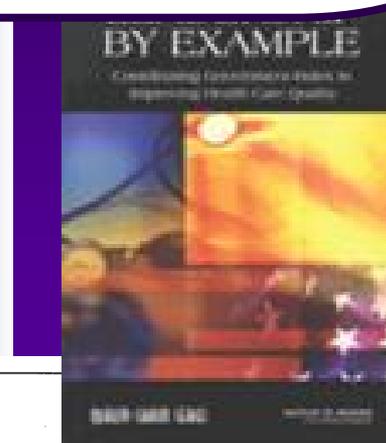
**Patients:** 596 VHA patients and 992 patients identified through random-digit dialing. All were men.

**Measurements:** Between 1997 and 2000, quality was measured by using a chart-based quality instrument. Scores were adjusted for clustering, age, number of visits, and medical conditions.

**Results:** Patients from the VHA scored significantly higher for adjusted overall quality (67% vs. 51% for chronic disease care [72% vs. 59%; difference, 13 percentage points [CI, 10 to 17 percentage points]], but not for acute care. The VHA advantage was most prominent

“... Overall, VA patients receive better care than patients in other settings”

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## EDITORIAL

## Creating a Culture of Quality: The Remarkable Transformation of the Department of Veterans Affairs Health Care System

For decades, fairly or unfairly, the Department of Veterans Affairs (VA) health care system had a suboptimal image in the quality of care it provided and in the evaluation of that care. About 10 years ago, the VA leadership

came, diabetes severity, and other comorbid conditions) uniformly across systems and used these measures to adjust for differences other than sex between the VA and commercial managed care organizations.

## The Veterans Health Administration Quality, Value, Accountability, and Informing Transforming Strategies for Patient-Centered Care

Jonathan B. Perlin, MD, PhD, MSHA; Robert M. Kolodner, MD; and Robert H. Roswell, MD

## Diabetes Care Quality in the Veterans Affairs Health Care System and Commercial Managed Care: The TRIAD Study

Eve A. Kerr, MD, MPH; Robert B. Gerzoff, MS; Sarah L. Krein, PhD, RN; Joseph V. Selby, MD, MPH; John D. Piette, PhD; J. David Curb, MD, MPH; William H. Herman, MD, MPH; David G. Marrero, PhD; K.M. Venkat Narayan, MD, MSc, MBA; Monika M. Safford, MD; Theodore Thompson, MS; and Carol M. Mangione, MD, MSPH

**Background:** No studies have compared care in the Department of Veterans Affairs (VA) with that delivered in commercial managed care organizations, nor have studies focused in depth on care comparisons for chronic, outpatient conditions.

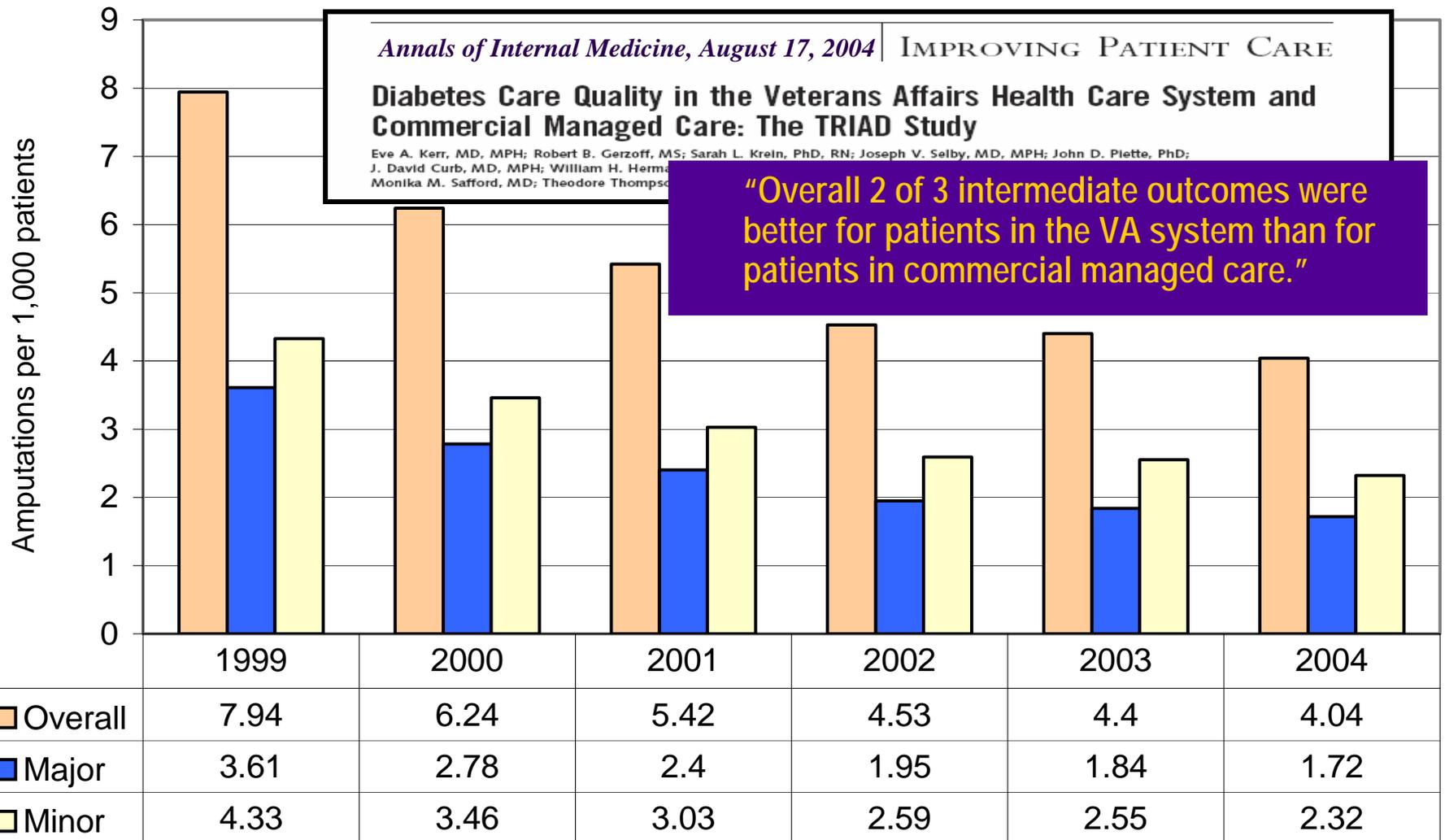
**Results:** Patients in the VA system had better scores than patients in commercial managed care on all process measures (for example, 93% vs. 83% for annual hemoglobin A<sub>1c</sub>;  $P = 0.006$ ; 91% vs. 75% for annual eye examination;  $P < 0.001$ ). Blood



### **3. *SATISFACTION:***

- **2000: 79 of 100 on external American Customer Satisfaction Index (Univ. of Michigan) Outpatient Care**
- **2001: 82/100 Inpatient & 83/100 Pharmacy**
  - **Significantly better than private health sector average of 68**
    - **Loyalty Score of 90 and Customer Service Score of 87 were healthcare benchmarks!**
- **2002: Repeat Performance – Healthcare Benchmark**
- **2003: Repeat Performance – Healthcare Benchmark**
- **2004: Repeat Performance – Healthcare Benchmark**
- **2005: Repeat Performance – Healthcare Benchmark**

# 4. FUNCTION: Reduced Age-Adjusted Amputation Rates in Diabetics





## **5. EFFICIENCY:**

# *Value for Taxpayers' Dollars: What VA Care Would Cost at Medicare Prices*

*Nugent GN, Hendricks A, Nugent L, Render ML*

*This analysis compares VA medical care expenditures with estimates of total payments under a hypothetical Medicare fee-for-service payment system reimbursing providers for the same counts of each service VA medical centers provided in fiscal 1999. At six study sites, hypothetical payments were more than 20 percent greater than actual budgets.*

*Nationally, this represented more than **\$3 billion in 1999** and **more than \$5 billion in 2003**. Data limitations suggest the estimate is conservative. Less than half of the difference is due to VA's low pharmacy costs. The study demonstrates the potential savings to patients and taxpayers of the VA health care system.*

# VA's Electronic Health Record

- VistA in all VA's
- Images
- CPOE >95%
- Bedside Medication Verification in all VA's
- Clinical reminders
- Computerized Mail Out Pharmacies
- HSR&D

The screenshot displays the VistA Imaging System interface for patient MADTL,FF. The main window shows a list of images found, including a sigmoid colon diverticulum and chest X-rays. A secondary window displays laboratory results for Hematocrit (Hct) over time, with a trend line graph showing values fluctuating around a reference range of 41-51%.

**Image Listing: MADTL,FF**

#	PROC. DATE	PROCEDURE	SHORT DESC
1	1998 - 03/24	COL	SIGMOID COLON DIVERTICULA
2	1997 - 07/28	GEN. MED.	X-RAY CHEST SINGLE VIEW 7/28/97
3	1997 - 07/28	COL	COLON 7/28/97
4	1992 - 12/24	GEN. MED.	BLEEDING SCAN FOR POSSIBLE GI BLEED 12/24/92

**Laboratory Results - Worksheet - All Results**

Date/Time	Specimen	HCT	HGB	MCV	PLT	WBC
06/18/98 00:00	Blood	35.3 L	11.4 L		276	7.1
01/21/98 00:00	Blood	34.6 L	11.6 L	90.4	276	8.1
01/21/98 00:00	Blood	34.6 L	11.6 L	90.4	282	8.1
08/17/97 00:00	Blood	34.1 L	11.3 L	90	549 H	13.7 H
08/16/97 00:00	Blood	33.9 L	11.4 L	89.2	605 H*	15.2 H
08/15/97 00:00	Blood	30.8 L	10.4 L	89	559 H	14.5 H
08/14/97 00:00	Blood	30.7 L	10.2 L	90.7	544 H	18 H
08/13/97 20:36	Blood	30.7 L	10.3 L	89.1	538 H	21.5 H
08/13/97 04:06	Blood	25.7 L*	8.4 L	90	559 H	20.1 H
08/12/97 04:44	Blood	29.4 L	10 L	88.7	596 H	21.6 H

**Hct (Blood) Trend Graph**

KEY: "L" = Abnormal Low, "H" = Abnormal High, "\*" = Critical Value, "\*\*\*\*" = Comments on Specimen



# ***Summary***

- **Right Environment**
- **Right Leadership & Support**
- **Right Structural Design**
  - **A system focused on a population**
  - **Performance measurement focused on quality**
  - **Aligned funding & incentives**
  - **Employed physicians**
  - **Automation of the care process**
  - **Patient - centered care model**
  - **Evidenced based guidelines**
  - **Quality Improvement as a System Property (IHI Collaboratives, QUERI)**



# ***Lessons from VA***

- **Aligned incentives**
- **Supportive information technology**
- **Integrated systems of care**

***Are effective in reducing costs and improving quality and satisfaction.***



## ***Relevance to Non-VA?***

- **Aligned incentives**
- **Supportive information technology**
- **Integrated systems of care**

***Other than the various pay for performance initiatives, are there other emerging prototypes.***



*Catholic Health East*

*Catholic Health System, Buffalo*

***Catholic IPA (CIPA)***

- Joint Venture: Catholic Health System and its Practice Community
- 750 Unique Physicians
- 60% Specialists/40% Primary Care
- Aim to Close Clinical Quality Gaps and Integrate Care
- Concerned about how to do it right from an antitrust perspective



# *Clinical Integration*

- A 3 part test for clinical integration of a physician network based on advisory opinions of FTC for other models (Advocate Health, Health South and Greater Rochester IPA):
  - Is the networks' clinical integration program real?
  - Are the initiatives of the program designed to achieve likely improvements in health care quality and efficiency?
  - Is joint contracting with fee-for-service health plans "reasonably necessary" to achieve the efficiencies of the clinical integration program?



# *Clinical Integration*





# *CIPA Initiatives*

- **Registry and Quality Improvement**
  - Registries
  - Provider Reviews, Audits, Tracking of Care
- **Care Coordination Program**
  - Care Managers (primarily RNs) supported by contract \$'s
  - Building an integrated team with physicians
- **Patient Education & Self Management Support**
  - Emmi program – completion reported to physicians
  - Health Buddy program
- **Technology Support**
  - Up to \$300/physician/month for EMR from contract \$'s

The logo features a purple diamond shape with a white starburst in the center. The text "CIPA EMR Initiative" is written in a yellow, italicized serif font, with "CIPA" in a larger size than "EMR Initiative".

# *CIPA EMR Initiative*

## ➤ Electronic Medical Record Initiative

- EHR adoption program: start at 50 out of 750; currently 250 out of 750; goal of 300 (40%) by end of year
- Physicians choose their office EMR
- Hospital - office connections (Novo Innovations)
- Medical Society of State of NY Grant for EHR interoperability

## ➤ Areas targeted

- Electronic prescribing
- Performance reporting and Improvement
- Advanced Electronic Communication
- Test tracking and referral tracking



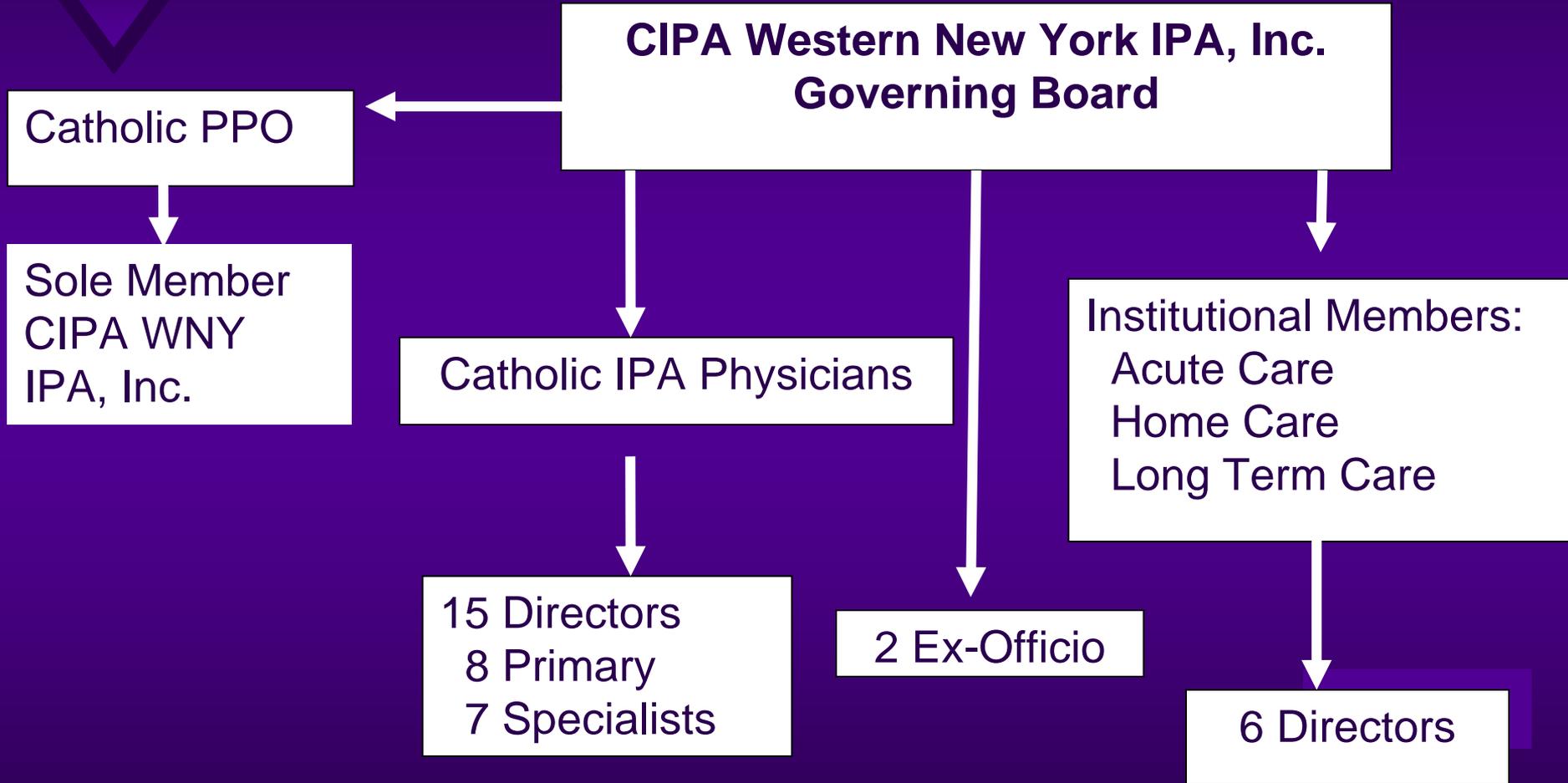
# *Alignment of Incentives*

*(Designed to Promote Efficiency & Quality)*

- **Core Measure Indicators** (“Perfect Care”)
- **Potentially Avoidable Delays**
- **Medication Reconciliation**
- **HCAPS Overall Patient Satisfaction**
- **Culture of Safety Initiative**
- **MRSA Surveillance Initiative**
- **Registries with patient care review, random audits and tracking**

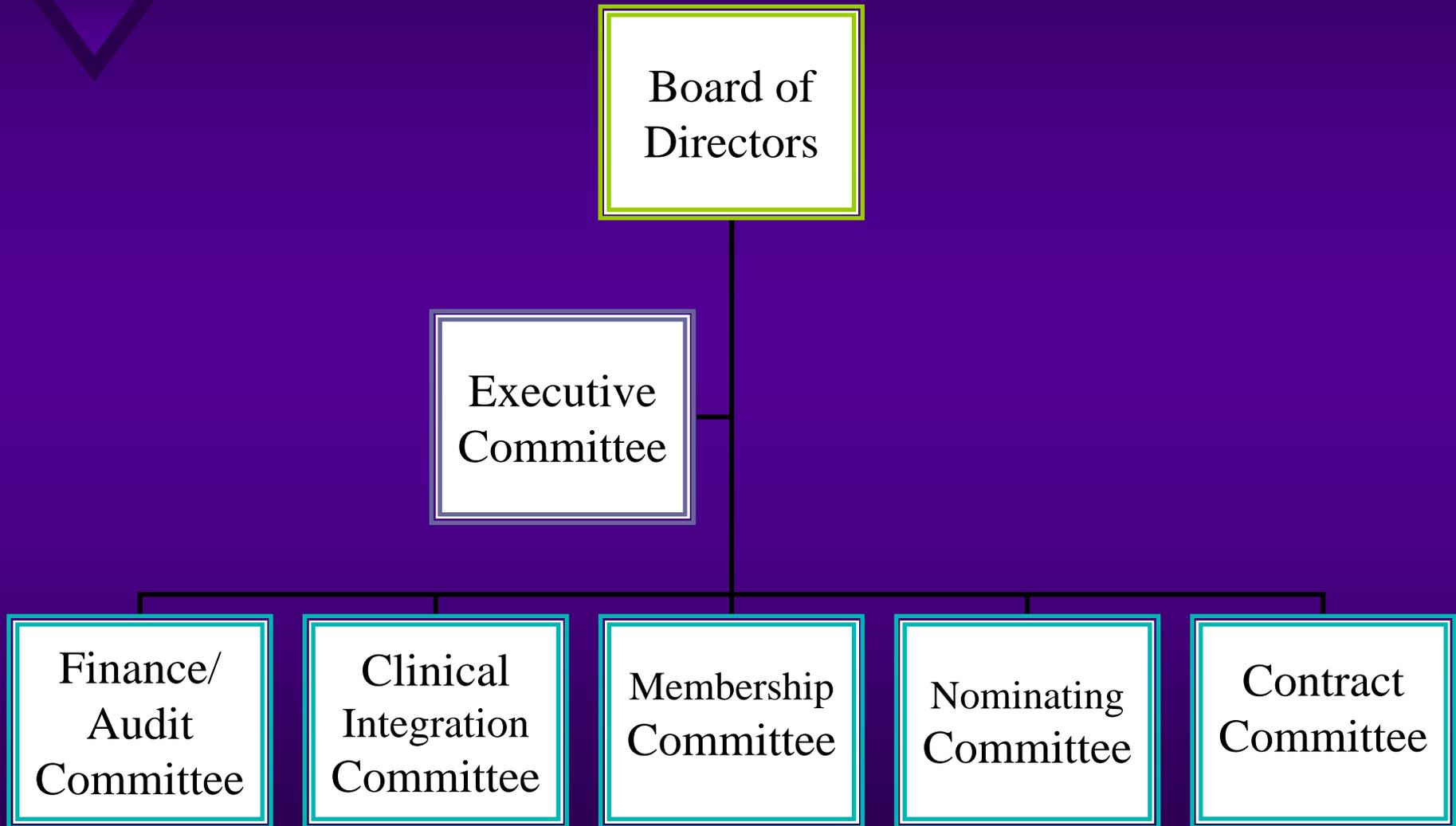


# *Organizational Structure*





# *Organizational Structure*





# *Governance of the Integration Effort*

## Board of Directors Checklist Components of the Clinical Integration Program

### Infrastructure:

Medical Director

2007

Yes

2008

Yes

Information System

Yes

Yes

Credentialing Process:

Yes

Yes

Clinical Protocols

Yes

Yes

Quality and Cost Benchmarks:

Yes

Yes

Performance Monitoring

Yes

Yes

### Corrective Action:

Formal Plan

Yes

Yes

Monitoring

Yes

Yes

Disease/Case Management

Yes

Yes

Patient Education

Yes

Yes

Payor Involvement

Yes

Yes

