THE CHALLENGE: CHRONIC DISEASE CARE AND THE PROMISE OF HIT

Health Care Information Technology 2004: Improving Chronic Care in California

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Why Chronic Disease?

- Cause major limitations for > 1:10 Americans, or 25 million people.
- >90 million Americans live with chronic illnesses.
- Cause 70% of all deaths in the US, or more than 1.7 million people each year.
- Medical care costs for people with chronic diseases account for >75% of national costs —almost $1.6 trillion in 2002 (14.9% of GDP)

-Centers for Disease Control

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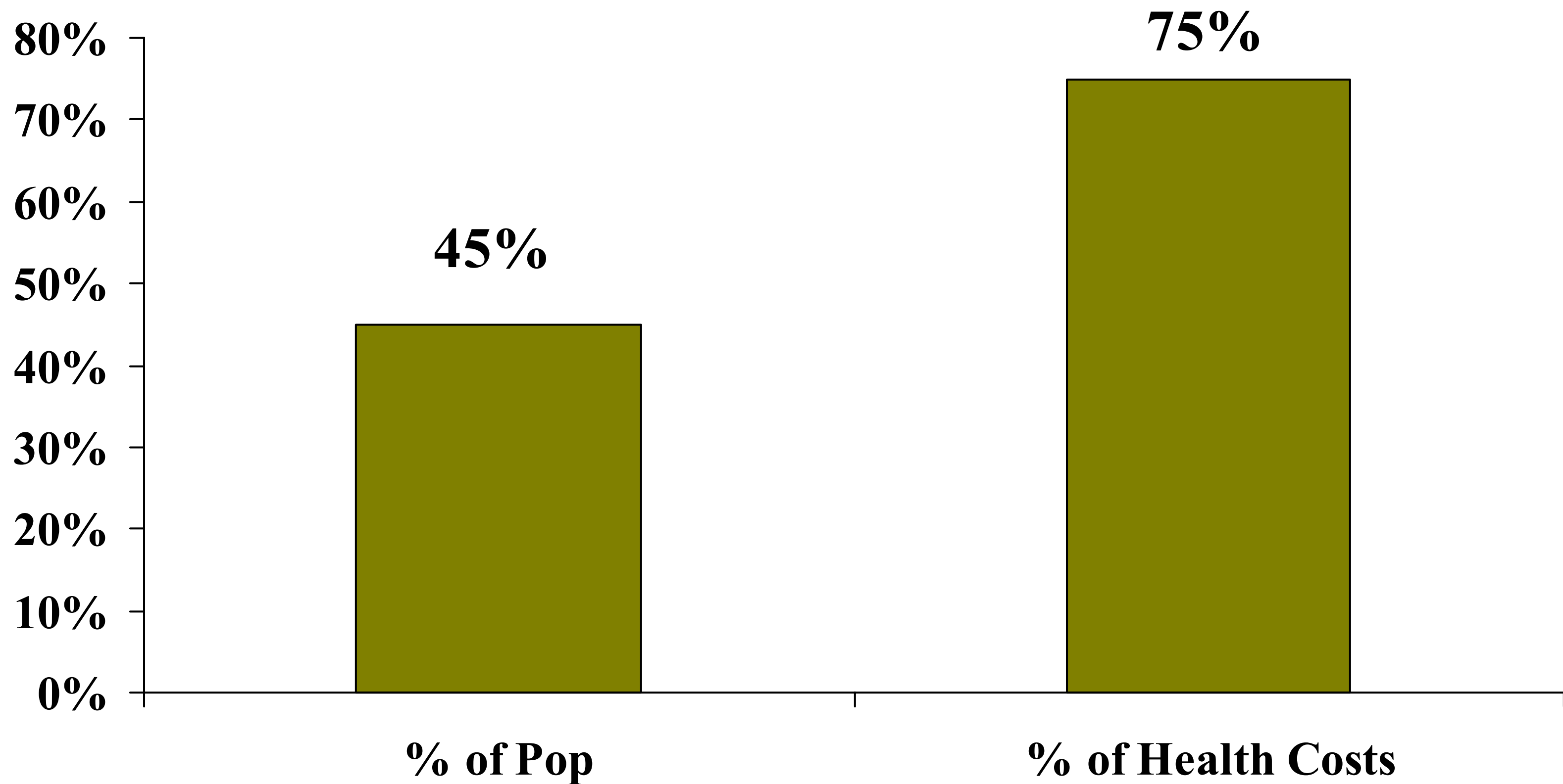
Chronic Illness: Prevalence and Health Costs



--C Hoffman et al, JAMA 1996:276:1473

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Opportunities to Improve

- US prevalence of chronic disease is significant and growing.
  - Asthma ↑75% between 1982 and 1996
  - Diabetes ↑30% over the last 10 years
  - Of those born in 2000, ~1/3 will develop diabetes
- In California
  - Almost 1.5 million diabetic adults
  - Estimated 3.9 million adults and children with asthma

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Who Cares and Why?

- Employers/Purchasers
  - Private Sector
  - Public Sector
- Health Care Providers
  - Large integrated systems
  - Competitive markets
  - Individual/small practices
- Patients and Families
  - Greater disease burden
  - Greater financial burden
- Society?

What Can HIT Help Address?

- Less than 50% of patients with chronic conditions are currently managed appropriately
- Inadequate management is a major component of health care costs
  - Rx noncompliance alone ~$100-150 billion/yr
- Lag between evidence and adoption of effective treatments into routine care averages 17 years.

--Institute of Medicine

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Challenges to Crossing the Quality Chasm

- **Redesign care processes based on best practices**
- **Use information technologies**
  - **improve access to clinical information**
  - **support clinical decision making**
- **Manage knowledge and skills**
- **Develop effective teams**
- **Coordinate of care over time**
  - **across patient conditions, services, and settings**
- **Incorporate performance and outcome measurements for improvement and accountability**

--Institute of Medicine

Defining High Quality Chronic Disease Care

- Timely, Appropriate
- Evidence-based
- It Takes a Team
- Team Captain = Patient
- Making Sure that the Right Signal is Heard Above the Noise
- HIT is a key enabler

Expectations of HIT—Realistic?

- Re-engineering care systems
- Change practice paradigm
  - reactive to proactive care
  - individual patient to population view
- “Fix” fragmented system of care
- Appropriately align incentives

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Re-engineering

- Eliminate Waste
- Improve Work Flow
- Optimize Inventory
- Change the Work Environment
- Enhance the Producer/Customer Relationship
- Manage Time
- Manage Variation
- Design Systems to Avoid Mistakes
- Focus on the Product or Service

--Langley et al, 1996
The Improvement Guide.

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Clinical Information Systems

Organize patient ***and population*** data
to facilitate efficient and effective care

- Timely reminders for providers and patients
- Identify relevant subpopulations for proactive care
- Facilitate individual patient care planning
- Share information with patients and providers to coordinate care
- Monitor performance of practice team and care system

--Improving Chronic Illness Care

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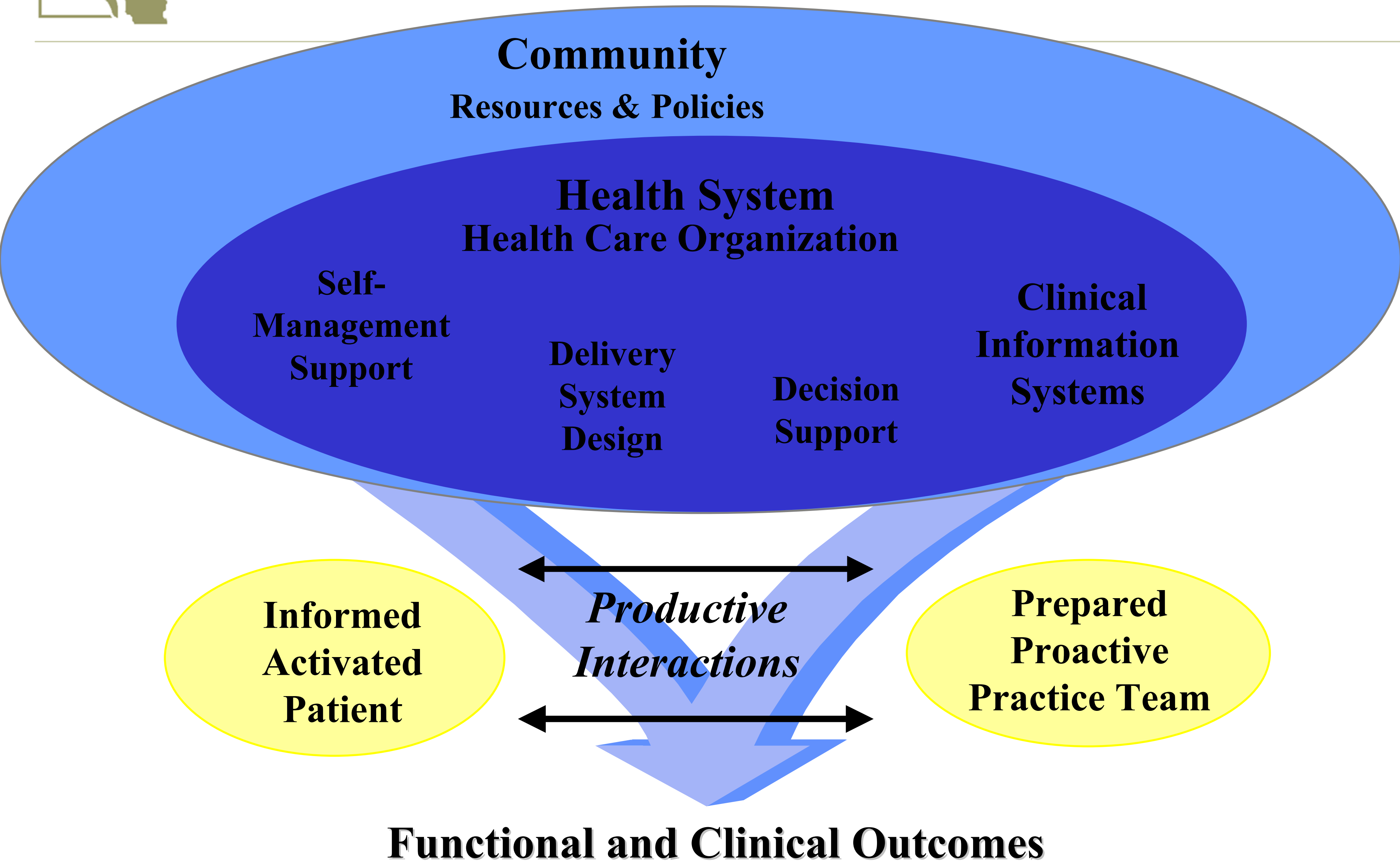
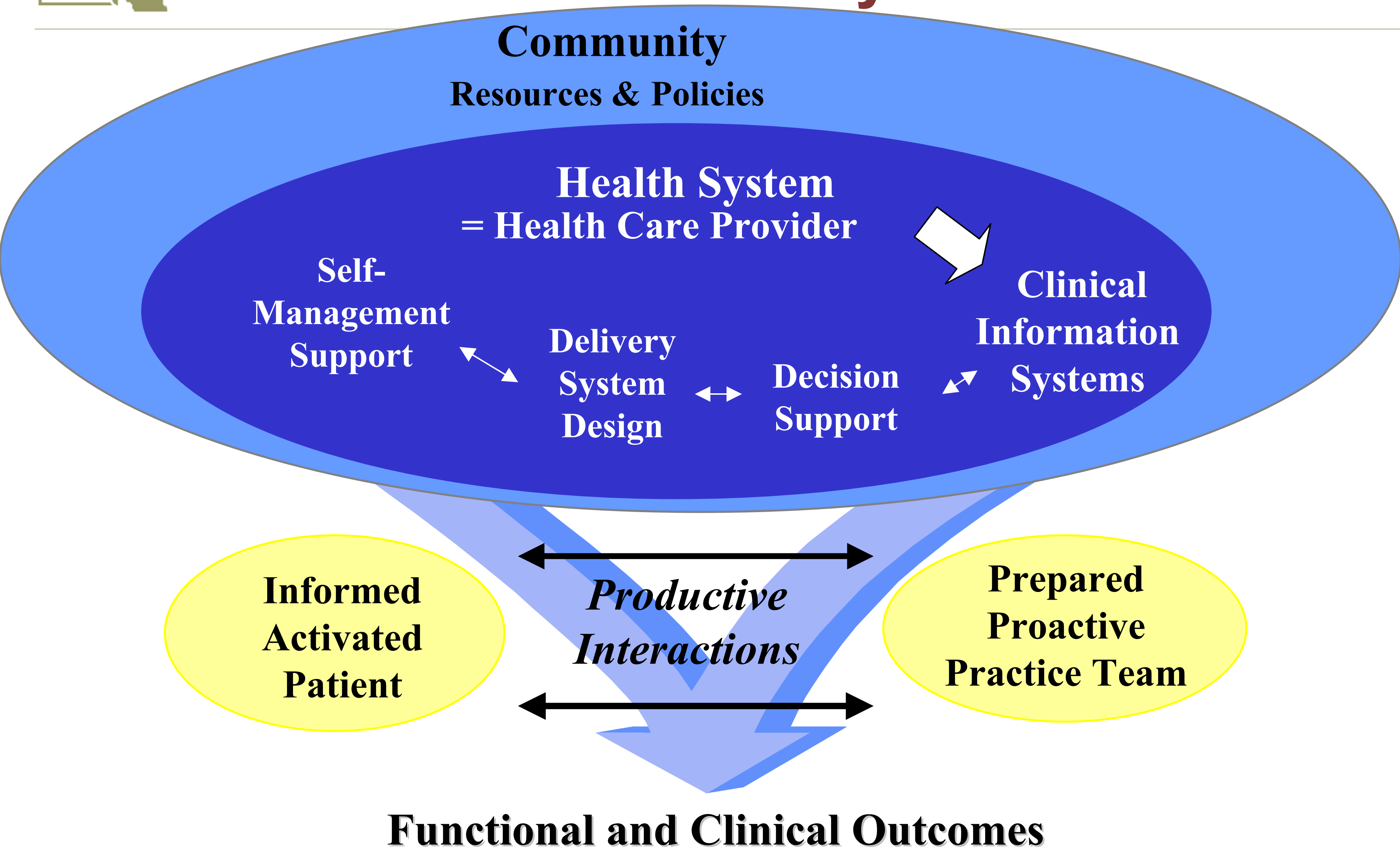
Chronic Care Model

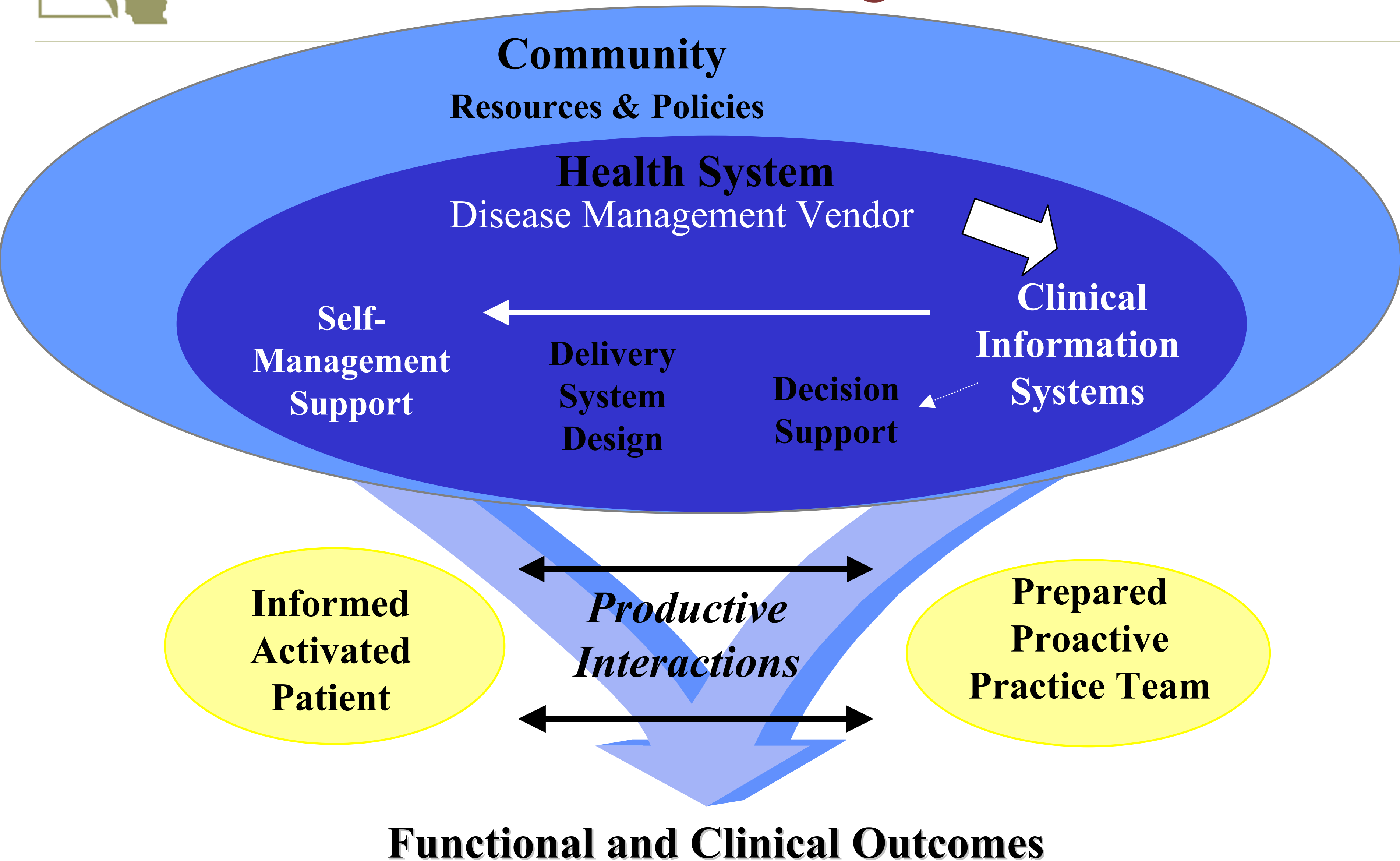


Chronic Care Model: Provider Systems



Chronic Care Model:

Disease Management



Key IT Functionalities to Support Chronic Disease Care

- Identify population
- Track process and outcome measures
- Prompt required action based on clinical protocols
- Provide feedback on overall performance
  - by patient and by population

a.k.a. DISEASE REGISTRIES?

Electronic Health Record Definition

- Clinician resource
  - Secure, real-time, point-of-care, patient-centric information
- Aids decision making
  - provides access to patient health record information when needed
  - incorporates evidence-based decision support
- Streamlines clinician workflow
  - ensures all clinical information is communicated
  - ameliorates response delays that result in delays or gaps in care
- Supports data collection for other uses
  - e.g., billing, quality management, outcomes reporting, and public health disease surveillance/reporting

-- HIMSS

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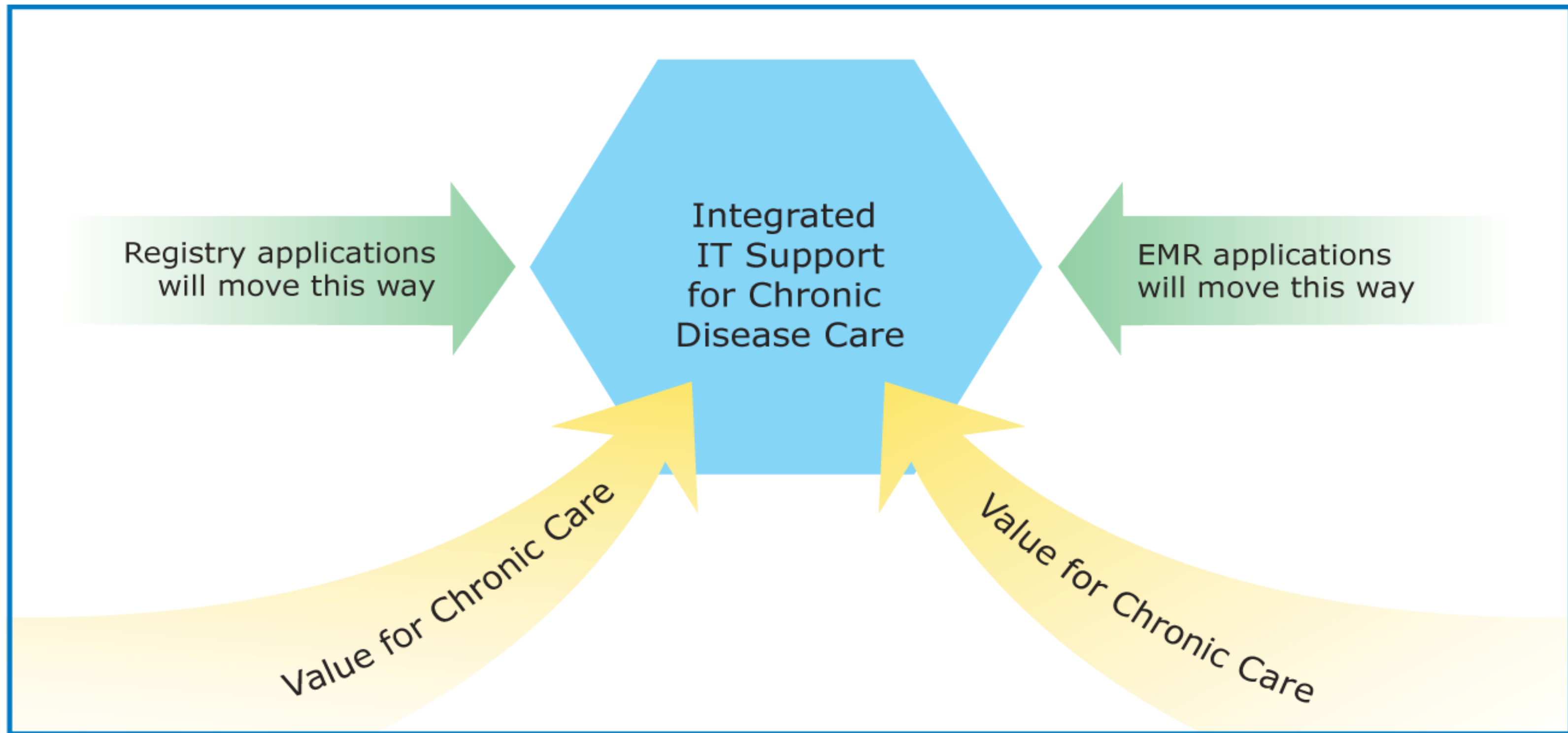
Spectrum of HIT



Fragmentation of Health Care

Defining the “System” of Care

- By provider
  - Integrated Health System
  - Organized Physician Groups
  - Comprehensive Clinic
- By financing
  - Employers/purchasers
  - Insurance products
- By patient

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Understanding Limitations

- Better information doesn’t assure the right thing is done
- Better communication doesn’t fix a fragmented system
- Better systems won’t override competition
- Care still involves people

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www.chcf.org

- California HealthLine
- iHealthBeat
- Updates on Chronic Disease Care and iHealth activities