WELLPOINT

Macro Trends in Health Care

A Payer Perspective on Health Care Innovations–Health IT, Genomics …

Charles Kennedy, M.D.

VP Health Information & Technology , WellPoint, Inc.

H.I.T. Policy Committee Insurance Industry Representative

Macro Trends in Health Care Industry

Health Plans Industry Challenges:

- Chronic Disease Epidemic
- Improve the quality and affordability of medical care
  - Desperate need for more effective cost containment strategies
  - New challenges for assuring quality of care
- Need to expand coverage (access) for everyone
  - Benefit buy downs and outright dropping of coverage for working families and small businesses
  - Declining enrollments, individual market challenge (e.g. pre-existing conditions, individual underwriting)
- Health Care Reform & current employer-based system
  - Unpredictable regulatory changes
  - Increased involvement of employers in health care of the individual
  - Increasd willingness to value innovation, drive change
- New industry focus on technology (information management)
- Challenged health care safety net
- Exciting innovations in personalized medicine creating medium term concerns about how to effectively diffuse innovations into common practice

Value Challenge #1: Affordability

Affordability Challenge Caused By Chronic Illness

Chronic Condition	Prevalence	Lost Work Days/ 1000	Annual Cost
Heart Disease	**60 million**	**1350**	$448 Billion
Diabetes	**16 million**	**400**	$174 Billion
COPD	**12 million**	**430**	$39 Billion
Asthma	**15 million**	**675**	$5 Billion

Chronic disease represents 75% of total health care expenditures nationally

- 50-70% of health care spending is related to **behaviors**
- **Behaviors are managed by the patient more so than the doctor**

Value Challenge #2: Quality & Safety

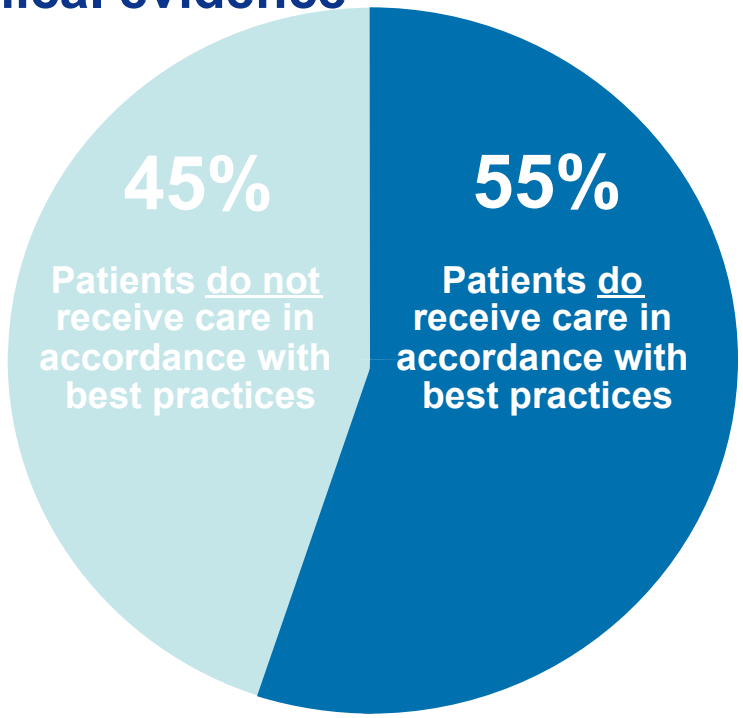
Optimize actual care delivery; align with best practices, comparative effectiveness, and other sources of clinical evidence

% of Recommended Care Received

- 64.7% Hypertension
- 63.9% Congestive Heart Failure
- 53.9% Colorectal Cancer
- 53.5% Asthma
- 45.4% Diabetes
- 39.0% Pneumonia
- 22.8% Hip Fracture

% of Recommended Pediatric Care Received

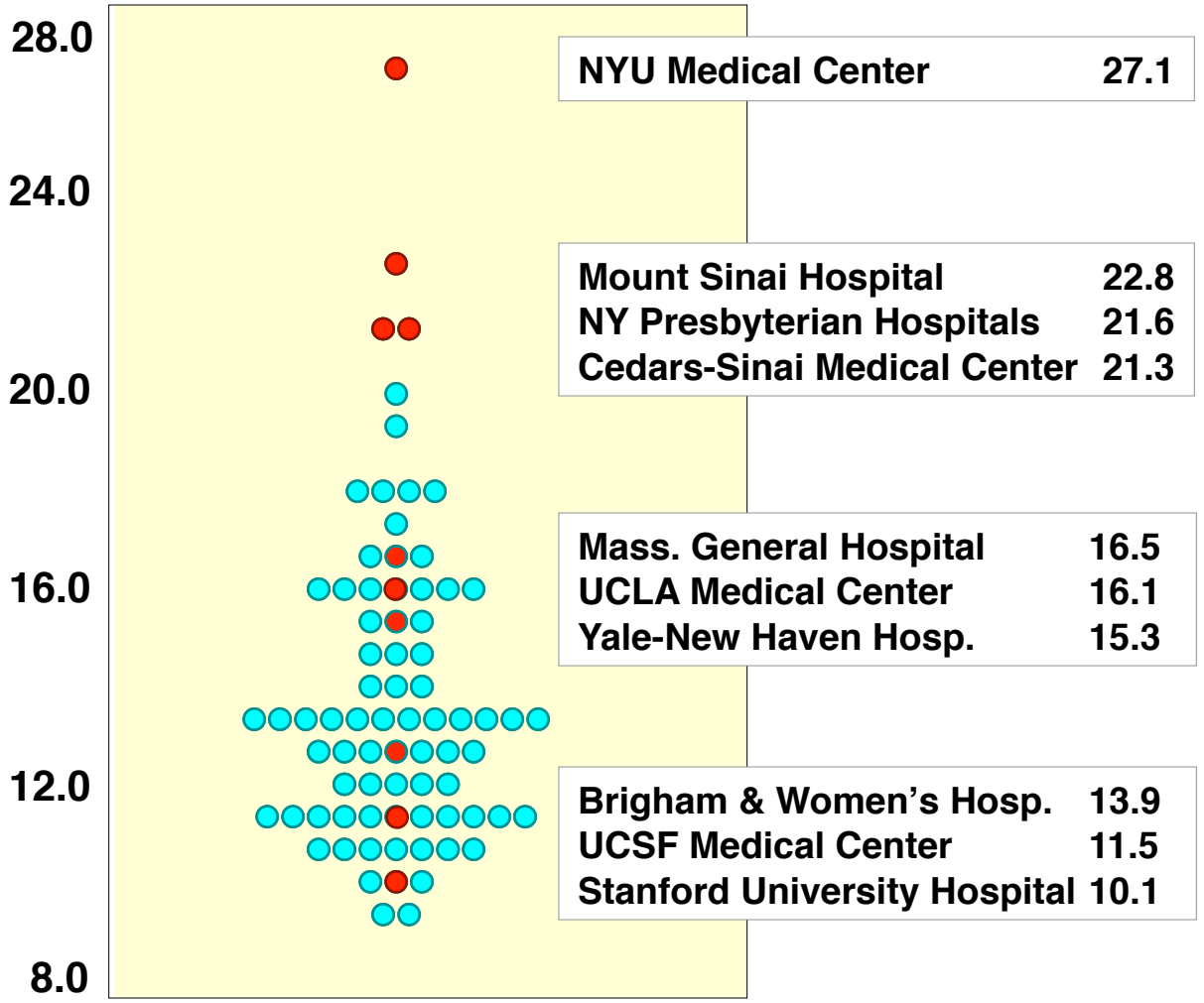
- 67.6% Acute Medical Care
- 53.4% Chronic Condition Care
- 40.7% Preventive Care



Source: McGlynn, E.A, et. al. "The Quality of Health Care Delivered to Adults in the United States." New England Journal of Medicine 348 (26): 2635-45 (2003); Mangione-Smith R, DeCristofaro AH, Setodji CM, Keesey J, Klein DJ, Adams JL, Schuster MA, McGlynn EA. The Quality of Ambulatory Care Delivered to Children in the United States The New England Journal of Medicine, Vol. 26, No. 5, Sept 2007, pp. 644-649

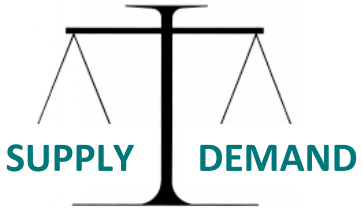
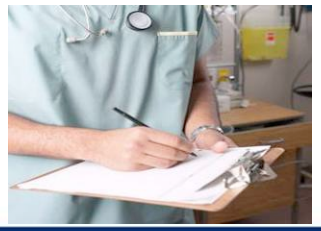
Value Challenge #3: Variation in Care

Why, amongst our country's leading academic medical centers, is there a three-fold variation in hospital days during the last six months of life?



Source: John E Wennberg, et. al.; Use of hospitals, physician visits, and hospice care during last six months of life among cohorts loyal to highly respected hospitals in the United States British Medical Journal 2004 328: 607

Cost, Quality, Variation of Care Drivers

Driver		Challenge	Solution??
Reimbursement System		Rewards volume over quality or outcomes	P4P, Advanced Medical Homes,
Expanding Capacity		Increased supply triggers increased demand	Narrow Networks, Patient Channeling, Centers of Excellence
Patient "Preference"		Little information on care effectiveness, limited patient compliance support	Technology-PHRs, Content, Informatics; Disease Mgmt,, Comp. Effectiveness
Clinical Decision -Making		Poor integration and coordination across delivery system	Decision Support Tools, Genomics, EHRs, Safety Studies

Genomic Medical Policy Management

Genomic based therapies are trickling into health plan medical policies— herceptin example:

Example: Trastuzumab (Herceptin, Genentech, Inc., San Francisco, CA) is a humanized recombinant DNA monoclonal antibody that targets tumor cells that overexpress the Human Epidermal Growth Factor Receptor 2 (HER2) protein and/or amplification of the HER2 gene.

Position StatementMedically Necessary:

I. Breast Cancer

Trastuzumab is considered medically necessary for individuals with breast cancer who meet criteria (A) *and* (B) below *and* in addition, *one or more* of the indications listed in (C) below:

Individuals whose tumors have been evaluated with an assay validated to predict HER2 protein overexpression.

- Individuals are considered HER2-positive if the breast cancer is immunohistochemistry (IHC) 3+ or fluorescent in situ hybridization (FISH) HER2 gene amplification +; AND

Individuals must undergo a baseline cardiac assessment (MUGA or Echocardiogram) prior to initiation of therapy and the physician documents a plan to monitor left ventricular function AND

Individuals meet one or more of the following indications:

- For treatment of metastatic breast cancer, as a single agent or in combination with chemotherapy (any chemotherapy approved for use in breast cancer), either in treatment-naive individuals or individuals already receiving chemotherapy.
- As adjuvant therapy for treatment of breast cancer.
- As adjuvant therapy within 12 months of completion of *adjuvant chemotherapy.*
- As neoadjuvant therapy for locally advanced breast cancer prior to surgical treatment.

II. Gastric Cancer

Trastuzumab is considered medically necessary for individuals with gastric adenocarcinoma who meet criteria (A) *and* (B) below *and* in addition, both of the criteria listed in (C) below:

Individuals whose gastric tumors have been evaluated with an assay validated to predict HER2 protein overexpression.

- Individuals are considered HER2-positive if the gastric cancer is immunohistochemistry (IHC) 3+ or fluorescent in situ hybridization (FISH) HER2 gene amplification +;AND

Individuals must undergo a baseline cardiac assessment (MUGA or Echocardiogram) prior to initiation of therapy and the physician documents a plan to monitor left ventricular function AND

Individuals meet both of the following criteria:

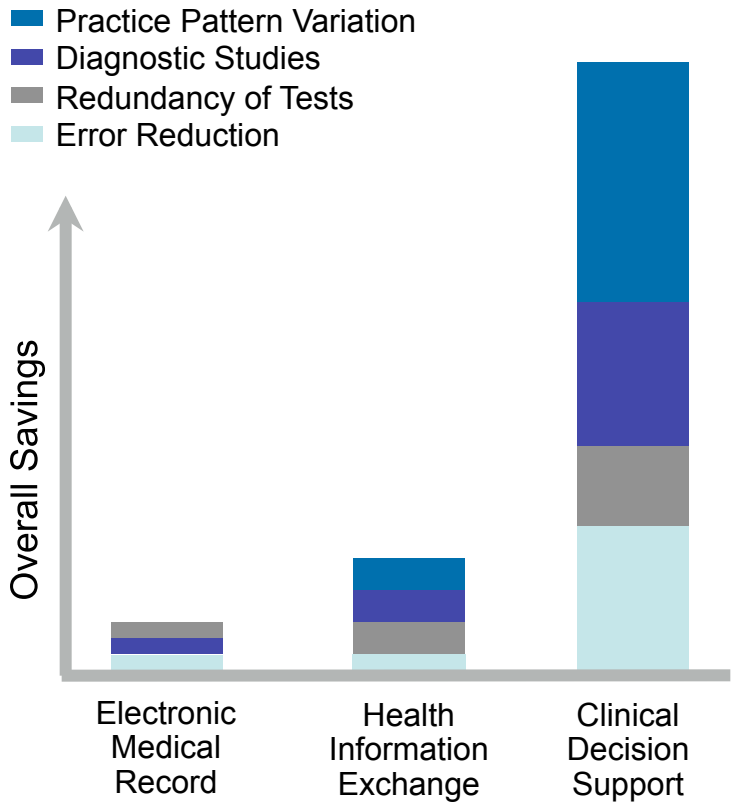
- For treatment of locally advanced, recurrent or metastatic gastric adenocarcinoma; *and*
- Trastuzumab is used in only one line of therapy.

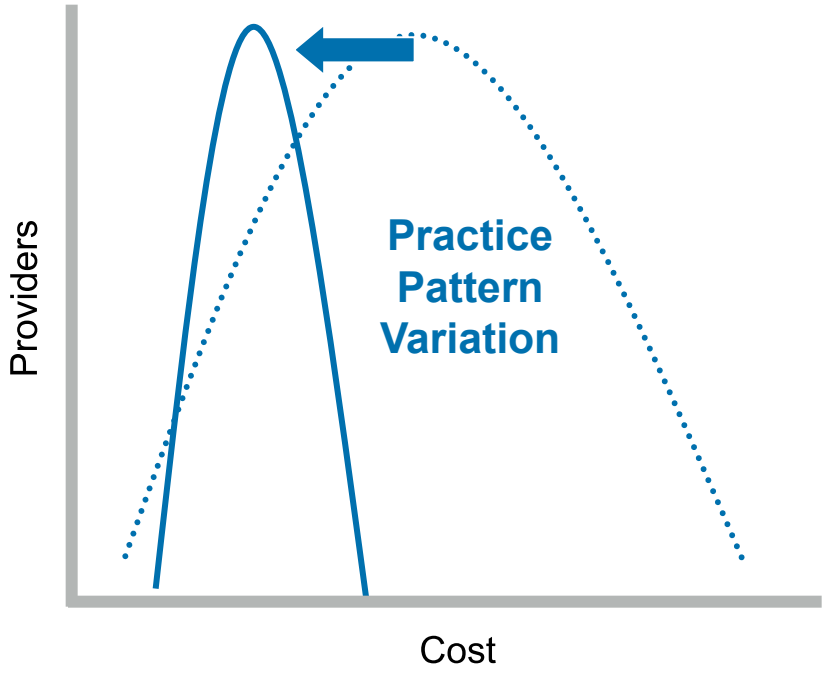
Investigational and Not Medically Necessary:

Concomitant use of trastuzumab with other targeted biologic agents (including but not limited to erlotinib, cetuximab, panitumumab, bevacizumab and lapatinib) is considered investigational and not medically necessary.

Health IT: Best Opportunity To Evolve The Industry

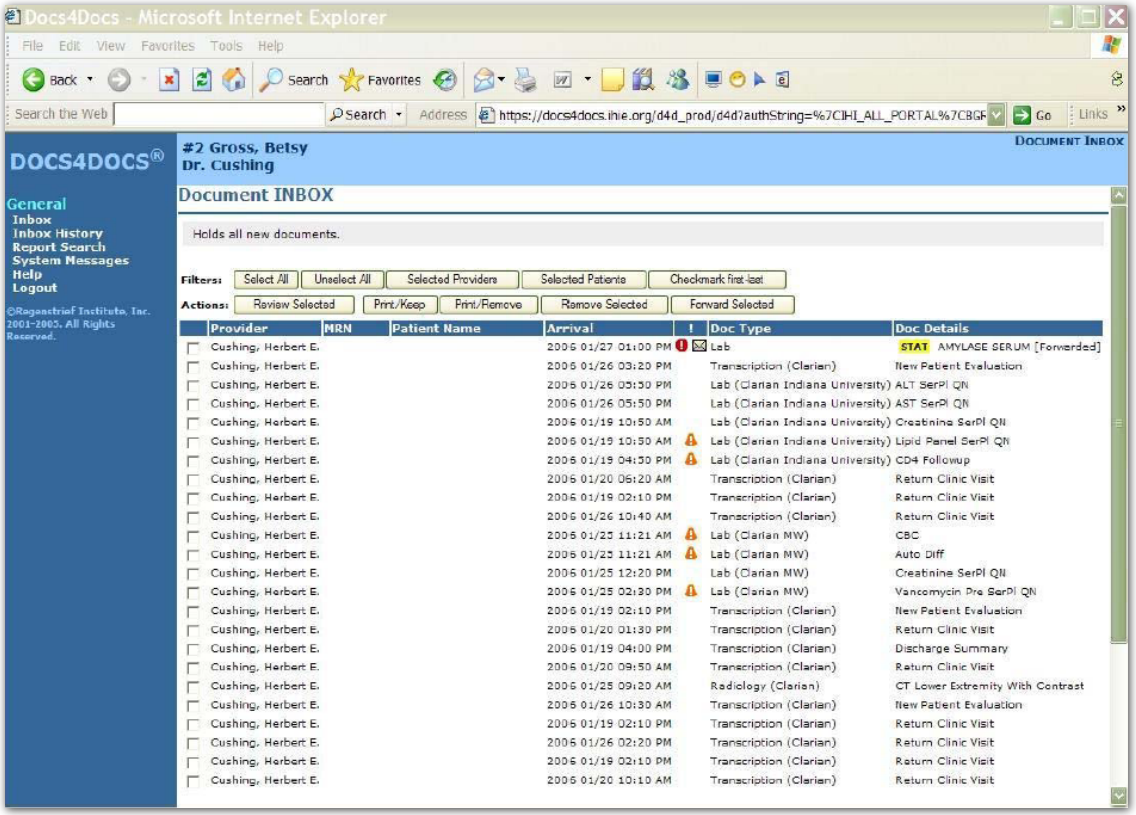
Electronic representations of patient health and health history linked to algorithms derived from comparative effectiveness can help maximize health care value





HIE: Interoperability = Data Dumpster

- **Interoperability creates value by presenting more comprehensive data to the treating physician at the point of care**
- **HIEs complement existing vehicles to present electronic data such as portals from lab vendors**
- **HIEs add value primarily when a physician who did not order the test needs to see the result such as ED settings or referrals.**
- **Duplicate testing probably accounts for 1-5% of all testing**



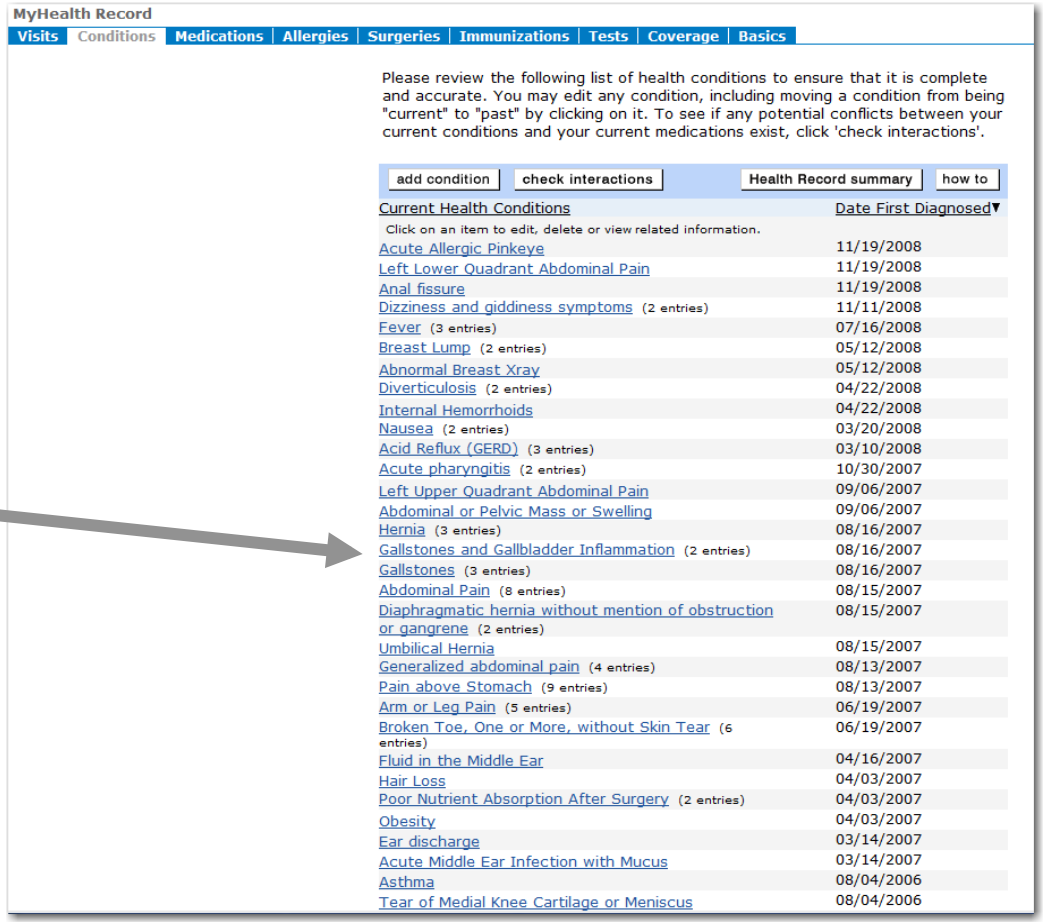
Interoperable PHR = Jig Saw Puzzle

For chronic disease management, patients must be empowered with data that is understandable, actionable, and personal to them

Current PHRs suffer from a lack of sophisticated data management. In this PHR, there is recognition that some conditions have been reported more than once, however there is no logic to combine any of the condition entries that might actually be a single clinical issue

See entries regarding Gallstone and Gallbladder Inflammation with Gallstone and abdominal pain. These entries are all related to one clinical condition but no understanding is created

Information is not processed, assessed, or analyzed. It is simply captured and displayed. The result is a lack of actionable information & limited value



How Could Health IT Evolve?

Health IT is in the first stage of a multi year path to transform health care

Early efforts will focus on interoperability– allowing system A to share data with system B. However, interoperability will not in and of itself create transformational value

Second and Third phases of Health IT will focus increasingly on data management strategies and algorithm based advisories, alerts, and messages.

Second and Third Phases of Health IT deployments will need to focus on a new Objective– Creating Shared Clinical Intelligence

Shared Clinical Intelligence Value

- **Value to Pharmaceutical firms– Simple, clearer ways to get new products into the right physician-patient interaction**
- **Value to health plans– Reductions in administrative costs for today's care management functions through automation. More effective management processes to reduce over, under, mis use**
- **Value to Physicians– Clear, decision support, less administrative over head from third parties, more defensible from malpractice charges, better support in carrying out day to day activities**
- **Value to Patients– More consistent, higher quality care**
- **Value to Employers– Lower costs for care that is documented to be higher in quality**