

# "IT Innovations In a Healthcare Network Devoted Exclusively to Cancer Research & Treatment"

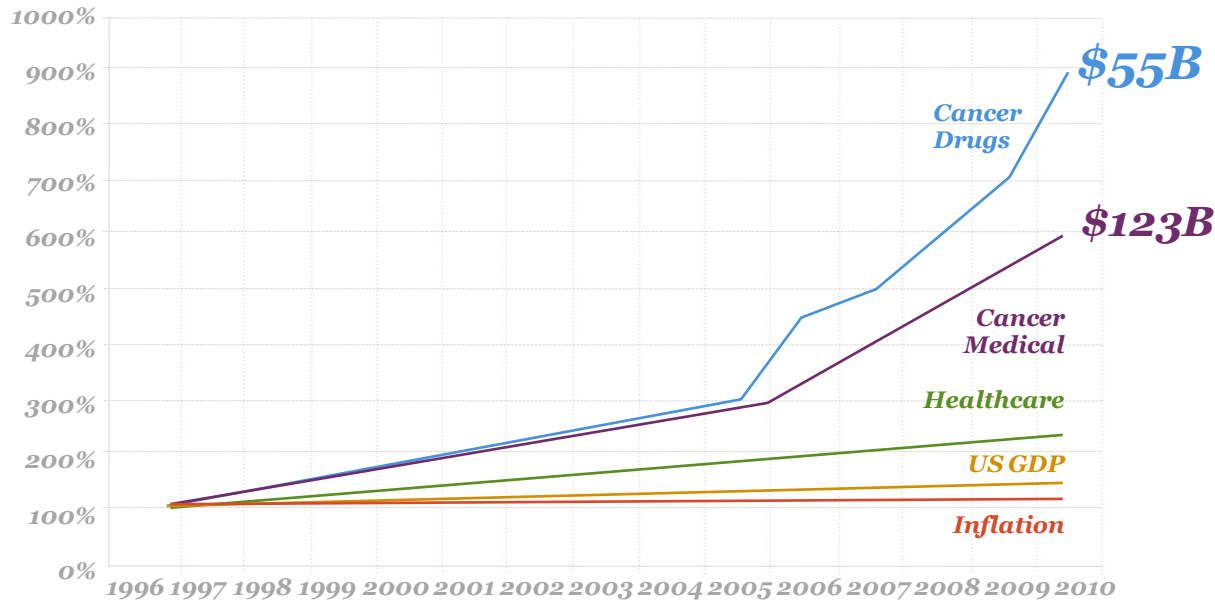
Asif Ahmad  
Sr. VP, Information & Technology Services  
February 27, 2012

# Agenda

- About Us
  - McKesson Specialty Health (MSH)
  - Technology Foundation for MSH
- System Design and Data Assets
- Clinical Outcomes and Research
- Data Governance

# Current Healthcare Challenges

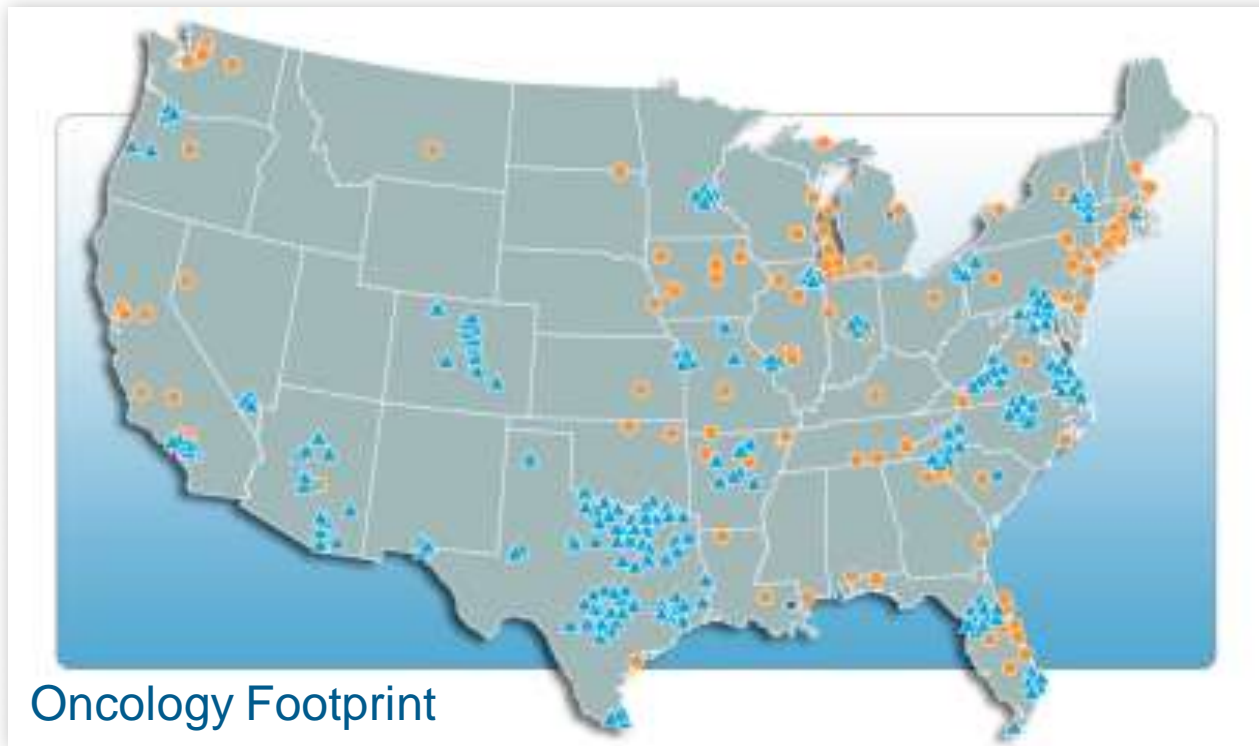
Cancer costs are rising beyond inflation and other healthcare costs



**We help  
community-based  
practices manage:**

- Increased competition from hospitals, clinics
- Declines in reimbursement
- Healthcare reform uncertainty
- Rising healthcare costs

# McKesson Specialty Health: Strong Clinical Partners



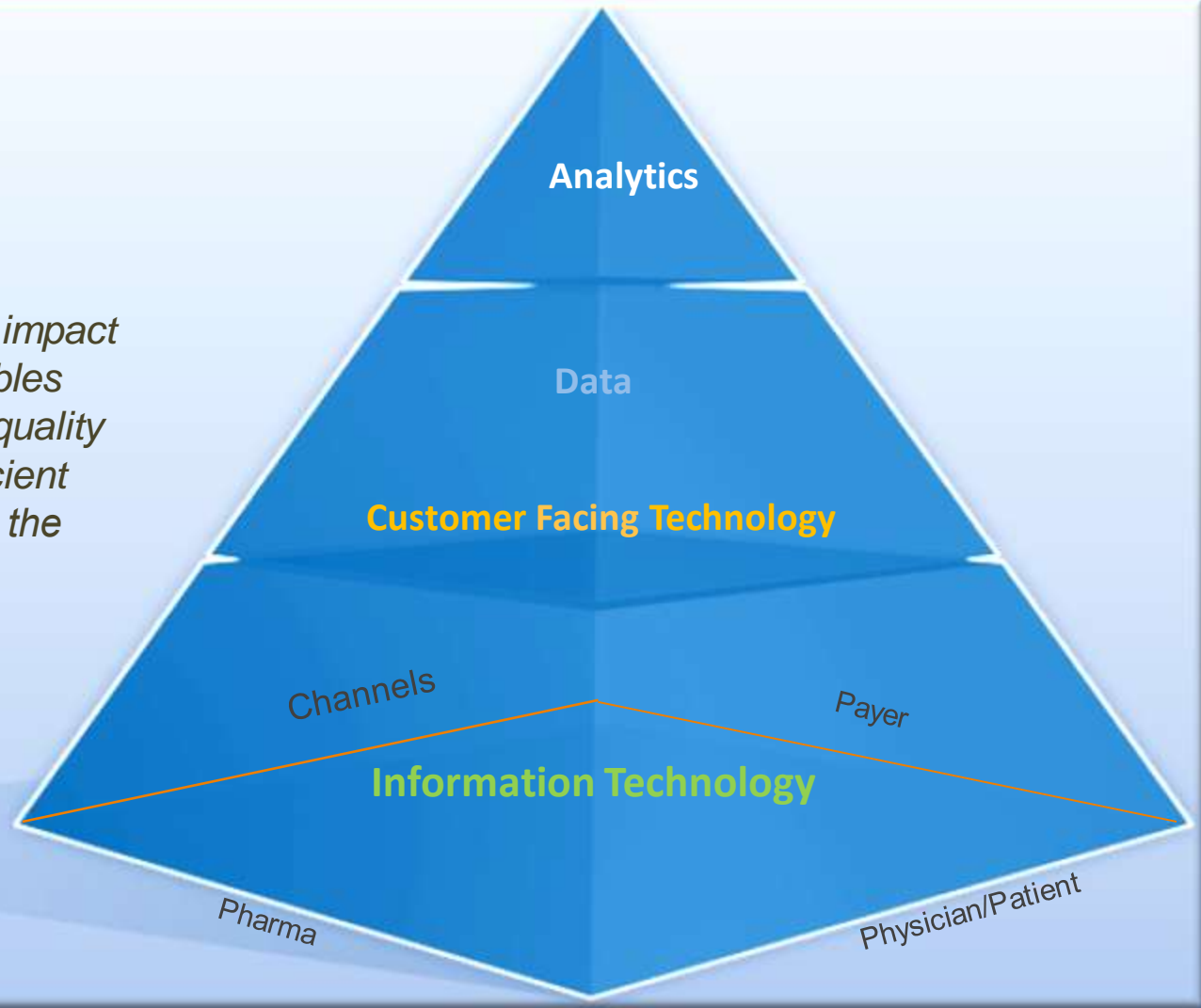
- ▲ US Oncology Network
- Onmark Perform Practice

- McKesson's **2nd largest** business unit
- One of the largest distributors of specialty pharmaceuticals and biologics
- **3000** oncologists and **2200** multi-specialty practices
- Broad set of proven, customizable services

## Technology Foundation for McKesson Specialty Health

### Mission

*Demonstrate measurable impact of technology that enables outcomes of the highest quality and uses the most efficient workflows...integrating the Community of Care*



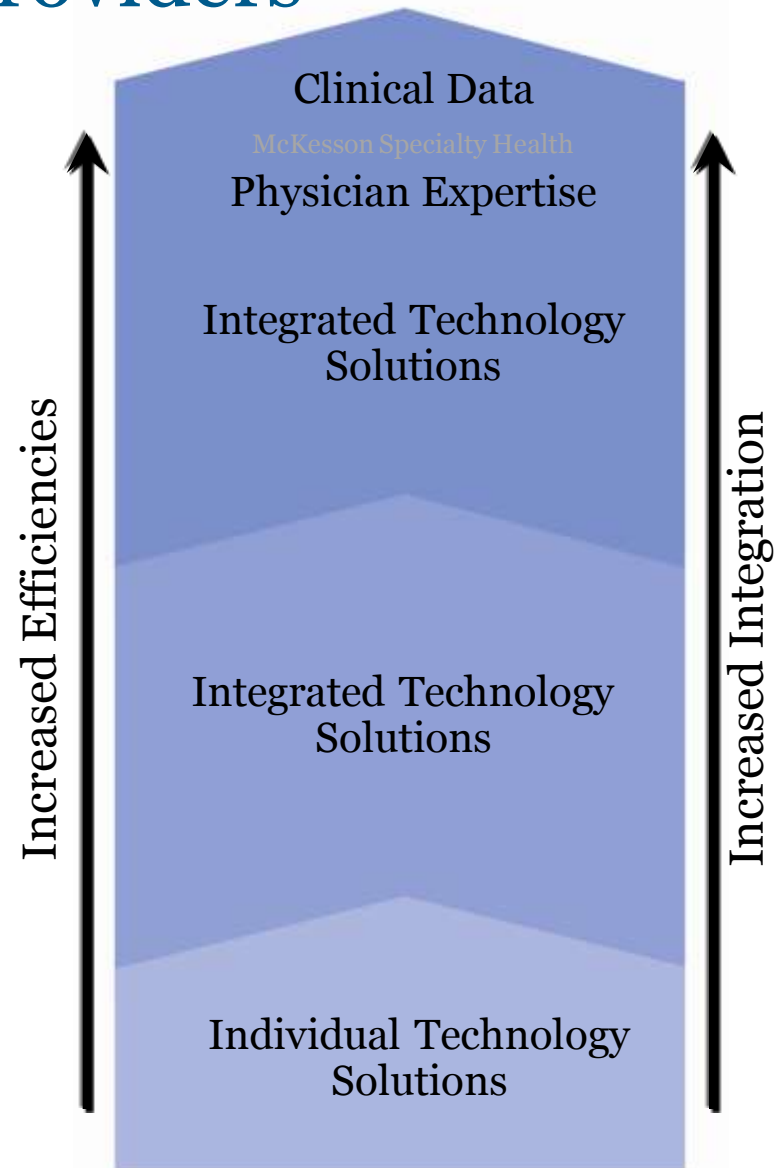
# System Design and Data Assets

# Value of Technology for Providers

When our technological expertise is complemented by **clinical data**, the delivery of patient care is transformed. Competitive advantages are realized in speed and efficiency of innovation – freeing providers to advance the science and delivery of patient care.

When integrated together, our technology systems can revolutionize the business of a practice – driving enhanced financial results, operational efficiency and supporting clinicians in delivering optimal patient care.

Wide array of individual technology solutions focused on optimizing revenue, driving down costs and increasing productivity.



# iKnowMed Electronic Health Record

## iKnowMed EHR Features

- Web-based
- Charge capture functionality
- Safety alerts
- Cancer diagnosis and extensive regimen library
- Clinical trial support

VALUE

VALUE

VALUE

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VALUE

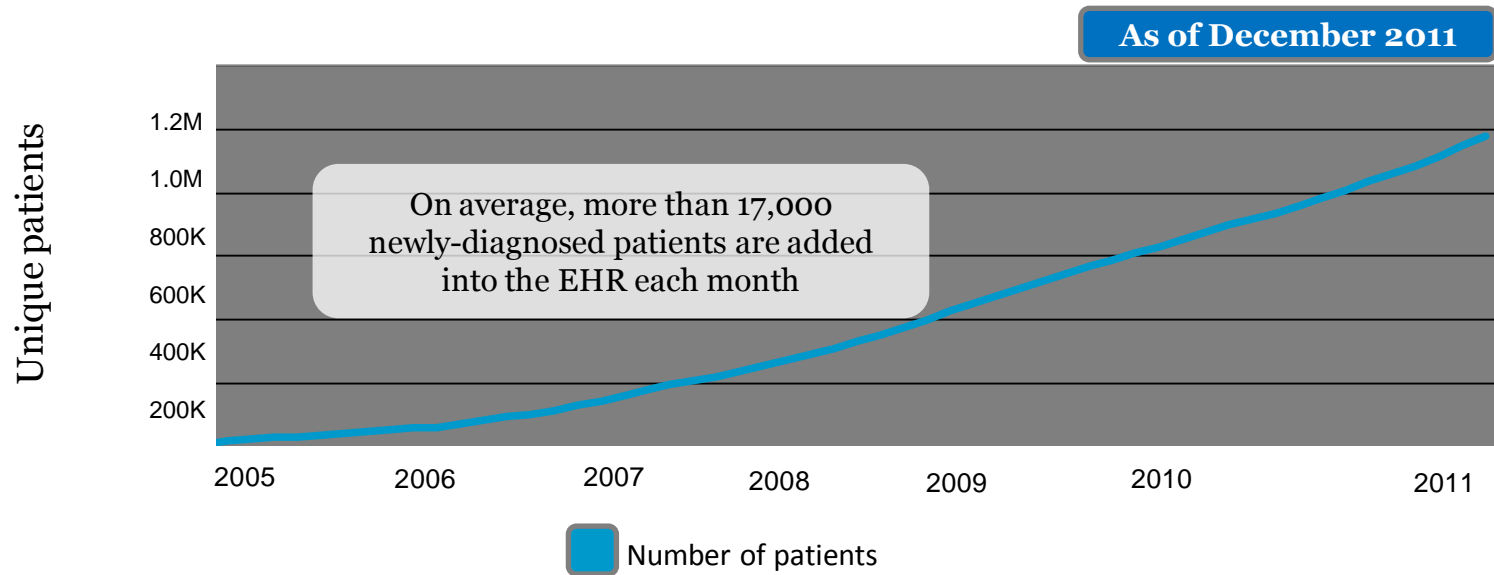
## Benefits

- Quick, convenient access to patient information
- Increased gross charge capture ranging from \$35,000-\$86,000 per physician<sup>1</sup>
- Decrease errors
- Point-of-care decision support
- Increase clinical trial accruals

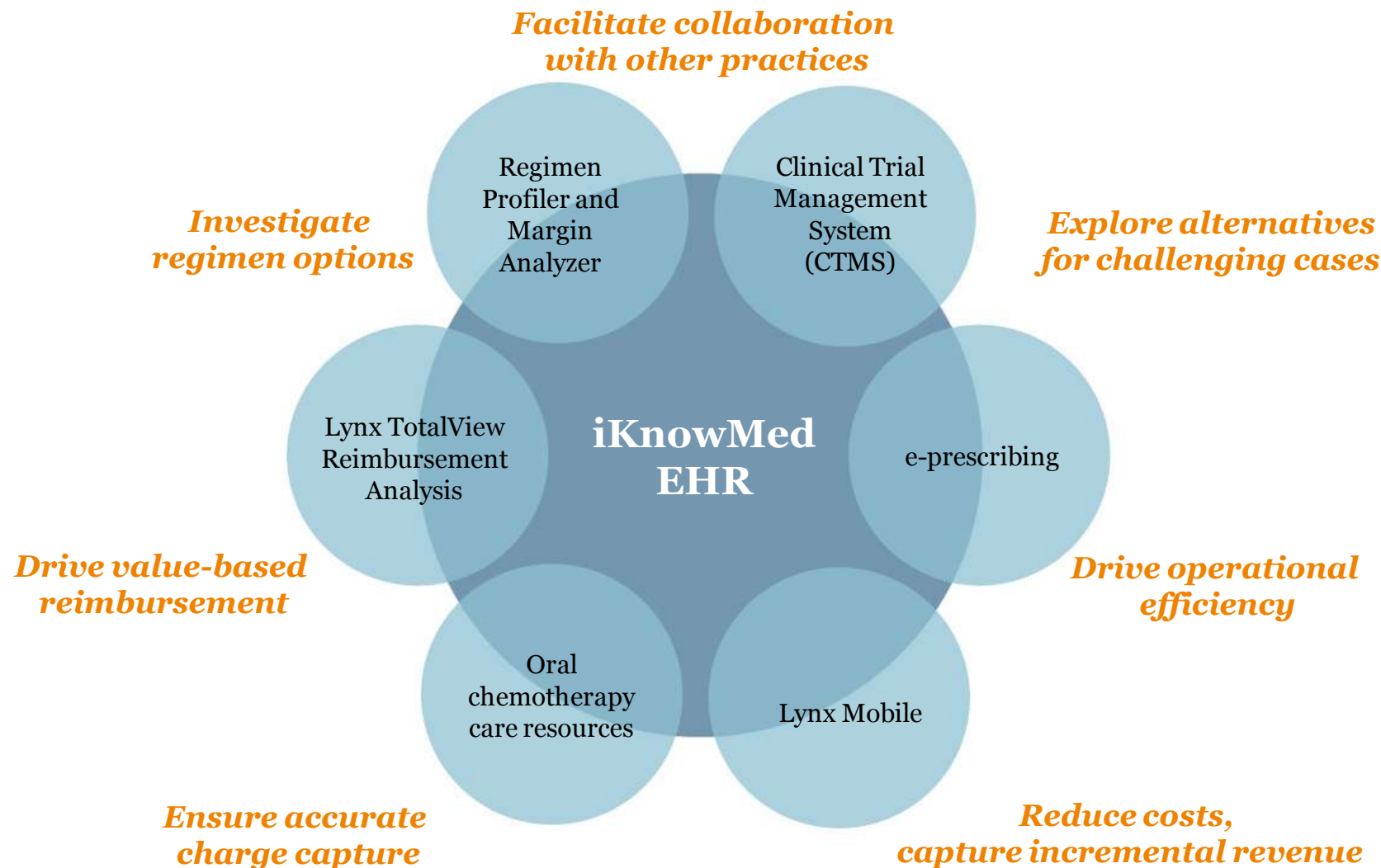


# Growing Number of Newly-Diagnosed Patients in iKnowMed EHR

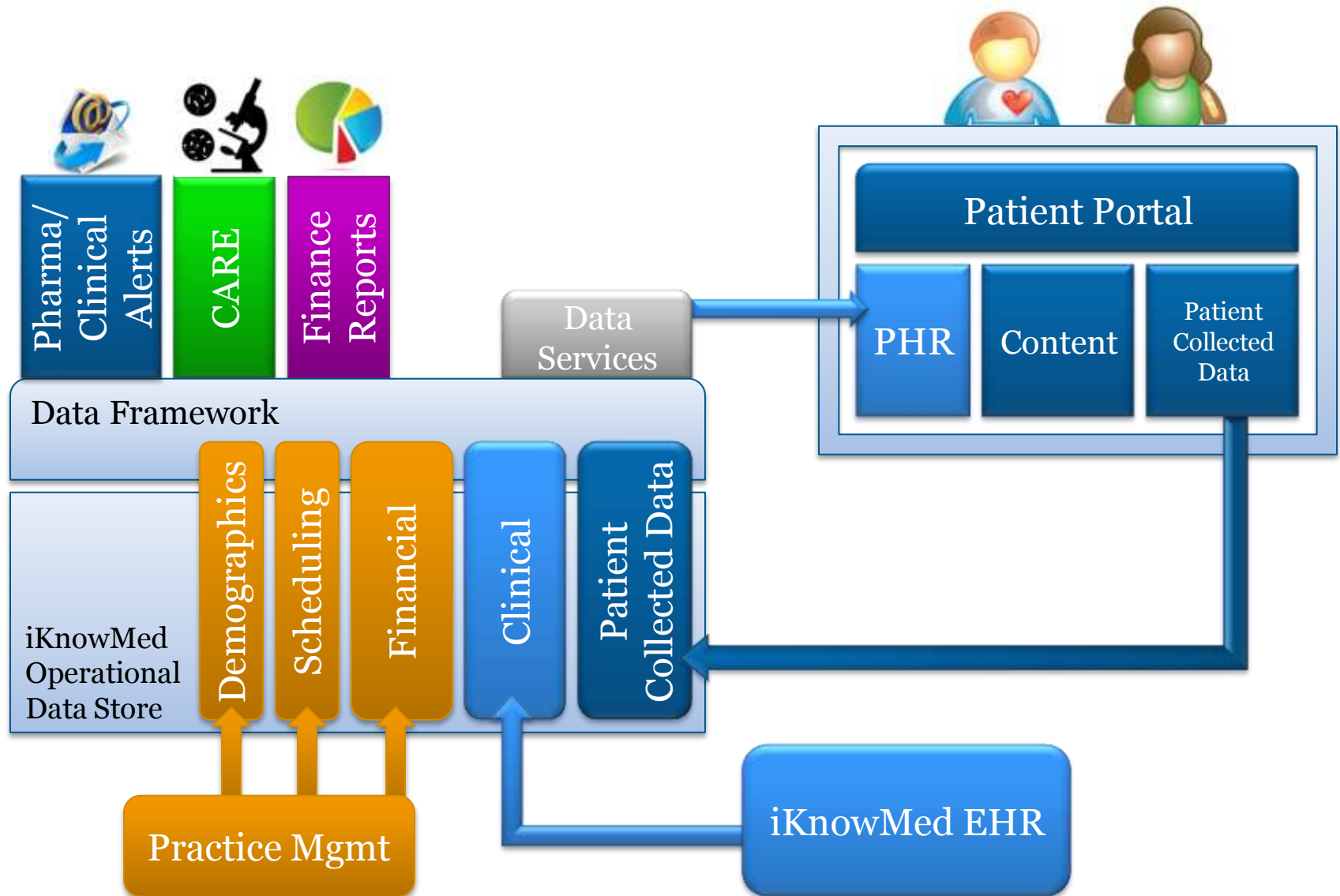
*...the number of unique patients in our EHR has grown more than eight fold in just four years*



# iKnowMed Enabling Technology to Advance Integrated Care and a Better Patient Experience



# Data Framework



# Real Time Decision Making

Alerts triggered off EHR, Practice Management, and Patient System Data

## EHR Data

- Clinical Alerts
- Diagnostic Pathways
- Adverse Event Responses

## Practice Data

- Research trial Accruals
- Reimbursement Alerts

## Patient Driven Data

- Financial Assistance
- Oral Chemo compliance

Drive provider, research and patient actions

# Clinical Outcomes & Research

# Key Trends

## Expected Trends

**Healthcare Reform** – current administration priorities and state of the economy are accelerating change

**Consumerism** -- Expanding set of increasingly educated and involved patients

**Pay for Performance** – Treatment decisions increasingly influenced by quality measures

**Care Delivery Models** – Efforts to design around a holistic provision of care

## Target Audience is Changing

### Current Landscape



### Future Landscape

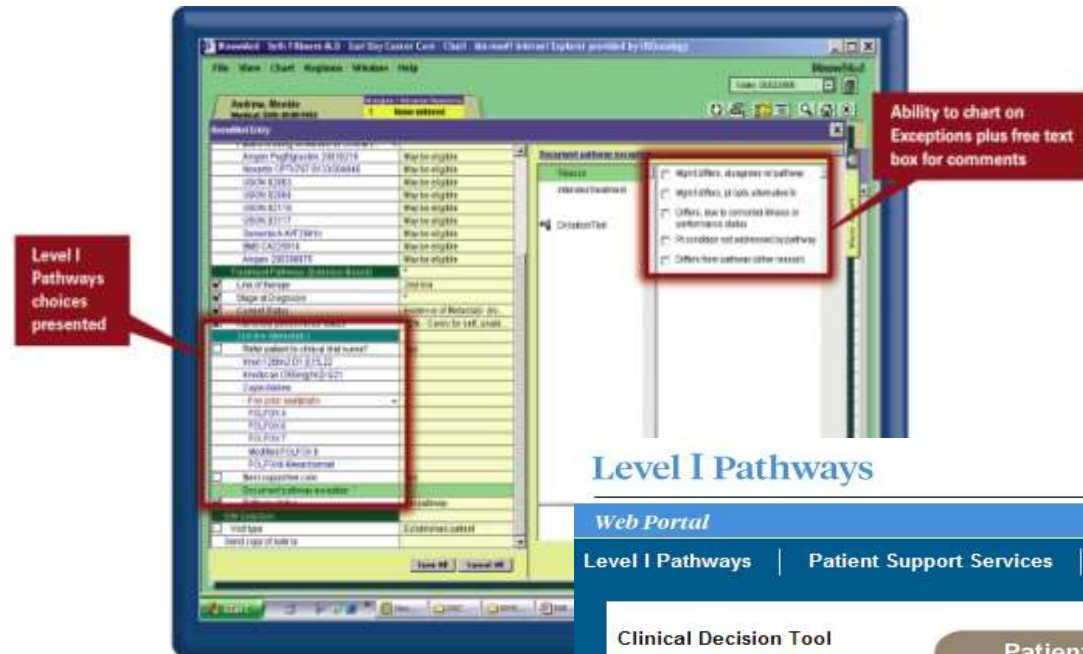


1. Medication is more effective than current offerings
2. Medicine is safer than current offering
3. Medicine is priced appropriately

[illegible]

iKnowMed decision support tool, enabling the physician to select treatment regimens

# Level 1 Pathways Decision Support



## Level I Pathways

### Web Portal

Level I Pathways | Patient Support Services | Advance Care Planning | Reporting | IO University

### Clinical Decision Tool

#### Information Entered

Patient: Doe, Tom (M)  
 MRN: test6555  
 Physician: Hossbach, Rider  
 Diagnosis: Colon Cancer  
 Height: 69 inches  
 Weight: 170 lbs  
 Stage at Diagnosis: IVA  
 CDS: Evidence of Metastatic Disease  
 Line of Therapy: 1st Line  
 On Pathway:  
 View Options

### Patient Data

### Clinical Information

### Regimens

### Colon Cancer Pathway

#### 1st Line of therapy

- ☐ Clinical Trial #
- ☐ FOLFOX [fluorouracil + leucovorin + oxaliplatin]
- ☐ FOLFIRI [fluorouracil + leucovorin + irinotecan]
- ☐ XELOX [capecitabine + oxaliplatin]
- ☐ FOLFOX + bevacizumab [fluorouracil + leucovorin + oxaliplatin + bevacizumab]
- ☐ FOLFIRI + bevacizumab [fluorouracil + leucovorin + irinotecan + bevacizumab]
- ☐ XELOX + bevacizumab [capecitabine + oxaliplatin + bevacizumab]
- ☐ capecitabine
- ☐ Best Supportive Care

#### Regimen Reference

**Fluorouracil (Bolus + CIV) + Oxaliplatin (FOLFOX 4) + Bevacizumab**  
 Saltz LB, et al. JCO 2008; 26:2013-2019.  
**Fluorouracil (Bolus + CIV) + Oxaliplatin (FOLFOX 6) + Bevacizumab**  
 Tournigand C, et al. JCO 2004; 22:229-237.  
**Fluorouracil (Bolus + CIV) + Oxaliplatin (FOLFOX 6, Modified) + Bevacizumab**  
 Hochster H. JCO 2008; 26: 3523.,

#### 2nd Line of therapy

- ☐ Clinical Trial #



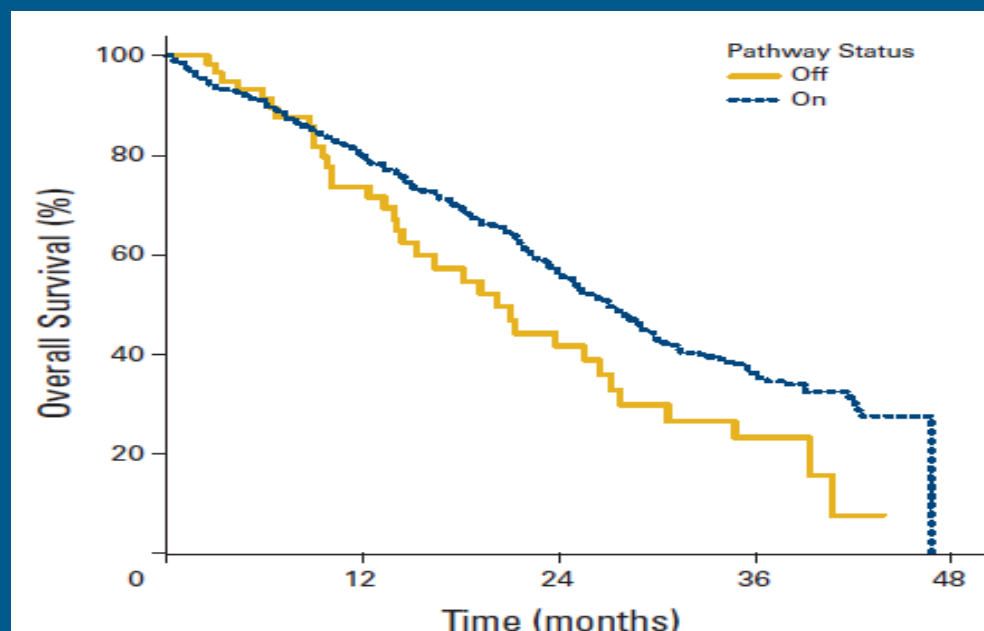
## Original Contribution

## Pathways, Outcomes, and Costs in Colon Cancer: Retrospective Evaluations in Two Distinct Databases

By J. Russell Hoverman, MD, PhD, Thomas H. Cartwright, MD, Debra A. Patt, MD, MPH, Janet L. Espirito, PharmD, Matthew P. Clayton, Jody S. Garey, PharmD, Terrance J. Kopp, Michael Kolodziej, MD, Marcus A. Neubauer, MD, Kathryn Fitch, RN, MEd, Bruce Pyenson, FSA, MAAA, and Roy A. Beveridge, MD

Texas Oncology, Austin; US Oncology, The Woodlands, TX; Ocala Oncology Center, Ocala, FL; New York Oncology Hematology, Albany; Milliman, New York, NY; Kansas City Cancer Center, Overland Park, KS

Disease Free  
Survival by  
Pathway Status --  
Metastatic



Hoverman, Pathways, Outcomes, and Costs in Colon Cancer: Retrospective Evaluations in Two Distinct Databases, JOP 7:3S

# Cost Effectiveness of Evidence Based Treatment

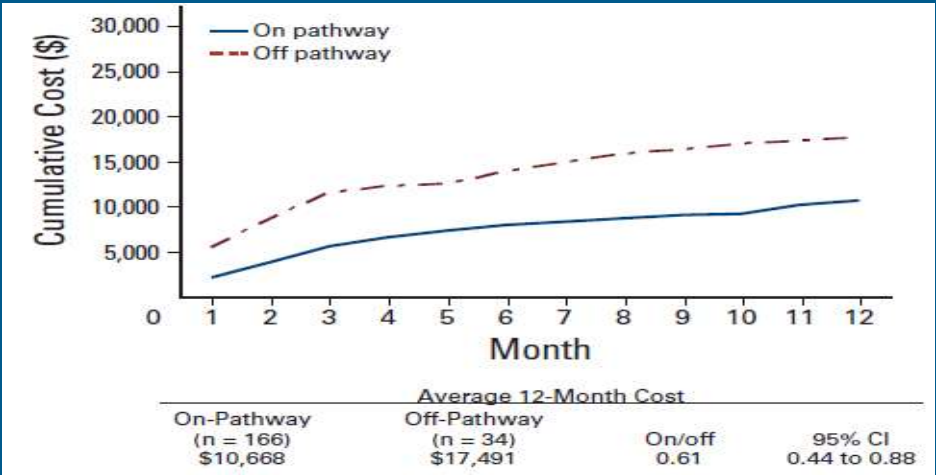
Original Research

## Cost Effectiveness of Evidence-Based Treatment Guidelines for the Treatment of Non–Small-Cell Lung Cancer in the Community Setting

By Marcus A. Neubauer, MD, J. Russell Hoverman, MD, Michael Kolodziej, MD, Lonny Reisman, MD, Stephen K. Gruschkus, PhD, MPH, Susan Hoang, PharmD, Albert A. Alva, MEd, Marilyn McArthur, MS, Michael Forsyth, RPh, Todd Rothermel, and Roy A. Beveridge, MD

Kansas City Cancer Center, Overland Park, KS; Texas Oncology, Austin; US Oncology, Houston, TX; New York Oncology Hematology, Albany, NY; Aetna Informatics; and Aetna, Hartford, CT

12-Month  
Cumulative Cost by  
Pathway Status  
and Line of  
Therapy-Adjuvant



Neubauer, Cost-Effectiveness of Evidence-based Treatment Guidelines for the Treatment of NSCLC in the Community Setting, JOP, 6:1.

# Market Intelligence - Line of Therapy Reporting

## Description

- The product identifies patients being treated for specific diagnosis and treatments and provides insights on patterns-of-care and line-of-therapy segmentation with break down by LOT at Network, State, Practice and Zip code level

## Key Benefits

- Pattern of care analysis
- Line of therapy segmentation
- Identify patients treated for specific diagnosis and treatments within the competitive landscape
- Facilitates directing strategic decisions

## Data Sources

- iKnowMed
- Claims
- Lynx
- Total View

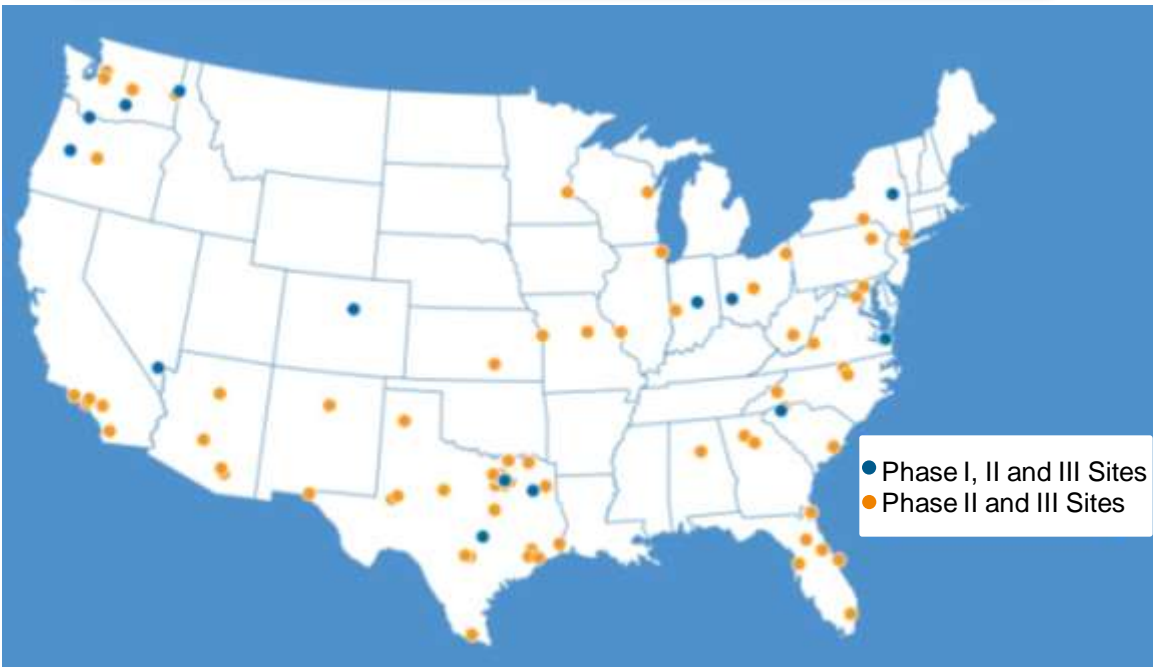
McKesson Specialty Health										MCKESSON									
Market Intelligence																			
Market Penetration & Patterns of Care Report																			
Tumor Type in 1st & 2nd LOT										Active Regimens									
January 2011 - March 2011										Market Penetration (Total Patient Share)									
EMR Status	Cohort	Practice	State	Zip Code	Total Treated Patients	Patients Treated with FC	FC Percent	Patients Treated with FCR	FCR Percent	Patients Treated with Alentuzumab	Alentuzumab Percent	Patients Treated with Bendamustine	Bendamustine Percent	Patients Treated with Bendamustine-Rituximab	Bendamustine-Rituximab Percent				
+	F "CLL" 1st LOT				882	481	55.8	29	3.4	332	38.5	73	8.5	51	5.9				
+	F "CLL" in 2nd LOT				361	198	54.9	12	3.3	165	45.7	23	6.4	9	2.5				
+	A "Tumor Type" 1st LOT				99	84	84.9	24	24.2	13	13.1	2	2.0	1	1.0				
+	A "Tumor Type" in 2nd LOT				48	43	89.6	9	18.8	2	4.2			1	2.1				

										Duration of Treatment- Regimens Ending During Study Period									
										Treatment Sample Size			Utilization		Duration of A Treatment (Weeks)				
Patients Treated with Alentuzumab	Alentuzumab Percent	Patients Treated with CHOP	CHOP Percent	Patients Treated with Flutardine mono	Flutardine mono Percent	Total Completed Regimens	Number of Completed A Regimens						A Utilization (mg)	Average Dose (mg/m <sup>2</sup> )	Mean	StdDev	Median	Min	Max
230	27.8	10	10.1	9	1.0	167	138	83	6,500	122	26.9	24.3	18.9	2.0	152.8				
98	27.2	35	9.7	8	1.7	75	50	67	2,978	116	25.4	28.3	25.2	2.0	105.3				
48	48.5					19	17	89	991	12	26.7	21.8	21.4	10.5	99.8				
23	47.9					15	15	100	581	119	19.7	12.7	14.4	4.8	91.7				

# US Oncology Research scale and scope

>95 Research Sites, >235 Locations covering 28 states



14 Phase I qualified Sites

- Over 50,000 patients since inception
- Over 90 open trials
- 200 active trials
- Over 2,900 active patients
- Over 5,100 follow-up patients
- 500+ FTEs dedicated to research (Central Office and Research Sites)
- More than 300 new studies reviewed annually
- Scientific and Clinical Thought Leadership

As of Jan.3, 2012



# Helping Patients Access Clinical Trials

iKnowMed can help increase patient accruals into trials two ways:

- at the point-of-care
- through the Comprehensive Accrual REsource (CARE)



# Data Governance

Data Governance Committee

*...maximizing the business value of data assets*

**Vision**

To improve quality and reduce cost of patient care and enhance the value of products and services we provide to our business partners by improving the quality of our data.

**Mission**

To increase awareness of the importance of data quality and to work collaboratively with all stakeholders to ensure the accuracy, completeness and consistency of our clinical, administrative and financial data.

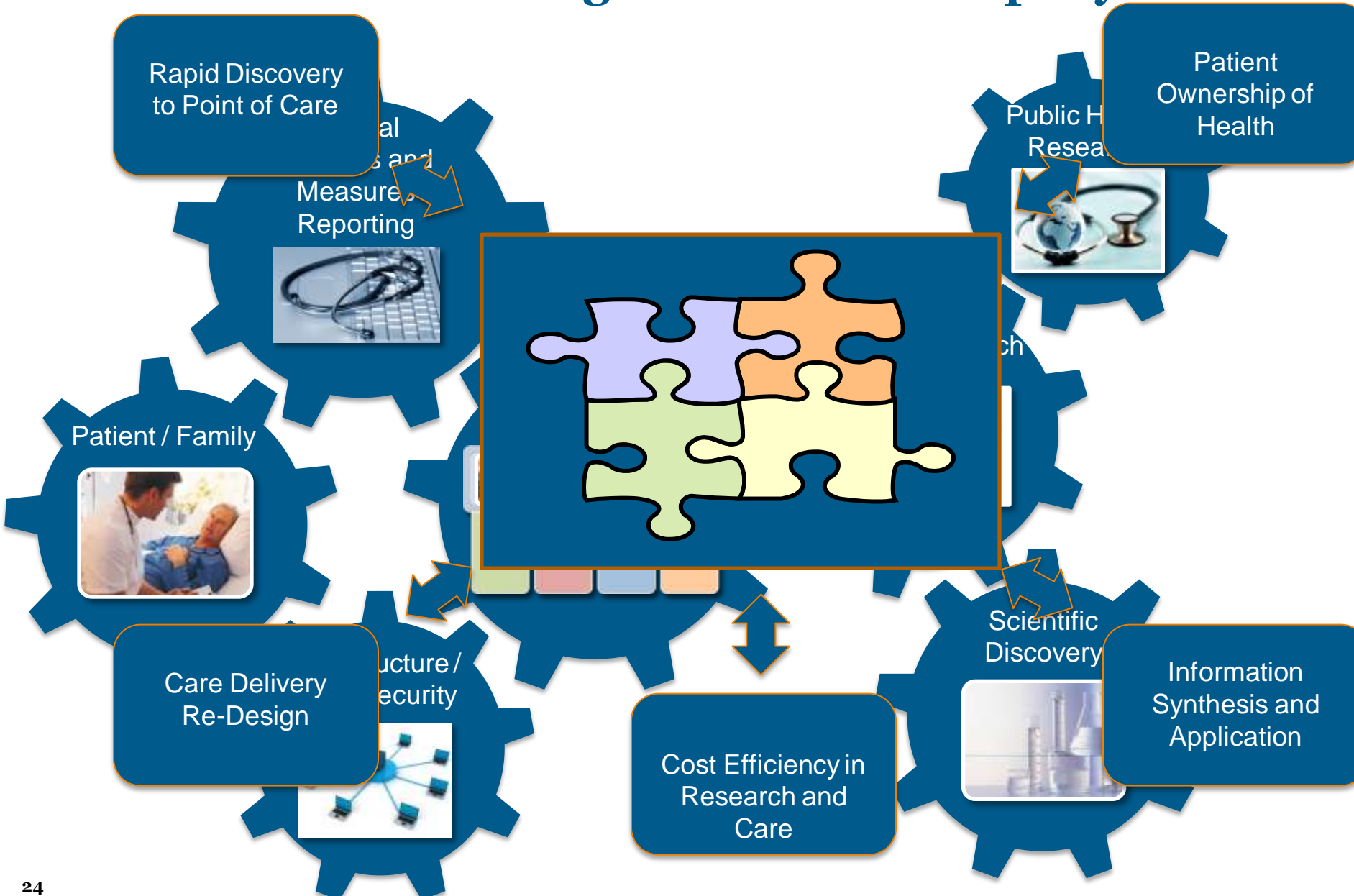
Scope

- Data governance
- Clinical, administrative and financial data (research/distribution)
- Quality, consistency, completeness and availability of data
- Data capture, integration and utilization
- Define gaps and utilization for improvement
- Data validation
- Data structure and standardization (Master Data Elements)
- Communication to stakeholders
- Prioritization
- Data access and compliance with regulation
- Data reports and benchmarks

Data Source Systems

- iKnowMed EHR (Clinical)
- Lynx Mobile (Dispensed Drugs)
- Practice Management Systems
- Claims / Reimbursement / Demographics / Schedule
- CTMS (Research)
- SAP (Distribution)
- Patient Portal
- Future (External EMR, Hospital, Radiation, LIS, Innovent portal, etc)

# Self Learning Healthcare Company







## *McKesson Specialty Health:*

- Committed to advancing the science, technology and quality of cancer care*
- Offering innovative solutions to strengthen the business and clinical health of cancer programs*

# Appendix

# Healthcare Informatics – Data Elements

