Reinventing Health Care: The Barriers to Innovation

March 2, 2012
Washington, D.C.

Sam Nussbaum, M.D.
Executive Vice President, Clinical Health Policy and Chief Medical Officer
“It was the best of times…”

Unprecedented advances in medical technology, treatments, and pharmaceuticals can improve population health.

It was the worst of times…”

The state of public health, unsustainable health care costs, the quality of medical care delivered and access to services challenge clinical care and overall health.

From “A Tale of Two Cities”
By Charles Dickens
## Challenges in the US health care system

<table>
<thead>
<tr>
<th>Challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Ranks last or next-to-last on:</td>
</tr>
<tr>
<td>• Quality</td>
</tr>
<tr>
<td>• Access</td>
</tr>
<tr>
<td>• Efficiency</td>
</tr>
<tr>
<td>• Equity</td>
</tr>
<tr>
<td>• Healthy lives*</td>
</tr>
<tr>
<td>• Variation in quality and safety</td>
</tr>
<tr>
<td>• Escalating costs/technology advancements</td>
</tr>
<tr>
<td>• Aging population and increased chronic diseases</td>
</tr>
<tr>
<td>• Lack of information and infrastructure for optimal care</td>
</tr>
<tr>
<td>• Primary care shortage</td>
</tr>
<tr>
<td>• Fragmented system</td>
</tr>
</tbody>
</table>

*The Commonwealth Fund – June 2010*
Health Expenditures

$4.48 Trillion
19.3% GDP

$2.57 Trillion
17.3% GDP

Average Annual Health Insurance Premiums and Worker Contributions for Family Coverage, 2001–2011

2008 version of the National Health Expenditures (NHE) released in January 2010

Invention Versus Innovation
Discovery and Innovation

Personalized Medicine

Statins reduce cardiac deaths

United States - Acute Myocardial Infarction (Heart Attack): Mortality (Viewed by Gender)

Suggested Citation: Division for Heart Disease and Stroke Prevention: Data Trends & Maps Web site. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC), National Center for Chronic Disease Prevention and Health Promotion, Atlanta, GA, 2010. Available at http://www.cdc.gov/DTHpap/.
Discovery and Innovation

HIV Medications

Improved screening and drugs
Discovery/Invention and Clinical Care Innovation

- Surgical Robots
- Surgical Checklists
- Payment Reform
- Evidence-based decision-making
- Genomics and Proteomics
- Specialty drug treatments
• 6 of the top 10 companies in global R&D expenditures are biopharmaceutical companies

• Over 2/3 of US patents in biopharma were issued to US-based life science companies

• U.S. leads the world in drug discovery: 2/3 new drugs in last 10 years from U.S.; currently 82% of world’s biopharma pipeline from US

"There is an ecosystem of science and biotechnology. Public organizations, patient organizations, universities, Congress, FDA, all of this is an ecosystem that is envied in the rest of the world."

E. Zerhouni, Director of NIH

Increasing Specialty Drug Development and Associated Costs

- Highly sophisticated protein structures derived from recombinant DNA technologies, most often given by injection or infusion.
- Specialty pharmaceuticals now represent 24% of all drug costs, projected to 40% by 2014.
- Expenditures exceed $73 billion annually, rising at twice the rate of conventional drugs.
- Average cost per prescription is nearly $2,000, with annual treatment costs ranging from $5,000 to $350,000.
- Over 600 specialty drugs in development for 100 different diseases, including:
  - 250 for cancer,
  - 160 for infectious diseases,
  - 60 for autoimmune diseases,
  - 35 for HIV/AIDS.
Payment Innovation: Improving Value and Affordability

Old Model:
Rate increases not tied to value

- Reward unit cost
- Inadequate focus on outcomes
- Payment sometimes aligned with quality

New Model:
Rate increases tied only to quality, safety, and value

- Align all payment with quality
- Lower cost without adversely affecting outcomes
- Improve quality
Q-HIP® Hospital Pay-for-Performance rewards quality, safety, outcomes, and patient satisfaction

<table>
<thead>
<tr>
<th>Patient Safety Section (35% of total Q-HIP® Score)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Computerized Physician Order Entry (CPOE) Adoption (Stage 1 Meaningful Use Criteria)</td>
</tr>
<tr>
<td>• IHI Improvement Map – Medication Reconciliation</td>
</tr>
<tr>
<td>• WHO Surgical Safety Checklist</td>
</tr>
<tr>
<td>• NQF Recommended Safe Practices</td>
</tr>
<tr>
<td>• NQF Emergency Care Standards</td>
</tr>
<tr>
<td>• NQF Perinatal Measures</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Patient Health Outcomes Section (55% of total Q-HIP® Score)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PCI Indicators</strong></td>
</tr>
<tr>
<td>• 4 ACC-NCDR/Indicators for Cardiac Catheterization/PCI</td>
</tr>
<tr>
<td><strong>Joint Commission/CMS Nat’l Hospital Quality Measures</strong></td>
</tr>
<tr>
<td>• Acute Myocardial Infarction (AMI) Indicator</td>
</tr>
<tr>
<td>• Heart Failure (HF) Indicator</td>
</tr>
<tr>
<td>• Pneumonia (PN) Indicators</td>
</tr>
<tr>
<td>• Surgical Care Improvement Project (SCIP) Measures</td>
</tr>
<tr>
<td><strong>NSC Indicators</strong></td>
</tr>
<tr>
<td>• 4 JC/NQF Nursing Sensitive Care Indicators</td>
</tr>
<tr>
<td><strong>CABG Indicators</strong></td>
</tr>
<tr>
<td>• 4 STS Coronary Artery Bypass Graft (CABG) Measures</td>
</tr>
<tr>
<td>Condition</td>
</tr>
<tr>
<td>---------------------------------</td>
</tr>
<tr>
<td>Sepsis Deaths</td>
</tr>
<tr>
<td>VAP</td>
</tr>
<tr>
<td>Central Line Infection</td>
</tr>
<tr>
<td>CAUTI</td>
</tr>
<tr>
<td>Birth Trauma</td>
</tr>
<tr>
<td>Elective Delivery Delivery Prior to 39 Weeks</td>
</tr>
</tbody>
</table>
PCMH Results

NEW HAMPSHIRE
- Quality measures for diabetes care improved
- 32% lower costs compared to rest of New Hampshire
- 17% lower ED visits compared to rest of New Hampshire

NEW YORK
- Inpatient rate 12% - 23% lower for PCMH providers
- ER rate 11% - 17% lower for PCMH providers
- Total medical and Rx cost for PCMH members was 14.5% lower than for members seeing non-PCMH providers

COLORADO
- 18% decrease in acute IP admissions compared to 18% increase in control group
- 15% decrease in total ER visits compared to 4% increase in control group
- Specialty visits remained flat compared to 10% increase in control group
Half of US physicians are employed by hospitals/ integrated delivery systems

MGMA: In 2009 more than 65% of established physicians and 49% of physicians post residency/fellowship placed in hospital-owned practices

Hospitals lose $150,000-$250,000 per year over the first 3 years of employing a physician

Hospitals absorb this loss to influence referrals to their specialists or to create ACOs

$475M contribution to 5-hospital West Penn Allegheny

This “affiliation” will enable West Penn to move from fee for service to salaries for physicians and offer incentives for quality and efficiency goals

300 medical centers in 42 states; 240 worksite health-care facilities

Will provide urgent care, wellness programs, and physical and occupational therapy to 3 million Humana members near a Concentra center

United’s OptumHealth services unit acquires Monarch: 2300 doctors; 30+ urgent care centers; access to 20 hospitals in Orange County

OptumHealth: previously entered into management agreements of two California groups, AppleCare Medical Group and Memorial HealthCare Independent Practice Association

Provides Medicare Advantage coverage and coordinated care for 54,000 people in California, Arizona and Nevada

CareMore’s 26 Care Centers are models for integrated health care and include a variety of services including medical evaluations and diabetes care
Patient-Centered Primary Care

Aligning economic incentives and providing tools for success

- Value-based reimbursement
  - Fee Schedules
  - Coordination fees
  - Shared savings
- Expanded access, i.e. alternatives for visits “after hours,” virtual visits
- Payment for care management
- Exchange of meaningful information, i.e. identifying high risk individuals
Measuring Success

• Increased Quality and Efficiency Performance
  – Increase compliance with evidence based care and preventive health guidelines
  – Reduction in avoidable ER, admissions and readmissions
  – Appropriate use of advanced imaging
  – Increase in persistent medication usage
• Increased Care Management engagement and follow up
• Pharmacy utilization: Brand vs. generic
• PMPM Target Management
  – Risk adjusted costs compared to established medical cost targets.
• Increased Patient Satisfaction
• CMS led private-public initiative testing a primary care service delivery and payment model in 5-7 locations

  • Service delivery model:

    ▪ Risk-stratified Care Management
    ▪ Access and Continuity
    ▪ Planned Care for Chronic conditions and Preventive Care
    ▪ Patient and Caregiver Engagement
    ▪ Coordination of Care

  • Payment Model: monthly care management fee to primary care practices for fee for service Medicare beneficiaries; potential to share savings in 2-4 years; compensation from other private payers in the initiative
First Year Outcomes

- 5.81% decrease in acute IP admissions
- 18.0% decrease in ER visits where diagnoses have been flagged as “avoidable”
- 10.7% decrease in total ER visits
- Brand RX usage, measured by brand PMPM as percent of total RX PMPM, decreased by 2.9%
- 13.21% decrease in inpatient days
- Total PMPM reduction of 3.4% relative to projected costs

 ✓ Integrated Delivery System
 ✓ Academic Medical Center
 ✓ >1200 PCP’s and specialists
"Medical home runs": 4 primary care sites with 15-20% less cost (risk-adjusted) without lower quality

Common features:

- Exceptional individualized treatments for chronic illness
- Efficient service provision
- Careful selection of specialists
- Successful innovation in an unsupportive environment

Source: “American Medical Home Runs,” Arnold Milstein and Elizabeth Gilberston, Health Affairs, September/October 2009 vol. 28, no.5 1317-1326
Targeting Super-Utilizers, “Hot Spotters”

• Atul Gawande*: focus on “super-utilizers” to cut medical cost

• 1% of patients in Camden cause 30% of medical cost; For WellPoint, 1% incur 28% of total costs

• A physician led team including a nurse practitioner and social worker helps super-utilizers with medical issues and preventive health efforts

• Results for first 36 patients:
  • 40% reduction in average monthly hospital and ER visits
  • 56% reduction in average hospital bills

* The New Yorker, January 24, 2011
Healthcare Costs are Concentrated

- **85% of Beneficiaries = 25% Spending**
  - 23 Million Beneficiaries
  - Spending $1,130 each
  - Total Spending = 5% ($26 B)

- **15% of Beneficiaries = 75% Spending**
  - 16.1 Million Beneficiaries
  - Spending $6,150 each
  - Total Spending = 20% ($104 B)

- **7 Million Beneficiaries**
  - Spending $55,000 each
  - Total Spending = 75% ($391 B)

2010 Medicare Spending Projection = $522 B
46 Million Beneficiaries
Spending Per Beneficiary = $11,347

[Diagram showing progressive illness and average spending]
CareMore: Care Innovation

- Care Centers provide a “Healthy Start” initial evaluation and integrated care that combines wellness and medical supervision and offers personalized health planning
- Extensivists intensively manage chronically ill members
- Biometric monitoring applied to care management
## Dramatically Improved Outcomes for Chronic Diseases

<table>
<thead>
<tr>
<th>Disease</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Diabetes</strong></td>
<td>7.08 average HbA1c for those attending our diabetic clinic</td>
</tr>
<tr>
<td><strong>End Stage Renal Disease</strong></td>
<td>50% reduction in hospital admission rate in 5 months</td>
</tr>
<tr>
<td><strong>Congestive Heart Failure</strong></td>
<td>56% reduction in hospital admission rate in 3 months</td>
</tr>
</tbody>
</table>
## Results Demonstrate Model Efficacy

<table>
<thead>
<tr>
<th></th>
<th>CareMore 2010 *</th>
<th>Medicare FFS 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Days/1000</td>
<td>870</td>
<td>1842</td>
</tr>
<tr>
<td>Admits/1000</td>
<td>241</td>
<td>335</td>
</tr>
<tr>
<td>Average Length of Stay</td>
<td>3.6</td>
<td>5.5</td>
</tr>
<tr>
<td>Readmission Rate</td>
<td>14%</td>
<td>20%</td>
</tr>
</tbody>
</table>

* CareMore statistics inclusive of ESRD, are adjusted for risk [1] and for prevalence of ESRD [2]

[1] Risk adjustment based on CareMore average Part C RAF score in CY2010 of 1.17 relative to an assumed Medicare FFS RAF score of 1.0
[2] CareMore has a higher prevalence of ESRD patients, about 1.8% of total members than Medicare FFS, which is about 0.5% of total eligibles.
Personalizing Care Management

Case Mgmt via Web Cam

Wireless Biometrics

Mobile-to-Mobile Video Chat

HDTV Case Management
Potential of Artificial Intelligence

Artificial Intelligence offers unique value for clinical input

- Ability to manage **large amounts of unstructured data**, even in natural language form (e.g. a normal journal article or an MD clinical summary)
- Influence **evidence-based care** by providing real-time, value-added, actionable insights to clinicians
- Unique capability to **learn, train, and optimize** its own algorithms from historical decisions

- **Probability based diagnosis and treatment recommendations**
- **Defined by Evidence Based Medicine**
- **Streamlined authorization/approval of procedures and treatment**

Graph:
- Over 21 million articles in Medline
- Almost 1 million new articles per year
- 1.6 billion searches in 2010
**IBM Watson: Potential to Help Doctors Make Better Decisions—Faster**

Potential Knowledge Sources May Include:

- Latest medical research
- Population health info
- Patient medical history
- Lab results
- Data analysis
- Complex treatment protocols

Our data Extensive provider networks

**IBM Watson technology to assist by analyzing data and providing responses**

- Analyzes millions of pages/second
- Targeted treatment options
The Need for Evidence-Based Medicine

History: Bone Marrow Transplant

- Bone marrow transplantation (BMT) for breast cancer entered medical market in the 1980s before meaningful effectiveness studies were done
- Between 1988-1998, 30,000 procedures and $5 Billion in medical costs
- Congress and States enacted mandatory coverage legislation in 1994
- 1999 research showed no difference in survival and lower quality of life
- Delayed research and introduction of promising therapies

Today: HER2 Genetic Testing

- 215,000 new breast cancer cases annually; 25-30% of women with breast cancer express the HER2 protein
- Trastuzumab (Herceptin®) is a recombinant DNA monoclonal antibody that targets tumor cells that over express the HER2 protein
- In 2005, two new major clinical trials expanded indications for this biotechnology
Diagnosis and Treatment of Prostate Cancer is Controversial

Even among radiation treatments, there is variation in cost and potential outcomes

Comparative effectiveness can assess outcomes, quality of life, and survival
• **Facts on Back Pain**
  - 9 of 10 Americans experience back pain
  - #1 cause of lost work productivity
  - $90B spent nationally on treatment
  - Most pain resolves within 6 weeks independent of treatment

• **Study of 172,000 Anthem Members in 6 States**
  - 1,000 surgeries during first 6 weeks
  - 35,000 imaging procedures within first 6 weeks
  - Care dependent on initial treating physician

• **Value and Benefits**
  - Collaboration with American Academy of Family Physicians
  - New payment models including bundling of payments
  - Educate members/physicians on treatment options
WellPoint Position: CER Promotes Value and Innovation

Collaboration amongst health care system stakeholders is central to making CER work

- **Address unsustainable health care costs**
  - Limited resources threaten innovation

- **Help patients choose more effective treatments**
  - Fewer unnecessary services = health system savings

- **Quality first, then affordability**
  - Superior treatments deserve our nation’s investment
  - Comparable treatments should be chosen on value
  - Selectively effective personalized treatments should be managed by physicians and patients
  - Remove inappropriate/ineffective treatments
Engaging Consumers in Health Care

Mobile Provider Finder

Connection with Consumers

Consumer Quality Tools

Data Integration

Consumer Experience Tools

Health Improvement

ZAGAT Health Survey

Recent Consumer Comments:
This doctor is one of the best I've ever encountered in Northern Virginia. She takes the time to listen to concerns and is a true partner in my health decisions. [more] [rate]

While the doctor is professional and seems knowledgeable, it's nearly impossible to get an appointment. The office staff is generally not friendly, and there is no on-site parking. [more] [rate]
## Closing Gaps in Evidence-Based Care

### Your Medical & Prescription Claims

**Your recent medical and prescription claims as of May 23, 2008**

<table>
<thead>
<tr>
<th>Date</th>
<th>Service/Prescription</th>
<th>Qty</th>
<th>Days</th>
<th>Doctor/Prescriber(*)</th>
<th>Paid(***)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Office Visit</td>
<td></td>
<td></td>
<td>Lynn, Samuel R.</td>
<td>$25.00</td>
</tr>
<tr>
<td>05/17/08</td>
<td>Office Visit</td>
<td></td>
<td></td>
<td>Lynn, Michelle L.</td>
<td>$25.00</td>
</tr>
<tr>
<td>05/18/08</td>
<td>Office Visit</td>
<td></td>
<td></td>
<td>Lynn, Samuel R.</td>
<td>$25.00</td>
</tr>
<tr>
<td>05/19/08</td>
<td>Office Visit</td>
<td></td>
<td></td>
<td>Lynn, Michelle L.</td>
<td>$25.00</td>
</tr>
</tbody>
</table>

### Prescriptions

<table>
<thead>
<tr>
<th>Date</th>
<th>Medication - Dose mg</th>
<th>Qty</th>
<th>Days</th>
<th>Doctor/Prescriber(*)</th>
<th>Paid(***)</th>
</tr>
</thead>
<tbody>
<tr>
<td>05/18/08</td>
<td>Motrin - 500 mg</td>
<td>30</td>
<td>30</td>
<td>Lynn, Tony M.</td>
<td>$15.50</td>
</tr>
<tr>
<td>05/18/08</td>
<td>Motrin - 500 mg</td>
<td>30</td>
<td>30</td>
<td>Lynn, Michelle L.</td>
<td>$15.50</td>
</tr>
<tr>
<td>05/18/08</td>
<td>Motrin - 800 mg</td>
<td>30</td>
<td>30</td>
<td>Lynn, Michelle L.</td>
<td>$15.50</td>
</tr>
<tr>
<td>05/18/08</td>
<td>Motrin - 800 mg</td>
<td>30</td>
<td>30</td>
<td>Lynn, Michelle L.</td>
<td>$15.50</td>
</tr>
<tr>
<td>05/18/08</td>
<td>Motrin - 800 mg</td>
<td>30</td>
<td>30</td>
<td>Lynn, Michelle L.</td>
<td>$15.50</td>
</tr>
<tr>
<td>05/18/08</td>
<td>Motrin - 800 mg</td>
<td>30</td>
<td>30</td>
<td>Lynn, Michelle L.</td>
<td>$15.50</td>
</tr>
<tr>
<td>05/18/08</td>
<td>Motrin - 800 mg</td>
<td>30</td>
<td>30</td>
<td>Lynn, Michelle L.</td>
<td>$15.50</td>
</tr>
</tbody>
</table>

### Other Medical Services

<table>
<thead>
<tr>
<th>Date</th>
<th>Service/Procedure</th>
<th>Qty</th>
<th>Details</th>
<th>Paid(***)</th>
</tr>
</thead>
<tbody>
<tr>
<td>05/17/08</td>
<td>Cholesterol Panel</td>
<td></td>
<td></td>
<td>$19.49</td>
</tr>
<tr>
<td>05/18/08</td>
<td>Laboratory Testing</td>
<td></td>
<td>Laboratory</td>
<td>$19.49</td>
</tr>
<tr>
<td>05/19/08</td>
<td>Laboratory Testing</td>
<td></td>
<td>Laboratory</td>
<td>$19.49</td>
</tr>
<tr>
<td>05/19/08</td>
<td>Laboratory Testing</td>
<td></td>
<td>Laboratory</td>
<td>$19.49</td>
</tr>
</tbody>
</table>

### Suggestions for You

**Ask your doctor about blood thinner medication (1339) **

Your medical claims show that you have a heart condition called atrial fibrillation, and your prescription claims show you are not taking a blood thinner medication. Atrial fibrillation is a serious condition that can cause blood clots and strokes. Blood thinners can help prevent blood clots and lessen your risk of a stroke. Ask your doctor soon if you should take a blood thinner.

**Call Your Doctor**

Keep taking Motrin as directed. **(115)**

Your prescription claims show you take Motrin. Although you recently refilled your prescription, your claims show you can not refill it for 30 days as you intended. This may help lower your prescription charges. Reduce your intake of Motrin if you feel your medication is not helping you, or if you are concerned about side effects, talk to your doctor about using another medication.

**Save Money - Ask your doctor about switching from Aspirin (109) **

Your prescription claims show you take Aspirin. You can save money if you take another, inexpensive drug that is as safe and effective as Aspirin. Ask your doctor if switching is right for you.

<table>
<thead>
<tr>
<th>Drug Name</th>
<th>Your Cost</th>
<th>Your Annual Cost</th>
<th>You Saved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aspirin - 81 mg</td>
<td>$1.37</td>
<td>$3.40</td>
<td>$1.33</td>
</tr>
<tr>
<td>81 mg</td>
<td>$1.37</td>
<td>$3.40</td>
<td>$1.33</td>
</tr>
</tbody>
</table>

---

*Doctor/Prescriber Name may be under names from the medical oscillator.
**This amount is the total paid by you and your health plan.

---

*More Information For You From Harvard Medical School*

Visit [http://harvard.resolutionhealth.com](http://harvard.resolutionhealth.com) and enter the number shown in [] to get information on your conditions, treatments, and medications.
Anthem Care Comparison:
Cost and Quality Information for Consumers

Consumer can see side-by-side comparisons of inpatient and outpatient procedures; diagnostic tests and office visits; and provider service frequency.

Cost and Quality Included
# Anthem Care Comparison: Variance in Cost for Spinal Fusion

This report compares providers within 5 miles of Washington, DC for Spinal Fusion (Posterior). This is just one of several sources you should consult to select a service provider; always consult your physician about what decision is right for you.

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Distance</th>
<th>Typical Cost Low</th>
<th>Typical Cost High</th>
<th>Number of Services/Year</th>
<th>Blue Distinction Center</th>
</tr>
</thead>
<tbody>
<tr>
<td>George Wash Univ</td>
<td>900 23rd St NW Washington, DC 20037</td>
<td>2 mi</td>
<td>$41,805</td>
<td>$47,030</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Washington Hospital Center</td>
<td>210 Michigan Ave NW Washington, DC 20017</td>
<td>2 mi</td>
<td>$41,805</td>
<td>$47,030</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Georgetown Univ</td>
<td>3800 Reservoir Rd NW Washington, DC 20007</td>
<td>3 mi</td>
<td>$62,707</td>
<td>$67,933</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Montgomery General Hospital</td>
<td>10101 Prince Philip Dr Olney, MD 20022</td>
<td>17 mi</td>
<td>$350,907</td>
<td>$340,119</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Fair Oaks Hospital</td>
<td>3600 Joseph Siewick Dr Fairfax, VA 22033</td>
<td>19 mi</td>
<td>$50,213</td>
<td>$54,579</td>
<td>143</td>
<td></td>
</tr>
<tr>
<td>Baltimore Washington Medical Center</td>
<td>301 Hospital Dr Glen Burnie, MD 21061</td>
<td>27 mi</td>
<td>$25,921</td>
<td>$29,624</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Saint Agnes Hospital</td>
<td>900 Caton Ave Baltimore, MD 21229</td>
<td>31 mi</td>
<td>$47,350</td>
<td>$51,654</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Mercy Medical Center Inc</td>
<td>301 Saint Paul St Baltimore, MD 21202</td>
<td>34 mi</td>
<td>$34,436</td>
<td>$38,741</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>University of Maryland Medical Center</td>
<td>22 S Greene St Baltimore, MD 21201</td>
<td>34 mi</td>
<td>$38,741</td>
<td>$43,045</td>
<td>N/A</td>
<td></td>
</tr>
</tbody>
</table>
ER Appropriate Use and Cost Provides Opportunity for Alternate Sites for Care

Source: CDC/NCHS National Hospital Ambulatory Medical Care Survey, American Hospital Association
Non-Emergent Care From ER to Alternative Sites

Educate Members on ER-alternatives
- Video on member websites
- Educational brochures, letter, and e-mail
- 24/7 Hotline provides care guidance and educates on appropriate setting for condition

Google-Map and Smart Phone Applications
- Point-and-click contact info, hours, location
- Directions from home or location

Member Incentives
- A co-pay increase for ER visits

Results
- Non-emergent ER use decreased 20%
- Members in program twice as likely to choose retail clinic
34 million members’ claims, pharmacy, and laboratory data enables population safety and public health research

- FDA Vaccine and Biologics Safety Surveillance: H1N1 Vaccine
- FDA Drug Safety Surveillance
- More than 110 Research Projects Underway
  - Breast cancer, asthma, rheumatoid arthritis, low back pain, multiple sclerosis