The Journey to Provider Gain-Sharing Success
A simple goal

Making the health system work better for everyone
A profound and lasting impact

Lowering the cost trend

>$100 billion
Unnecessary costs due to improper payments and administrative inefficiencies

22 hours per day
Time physician needs to see patients and meet recommended guidelines

>50%
Portion of unnecessary clinical costs that consumers can influence

>$80 billion
Unnecessary annual spend due to low health information technology adoption
A clear focus

Enabling a health system that is more connected, more intelligent and more aligned

Connected
We help connect across the system, enabling the flow of information, which gives people the insights they need at the right times so they can make decisions that improve the quality of care and facilitate fair and efficient transactions.

Intelligent
We help by applying informatics and analytics to improve clinical, financial and administrative decisions and workflow at critical points in the health system.

Aligned
We help by supporting the consistent delivery of high-quality, efficient, patient-centered care and by guiding the development of integrated, accountable health systems.
Who we are serving get more connected, more intelligent and more aligned

<table>
<thead>
<tr>
<th>Count</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>60,000,000+</td>
<td>individuals</td>
</tr>
<tr>
<td>80,000</td>
<td>physician practices and other health care facilities</td>
</tr>
<tr>
<td>67,000</td>
<td>pharmacies*</td>
</tr>
<tr>
<td>5,000</td>
<td>hospitals</td>
</tr>
<tr>
<td>400</td>
<td>global life sciences organizations</td>
</tr>
<tr>
<td>300</td>
<td>health plans</td>
</tr>
<tr>
<td>150</td>
<td>state, federal and municipal agencies and departments</td>
</tr>
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</table>

Statistics as of 6/30/13 except where noted; *as of 1/17/13
Navigating the journey from providing care to managing health

Providing Care
- Patient Access
- Medical Necessity
- Reimbursement
  - Clinical Care
  - Coding and Documentation
  - Generate New Capital

Managing Health
- Invest New Capital
- Population Health Management
- Financial and Clinical Analytics
- Aligned Incentives
  - Care Delivery Model
  - Prepare for Change

Quality
- Patient Satisfaction

Cost
Polling Question

Which parts of the Provider Journey are you most involved with today (select all that apply):

- Coding and Documentation
- Reimbursement
- Care Delivery Model
- Financial and Clinical Analytics
- Population Health Management
Generate new capital

Generating capital to invest in a new strategy for care delivery

1. PATIENT ACCESS
   Enhancing Patient Flow

2. CLINICAL CARE
   Simplifying Clinical Workflow

3. MEDICAL NECESSITY
   Proactively Addressing Payer Compliance

4. CODING AND DOCUMENTATION
   Automating & Optimizing Coding

5. REIMBURSEMENT
   Augmenting Cash Flow
Facing the financial strains common to providers, this nonprofit health care system sought innovative solutions that would allow them to devote their resources to their core mission of providing the highest level of patient care. Four months after engaging with Optum, Bethesda achieved the following:

• Discharged-not-final-billed rate declined 63%, from $40 million to $15 million

• Increased cash receipts by 28%, from $18 million to $23 million
Case studies

For DCH, an Alabama provider that generates $1.5 billion in annual gross revenue, the eFR Platform helped achieve the following results:

- Reduced cost of collections from more than 2.5% to 1.87%
- Decreased accounts receivable more than 90 days from 20% to 7.9%
- Drove down accounts receivable by 9 days and $14.4 million
- Gained ability to measure denials
- Trimmed denial volume by 60%

UMMS is an 11-hospital network that generates $2.5 billion in operating revenues. With four decentralized business offices, multiple accounting systems, and no available method to aggregate reporting, UMMS’ integration and standardization challenges were enormous. By implementing the eFR Platform, Optum’s electronic financial record system, the UMMS achieved the following results:

- Increased cash collections by $155 million in the first year
- Exceeded fiscal-year targeted cash collection goal by $76 million
- Reduced accounts receivable by 11 days
Prepare for change

CARE DELIVERY MODEL

1. CONSENSUS
   Agreement on the Goal

2. GOVERNANCE
   Accountability for the Goal

3. STRUCTURE
   Alignment to the Goal
Governance

Representatives from all partners including clinical, financial and operational leadership and staff

- Executive oversight (board)
- Clinical and operational leadership
  - Physician leadership
  - Clinical initiatives
    - Clinical research and execution
    - Financial contracted cost analysis
    - Operations, legal, marketing
    - IT connectivity solutions
    - Physician engagement

T1  T2  T3  TX
Sample structure: Physician engagement

**PHYSICIAN LEADERSHIP**

- Chief medical officer
- Primary care physician leader
- Specialty leaders
- Hospitalists

Quality issues reviewed by medical group, hospital or payer committees (results cannot be shared)

- **Culture**
  - Design program performance
  - Design individual physician profiles
  - Perform outlier intervention
  - Pilot new models
  - Engage in care delivery redesign
  - Educate physicians
  - Approve evidence-based guidelines and protocols

- **Drive**
  - Portal
  - Email
  - Individual performance meetings
  - Panel meetings
Case studies

Partnering with Optum, Arizona Connected Care sought to enhance personal accountability and patient engagement across the continuum of care. As a result, Arizona Connected Care:

• Projects an average reduction of nearly $100 PMPM (16.5%) in medical costs by Year 3

• Forecasts growth in ACO membership from 6,000 initial members to over 50,000 in three years

• Enhanced its use of community health resources

• Closed communication gaps between providers to improve follow up care

• Advanced care coordination and communication among physicians and other providers

• Enriched patient quality of life and community health
Invest new capital

Investing in a new care delivery strategy.

Financial & Clinical Analytics
To predict the future medical experience of individual health consumers as well as defined populations

Population Health Management
To identify, engage, and impact every individual with a health need within a defined population
## Technical Blueprint for Physician Gain-Sharing Enablement

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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</thead>
<tbody>
<tr>
<td><strong>Electronic Medical Record</strong></td>
<td><strong>Health Information Exchange</strong></td>
<td><strong>Clinical Analytics</strong></td>
<td><strong>Population Health Management</strong></td>
</tr>
<tr>
<td>Collect the data generated within a physician practice</td>
<td>Aggregate the data generated within the health care community</td>
<td>Convert aggregated data into actionable information</td>
<td>Take action</td>
</tr>
<tr>
<td>Utilize the activities delivered within the physician’s office to build each patient’s clinical database</td>
<td>Augment the physician’s EMR with patient data from community specialists, hospitals and ancillary services</td>
<td>Identify and stratify:</td>
<td>Catalyze action to mitigate identified risk:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Patients at risk for unfavorable future medical experience</td>
<td>• Action for physician at point-of-care</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Physician performance relative to best practice</td>
<td>• Action for health coaches remotely</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• Action for patients to engage in self-care</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Registries (Pre-defined &amp; dynamic)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Care coordination</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Quality &amp; Business Intelligence reporting</td>
</tr>
</tbody>
</table>
Polling questions

Select “Yes” to all that apply:

• Do you participate in an HIE?
• Do you have a PHM strategy?
• Do you have predictive analytical tools in place?
Key opportunities in population health management

2012 medical claims cost distribution among Commercial payers using Optum for Population Health Management services

Population medical costs are largely from treatment of **chronic conditions** in the **ambulatory setting**.
Four steps of Population Health Management

Physician groups who have been successful in value-based contracts consistently cite the same four areas of critical focus for success in PHM.

1. Optimize network management
2. Manage care transitions
3. Invest in in-home intervention
4. Expand chronic disease management
Step 1: Optimize network management

Refer to clinically effective and financially efficient sub-specialists. Ensure patient experience with referral and specialty care is optimal.

**IMPACT TO INDIVIDUAL**

- 10% reduction in surgical intervention rate for spine, hip and knee surgeries
- $10,000–15,000 average medical cost savings per redirection

**IMPACT TO POPULATION**

- 49% fewer redos and 60% lower complication rate for implantable cardiac device surgeries when performed by quality-designated cardiothoracic surgeons
- 14% total cost savings when population is consistently referred to the highest quality and most cost-efficient physicians for all specialty care
Step 2: Manage care transitions

18 hospitals will each forego more than 1 million dollars in Medicare reimbursement this year due to readmission penalties.

Utilize onsite and post-discharge resources to reduce readmission:

• Onsite RNs
• Home visits
• Telephonic case managers
• Telemedicine

37% Reduction in 30-day readmit rates*

* For adults with medical (non-surgical, non-maternal) admitting diagnosis
Step 3: Invest in in-home intervention

Focus intense resources on patients with highest acuity needs following acute illness

**Post-acute care**
- Complete thorough in-home assessment using mobile device
- Share results with clinical team
- Trigger alerts for potentially urgent health issues
- Identify key topics for patients to discuss with primary physician
- Recommend and ensure appropriate follow-up appointments

**Among high-risk patients**

- **34%** reduction in 30-day readmit rates
- **51%** fewer prescriptions per high-risk member*
- **64%** drop in acute admit rate

*9 or more initial prescriptions
Step 4: Expand chronic disease management

Moving chronic care from the exam room to the community.

- Predictive modeling analytics
- Systematic, population-based care manager outreach
- **20%** improvement in optimal care compliance among chronically ill

The chronic disease patient with the greatest need ... is also the one least likely to show up in your office.
While building their ACO, Steward Health Care wanted to have an immediate impact as well as lay the foundation for population health management. Steward chose Optum to provide an analytical platform and care management services. Optum implemented readmission prevention, complex and chronic patient management, and care access services, with the following results:

• Using CMS data, they identified skilled nursing facilities for readmission prevention product implementation in the Steward Health System in 90 days

• Ten nurses and two case managers were hired, trained, and working in less than 70 days

• Client-branded patient engagement materials were developed and implemented in 90 days

• A comprehensive training plan and curriculum were completed in less than 65 days
Provider-based predictive modeling

Analytics to predict future medical costs of individuals and populations are limited by the characteristics of the three types of available data.

- **Claims data**: generally comes from medical or pharmacy benefit managers/payers.
- **Clinical data**: usually comes from an electronic medical record (EMR), biometric feeds, lab feeds, pharmacy feeds or health assessments (by either the patient or care manager).
- **Abstracted data**: may come from hospital notice of discharge, admission, ED visit or skilled nursing facility transfer.
Provider-based predictive modeling

Relative strengths of data used in health care analytics vary by source, and can be categorized by **sensitivity** (ability to detect all conditions), **specificity** (ability to identify conditions accurately), **timeliness** and **availability**.

<table>
<thead>
<tr>
<th>Claims data</th>
<th>Clinical data</th>
<th>Abstracted data</th>
</tr>
</thead>
<tbody>
<tr>
<td>– insensitive</td>
<td>+ sensitive</td>
<td>+ sensitive</td>
</tr>
<tr>
<td>– non-specific</td>
<td>+ specific</td>
<td>– non-specific</td>
</tr>
<tr>
<td>– untimely</td>
<td>+ timely</td>
<td>+ timely</td>
</tr>
<tr>
<td>+ always available</td>
<td>– variably available (may be incomplete or unstructured in EMR, or unavailable from non-EMR users)</td>
<td>+ generally available</td>
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Variations in strengths and weaknesses between these three data sources suggests aggregation will provide a more effective basis for prediction of future medical outcomes and costs.
Combined data is key: Diabetes example

Optimal prediction of future medical experience of individuals and populations

Claims data
When used for chronic disease management, improved treatment compliance about 20%

Clinical data
30% of individuals identified as diabetic by clinical data were missed by claims data
- 2/3 identified only through abnormal EMR lab results
- 1/3 identified only through EMR prescription data

Abstracted data
37% decrease in 30-day readmission rates when care manager promptly notified of discharge
Population health management technology
Health Intelligences Management — Measurement

REGISTRIES
Pre-defined Registries
Dynamic Registries
Population Opportunities

CARE COORDINATION
Workflow Management
Longitudinal Care Plan
Care Plan Adherence
Assessments

QUALITY & BI REPORTING
Performance & Management Reporting
ACO Measures
Risk Scores

CLOUD COMPUTING

Claims Data
Medical, pharmacy, lab

Clinical Data
Biometric, disease-specific

Practice Mgmt
Billing data and scheduling
## Diabetes Mellitus Registry

### Admission Risk: 3 Months

<table>
<thead>
<tr>
<th>Risk %</th>
<th>Patient Name</th>
<th>Age</th>
<th>Sex</th>
<th>Care Program</th>
<th>HbA1c</th>
<th>LDL</th>
<th>BP</th>
<th>Attributed Provider</th>
<th>Attributed Clinic</th>
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<td>88</td>
<td>F</td>
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<td>72</td>
<td>M</td>
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<td>M</td>
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<td>11</td>
<td>Goldberg, David</td>
<td>69</td>
<td>M</td>
<td>View Program</td>
<td>9.7</td>
<td>197</td>
<td>133/78</td>
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<td>130/74</td>
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### Key Clinical Values

<table>
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<th>Type</th>
<th>Result</th>
<th>Expected Range</th>
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<tbody>
<tr>
<td>02/12/2012</td>
<td>Weight</td>
<td>110 lbs.</td>
<td>80 - 110 lbs.</td>
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<tr>
<td>02/12/2012</td>
<td>BP</td>
<td>116 / 68</td>
<td>&lt; 120 / 80</td>
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</table>

### Disease Specific Values

<table>
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<th>ACT Type</th>
<th>Result</th>
<th>Expected Range</th>
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<tbody>
<tr>
<td>02/13/2012</td>
<td>ACT</td>
<td>14</td>
<td>&gt;= 20</td>
</tr>
<tr>
<td>02/12/2012</td>
<td>Spirometry</td>
<td>280 L/min</td>
<td>&gt;= 375 L/min</td>
</tr>
</tbody>
</table>

### Opportunities

#### Ongoing and Future Opportunities

<table>
<thead>
<tr>
<th>Due Date</th>
<th>Opportunity</th>
<th>Assigned To</th>
<th>Task</th>
</tr>
</thead>
</table>
| 02/12/2012 | Influenza/Pneumococcal Vaccination Overdue | Harrison, C. (HSN) | - Assess patient for appropriateness of flu vaccine  
|            |                                      |             | - If vaccine is indicated, educate patient on the benefits of seasonal flu vaccine  
|            |                                      |             | - Confirm patient has received the flu vaccine  |
| 02/13/2012 | Medication Adherence: Asthma Rescue Meds | Harrison, C. (HSN) | - Educate patient on physician ordered medication regime  
|            |                                      |             | - Patient is able to verbalize an understanding of quick relief (rescue) medications  
|            |                                      |             | - Confirm with patient rescue medication script is filled and patient has rescue meds available routinely  |
| 02/13/2012 | Asthma Action Plan Adhered To         | Harrison, C. (HSN) | - Educate patient on physician directed action plan  |
Navigating the journey from providing care to managing health

**Generating New Capital**
- Patient Access
- Medical Necessity
- Reimbursement

**Clinical Care**
- Coding and Documentation

**Incentives**
- Care Delivery Model

**Quality**
- Patient Satisfaction

**Invest New Capital**
- Financial and Clinical Analytics

**Population Health Management**
- Managing Health
- Cost

**Aligned Incentives**
- Invest New Capital
For more information, contact:

www.optum.com/journey

discover@optum.com

800.765.6619