**ACO Fundamentals and Financials**
Massachusetts Medical Society

**October 2, 2012**

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**Agenda**

1. Governance – Form Follows Function
2. Funds Flow and Finance Models
3. Care Management and Shared Risk
With you today from PwC

Warren Skea, PhD
Kulleni Gebreyes, MD

Section 1
Governance – Form Follows Function
"By 2020, the American health insurance industry will be extinct. Insurance companies will be replaced by accountable care organizations — groups of doctors, hospitals and other health care providers who come together to provide the full range of medical care for patients.


Required: Physician Alignment and Leadership

In a recent PwC survey almost half of all doctors said they want to be employed by a hospital, hospital system or medical foundation. Other findings include:

- **17%** of physicians feel ACO models could give providers more control of the premium dollar
- **30%** feel strongly that the ACO concept is motivating hospitals towards closer alignment with physicians
- **Over 50%** feel hospitals and physicians will be more closely aligned through Accountable Care Organizations in the next five years

Source: PwC Health Research Institute Physician Survey
Common Attributes to Most ACOs

1. Effective and collaborative leadership made up of both physicians and professional administrators.
2. Culture that supports clinical and operational integration, care redesign, operating efficiency, and innovation.
3. A medical home model for primary care providers.
4. Patient registries to identify high-risk patients and strategies for mitigation.
5. At least one acute care hospital with an array of clinical specialists.
6. Relationships with sub-acute facilities to coordinate care.
7. Aligned goals and incentives within compensation structures.
8. Systems and processes to manage patient “stickiness”
Medicare ACO governance requirements

1. **75% board representation.** 75 percent of the governing board must be chosen by the ACO participants.

2. **One Medicare beneficiary on the governing board.** One of the members of the governing board must be a Medicare beneficiary served by the ACO. This beneficiary may not have any conflict of interest (presumably beyond being a patient serviced by the network) and may not be a provider/supplier for the ACO.

3. **Management.** Each ACO must have an executive accountable to and subject to selection and removal by the governing board. The executive’s leadership team must have the ability to influence or direct clinical practice to improve outcomes. The ACO must also have a compliance officer who reports directly to the governing board. The compliance officer cannot be legal counsel to the ACO.

4. **Conflict of interest policy.** Each ACO’s governing board must have a conflict of interest policy calling for disclosure of relevant financial interests and for a procedure to determine whether conflicts exist and an appropriate process to resolve conflicts.

5. **Compliance function.** The ACO must adopt a compliance plan to address how the ACO will comply with applicable legal requirements. The plan must include the following elements:
   - A designated compliance officer;
   - Mechanisms to identify and address issues;
   - A method for employees and contractors to report suspected problems;
   - Compliance training of employees and contractors;
   - Required reporting of criminal activity to law enforcement agencies; and
   - Required updating of the compliance plan to reflect changes in law, including any new mandatory compliance plan requirements of the ACA.

### Six core structural components necessary for an effective innovative partnership model

<table>
<thead>
<tr>
<th>Each core component...</th>
<th>Seeks to...</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. A commitment to providing patient-centric care to be considered at the center of all clinical decision-making</td>
<td>Engage the patient / family (caregiver)</td>
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<tr>
<td></td>
<td>Encourage disease self management</td>
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<tr>
<td>2. A health home that provides primary and preventive care and coordinates all other care</td>
<td>Provide care that is: Accessible</td>
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<tr>
<td></td>
<td>Personalized</td>
</tr>
<tr>
<td></td>
<td>Continuous</td>
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<td>3. Population health and data management capabilities</td>
<td>Aggregate patient health status data</td>
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<td></td>
<td>Stratify populations based on risk and needs</td>
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<td></td>
<td>Engage patients in self management</td>
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<td>4. Robust provider network that delivers care across the entire continuum with top quality outcomes at reduced cost</td>
<td>Provide facilities across the continuum, including: Hospitals</td>
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<td>Health homes, PCP extenders, FQHCs, wellness and other prevention services / providers</td>
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<td>Rehabilitation centers and other post-acute providers</td>
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<td>Integrate robust application of technology</td>
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<td>5. A well functioning governance structure capable of course changes – physician self management and self-governance</td>
<td>Provide leadership that requires: Vertical, timely and decisive decision-making</td>
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<td>Focus on transformation of the culture of partnering organizations</td>
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<td>Shift from volume-based to value-based</td>
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<td>6. Payer-provider partnerships</td>
<td>Partnerships around: Predictive modeling</td>
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<td></td>
<td>High-cost case management</td>
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<td>Disease management</td>
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<td>Provide performance measurement</td>
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Questions Organizations Should Ask Themselves

Given these trends, what should organizations be asking themselves?

1. What are the non-negotiable components for a partnership?

2. What is the value our organizations brings to a partnership?

3. What should be included in an initial discussion of our organization’s asks, concerns and opportunities?
What do organizations need to do?

1. Agree on criteria for partnering

2. Identify willing partners

3. Agree to begin partner discussions consistent with #1

SAMPLE Criteria for Partners

- Brings a Demonstrated Commitment to the Triple Aim: Quality, Service & Affordability, Including a commitment to Community Health
- Brings a strong, regional primary and specialty base with Options that welcomes independent Small Group Primary & Specialist Physicians from the Community
- Agrees to a model that offers shared leadership for the organization in a clear Employer-Payer-Provider Collaborative
- Provides a model that delivers a full continuum of care, focused and paid for wellness, outcomes and cost savings
### Requirements for ACOs

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Structure</th>
<th>People / Partners</th>
<th>Process</th>
<th>Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Executive Management</td>
<td>1. Organizational Structure</td>
<td></td>
<td>1. Delivery System Configuration</td>
<td>1. HIT</td>
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<tr>
<td>2. Financial</td>
<td>2. Governance</td>
<td></td>
<td>2. Physician/staff population rations</td>
<td>2. EHR/EMR</td>
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<td></td>
<td>7. Regulatory</td>
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<td></td>
<td>Compliance</td>
<td></td>
<td></td>
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<td></td>
<td>8. Patient Rights</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>and Responsibilities</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### What Decisions Need to be Made?

- [ ] 1. Delivery System Configuration
- [ ] 2. Physician/staff population rations
- [ ] 3. Provider contracting
- [ ] 4. Payer partnership strategies
- [ ] 5. HIT
- [ ] 2. EHR/EMR
- [ ] 3. Meaningful Use Requirements
- [ ] 4. Date Connectivity in “Real Time”
- [ ] 5. Data coordination and Management
Key decisions any organization contemplating an ACO must make

1. **Integration** - Can the applicant realistically deliver all that is required for shared savings? How integrated is the applicant now? Will physicians be sufficiently engaged? Will partnering with payers be required or advised?

2. **Cost-Benefit** - The bar is set high to qualify as an ACO and to obtain any significant shared savings. Is it worth the cost to prepare and file an application? Should providers wait and see how this works out in the initial rounds?

3. **Stickiness** - Beneficiaries are in an open model and can seek services anywhere, so the ACO must analyze and determine how "loyal" its patient population is since the ACO will be responsible for the cost and quality of the services provided to them.

4. **Risk-Reward** - Those interested in participation in ACOs will clearly need to evaluate the financial implications of involvement. Does the math work?

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Form Follows Function: ACO Governance Development Decisions to be Made

Has your organization considered all of these questions when designing your ACO governance structure?

Key:
- Strategy
- Structure
- People/Partners

Yes
No
For Profit & Nonprofit Models:

Identifying a Clear Authority Matrix

Nonprofit Tax Exempt Model
**Nonprofit Tax Exempt Model Structure**

- **Hospital Parent***
  - Sole Corporate Member
  - Provider Services Contract

- **ACO (tax-exempt)**
  - FMV

- **MSO**
  - Owned and Financed Equally

- **Physician Members**

- Board has equal Physician and Hospital members
- Hospital provides working capital and reserves for ACO initiative
- Contracts with MSO for management and provider services
- Distributes shared savings to MSO per contract
- Medicare contracts
- Pay-for-performance contracts with commercial payers
- MSO paid by ACO for management services at FMV and provider services
- MSO employs staff and provides infrastructure support efforts
- Contracts with ACO include a bonus for distribution to physicians and hospitals based on shared savings generated
- Independent, voluntary physicians and hospital-employed physicians
- Work through MSO to improve quality and efficiency
- Receive lease for services (e.g., committee work, care coordination)
- Receive share of savings from MSO for ACO contract success

* Hospital Parent must be nonprofit for ACO subsidiary to be tax-exempt

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**Nonprofit Tax Exempt Model Governance**

**Powers of Sole Corporate Member**
- Approve amendments to governing documents
- Approve sale of substantially all the assets; dissolution; or liquidation
- Appoint / remove directors from slate proposed by physician members and hospital
- Approve outside auditors recommended by Board

**Board of Directors**
- Exercise oversight of ACO subject to reserved powers of Hospital as Sole Corporate Member
- Appoint executive director / medical director
- Approve funds flow
- Recommend outside auditor
- Appoint Committees: Finance, Contracting & Quality

* Hospital Parent must be nonprofit for ACO subsidiary to be tax-exempt

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**Nonprofit Tax Exempt Model Pros and Cons**

**Pros**
- Income is tax exempt to the ACO
- Simultaneously responsive to hospital mission and need for greater physician involvement
- Provides clear lines of accountability and financial transparency
- Hospital and physicians have equal partnership on risk and pay for performance contracts

**Cons**
- Unclear whether tax-exemption will be available; if exemption not available, net income will be taxable
- Difficult to have hospital as sole member but have sufficient physician involvement in governance
- Cost and time involved obtaining tax-exempt status for ACO
- Physicians may resist participation where hospital is dominant member

**For-Profit Corporation Model**
**Nonprofit Tax Exempt Model Structure**

- Hospital:
  - Controlled solely by Hospital

- MSO:
  - MSO paid by ACO for management services at FMV
  - MSO employs staff and provides infrastructure

- ACO:
  - Common Stock Ownership is equal between Hospital and Physician Members. Hospital has Preferred Stock ownership

- Provider Services Contract

- Services

- Provider Services Contract

- FMV

* Hospital may be nonprofit or for-profit

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**Nonprofit Tax Exempt Model Pros and Cons**

**Pros**
- Separate profits and losses from stockholder entities
- Hospital can fund disproportionate share of capital expenses through preferred stock, but still have substantial physician involvement in governance
- Hospital and physicians have equal partnership on risk and pay for performance contracts

**Cons**
- Taxation of net income
- Does the offering of stock constitute the sale of a security under federal or your state’s laws?
LLC Model

- Operates in support of the charitable, medical and educational purposes of the Hospital
- Allocations of profits, losses and distributions of cash are made in conformity with Membership Percentage Interest
- Board has equal representation from Hospital and Physician Members
- Reserved powers only in Hospital Member
- ACO distributes shared savings to Hospital and Physician Organization as an expense before cash distributions
- May use in conjunction with an MSO structure

* Hospital may be nonprofit or for-profit

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Reserve Powers of Hospital Member

1. Election and removal of ACO Board of Managers
2. Approve or initiative the sale, lease, merger, consolidation or other transfer of the ACO
3. Approve or initiative the sale, lease, transfer, assignment, encumbrance or disposition of ACO assets greater than $X
4. Approve or incur debt in excess of a certain dollar amount
5. Approve or initiate the dissolution of liquidation of the ACO or initiate insolvency or bankruptcy proceedings
6. Approve amendments to the documents of the ACO with some member protections
7. Approve or initiate a change in the nature of the ACOs business or lines of service
8. Approve, amend or terminate the Management Agreement with the MSO (if any) and other material contracts
9. Approve and establish annual operating budgets and strategic plans
10. Approve or initiate additional capital calls from members or approve a private placement or similar financing of the ACO
11. Approve distribution of cash or shared savings payments
12. Approve new providers to participate in the ACO

Powers of the Board (equal representation)

1. Appointment of ACO officers and leadership positions
2. Approval of financial risk sharing compensation models
3. Approval of new classes of health care provider members of the ACO
4. Approval of the entry of new members into the ACO
5. Retention of consulting, legal, accounting or actuarial services
6. Approval of contracts with third parties of less than a certain dollar amount threshold
Nonprofit Tax Exempt Model Pros and Cons

**Pros**
- Hospital can fund disproportionate share of capital expenses, but still have substantial physician involvement in governance
- Responsive to hospital mission and need for greater physician involvement
- Provides clear lines of accountability and financial transparency
- Hospital and physicians have equal partnership on risk and pay-for-performance contracts

**Cons**
- Risk of jeopardizing tax-exempt status of hospital (if applicable) where ACO also includes for-profit members
- Physicians may resist participation where hospital is dominant member
- Does the offering of stock constitute the sale of a security under federal or your state’s laws?

Hospital Division Model / Single Member LLC Model
**LLC Model**

- Hospital
  - ACO
  - Provider Services Contract

OR

- Hospital
  - ACO, LLC
  - Provider Services Contract

**Physician Organization**

* Hospital may be nonprofit or for-profit

**Nonprofit Tax Exempt Model Pros and Cons**

**Pros**
- Allows hospital to disproportionately fund capital expenses
- Hospital-owned, single member LLC can be disregarded entity of can be structured as a pass-through entity if there is risk sharing

**Cons**
- This structure is not a true 50/50 hospital / physician venture but PPACA favors physician-driven ACOs
- ACO revenues treated as hospital revenues, thus subject to hospital loan agreements / hospital creditors
- No independent accounting oversight; need for greater financial transparency
- Stark Law / Anti-Kickback Statute: difficult to fit within applicable exceptions or safe harbors unless hospital employs physicians or payments are for quality-related services only rather than shared savings, efficiency or utilization measures
Industry Examples of Collaborative Models

Examples of collaborative models

1. Aetna - Inova joint ownership of a new payer
2. Anthem Blue Cross, Sante Community Physicians, IPA, Community Medical Centers, and Fresno employers—contractual shared “skin in the game”
3. Hoag Memorial Hospital - St. Joseph of Orange affiliation
4. IPA wrap around medical foundation/group practice as a potential home for independent physicians

Many other collaborative models and nuances on these basic alternatives
Aetna-Inova Joint Venture

Aetna and Inova’s joint venture is a clear example of a unique and innovative partnership that shares the risk, rewards and accountability of the enrolled population’s health with affiliated hospitals and physicians in a JV supported by Aetna. **Note:** Inova is a well established and comprehensive IDN.

This arrangement is in contrast to the basic CIGNA model which prefers to only contract with medical groups which in turn sub-contract with hospitals as “cost centers.”

**Objectives of the Joint Venture**

- Launch of *Innovation Health Plans* (a new insurance entity) – equally owned by Aetna and Inova and serving the Northern Virginia patient population
- Develop *Signature Partners* – network for affiliated and independent physicians in the region
- Incorporate the use of data analytic tools to strive for the practice of evidence-based medicine, improve access to care and reduce unnecessary admissions and readmissions

Source: “Advisory Board Spotlight: Aetna and Inova Joint Venture.” 2011
"Core Ingredients of Aetna-Inova Partnership"

- Data analytics
- Performance management
- Reporting infrastructure

Aetna-Inova Partnership

Shared Incentives

• Innovation
• Health Plans
• Providers
• Purchasers

Information Technology

• Cost and Quality Management
• Clinical integration
• Primary care focus

Signature Partners Network

Shared Governance

Aetna-Inova Joint Venture - Flow of Funds

- Providers are not exclusive and will continue to contract with other payers and self-insured employers
- This is a unique model

Source: "Advisory Board Spotlight: Aetna and Inova Joint Venture," 2011

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Beyond the traditional role of a health plan

“As the healthcare market shifts towards a population management focus, health plans have taken an active role in supplying providers with logistical and analytic support for building a value-based delivery system that will produce high quality, efficient care.”

Traditional role
- Claims processing
- Risk Management
- Utilization Management

New role: Under JV
- Information transfer
- Shared Incentives
- Care Management
- Decision Support
- Performance Management
- Technology Infrastructure

Positive implications for physicians and patients

Implication #1: “Improved Care Delivery Across Independent Practitioners”
- The creation of “Signature Partners” as an umbrella provider group will provide links to the independent physicians with varied backgrounds, cultures and practices

Implication #2: “Increased Emphasis on Care Management”
- Support the growth of medical homes to expand the provision of high quality, coordinated services across the continuum of care
- Enhance patient-centric, individualized care through team-based delivery structures and the use of analytic tools to interpret patient data information

Implication #3: “New Health Plan Product Offerings”
- New health plan products to reduce premiums and improve delivery of care through shared risk arrangements with providers that promote high quality and affordable health care
Aetna – Inova Joint Venture: Impact on hospitals and physicians

What did hospitals get?

- Shared equity and governance
- Shared risk and reward
- Exclusive new health plan products to reduce premiums but increase membership and improve delivery of care by promoting high quality and affordable health care
- Analytic tools and data to support team-based care delivery

What did physicians get?

- The creation of "Signature Partners" as an umbrella provider group will provide links to the independent physicians with varied backgrounds, cultures and practices
- Shared risk and reward
- Reimbursement replacement opportunities
- Access to new enrollees
- Administrative practice support

Anthem-Blue Cross Contractual Venture
**Anthem-Blue Cross:**

*Innovative, contractual, shared “skin in the game”*

Contractual venture (not shared ownership) between payer (ABC), hospital system (Community Medical Centers, Fresno), physicians (Sante Community Physicians, IPA) and employers (school districts) all sharing risk and reward. Contractual venture highlights:

- Narrow network
- All parties share in any savings generated compared to fixed targets
- Medical group and ABC are taking the lead on population health management

Another example:

- Cal. Blue Shield, Dignity Health, Hill Group and CalPERS reportedly saved CalPERS $32 Million in the last 2 years (LA Times; 9/6/12)

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**Anthem-Blue Cross: “Skin in the game”**

- Providers are not exclusive and will continue to contract with other payers and self insured employers
**Anthem-Blue Cross impact on hospitals and physicians**

**What did hospitals get?**
- Shared risk and reward
- Access to new members
- Analytic tools and data to support team-based care delivery

**What did physicians get?**
- Key role in population health management
- Shared risk and reward
- Reimbursement replacement opportunities
- Access to new enrollees

**Source:** "Advisory Board Spotlight: Aetna and Inova Joint Venture," 2011

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**Hoag Memorial Hospital-St. Joseph of Orange Affiliation**

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**Hoag Memorial Hospital – St. Joseph of Orange Affiliation**

- Described as an affiliation, not a merger or acquisition
- In fact it is a “change of control” triggering the need for antitrust merger approval (obtained) and California Attorney General approval (in process) with St. Joseph parent retaining ultimate control
- Adeptly structured to retain Catholic Directives at St. Joseph but not applicable to Hoag Memorial Hospital
- **New holding company to oversee all Southern California hospital and physician operations** of both St. Joseph and Huntsville Memorial Hospital
- Huntsville Memorial Hospital physicians invited to join or sub-contract with St. Joseph’s Heritage Medical Foundation for managed care contracting
- Triggered in part by Huntsville Memorial Hospital’s loss of its largest medical group (Greater Newport Physicians IPA) to Memorial Care

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**Hoag Memorial Hospital – St. Joseph of Orange Affiliation**

- Providers are not exclusive

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**Diagram:**
- St. Joseph of Orange
- St. Joseph’s Orange County Hospitals
- NewCo Health Plan
- Hoag Memorial
- Payers
- Hospital Operations
- Physician Operations
- Heritage Medical Foundation
- Hoag Physicians
- Reserve Powers
- Payer contracts
- Provider relations
**Hoag Memorial Hospital-St. Joseph of Orange Affiliation**

**What did hospitals get?**
- Becoming part of a strong, more sustainable provider network while retaining assets and significant independence
- Shared governance
- Shared risk and reward
- Expanded service area
- Economies of scale and allocation of services
- Analytic tools and data to support team-based care delivery

**What did physicians get?**
- Hoag physicians have opportunity to join/affiliate Heritage Medical Foundation
- Key role in population health management
- Shared risk and reward
- Larger patient base
- Reimbursement replacement opportunities

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**Sutter Sacramento Medical Foundation/IPA**
Sutter Sacramento Medical Foundation/IPA wrap

- Described as an affiliation, not a merger or acquisition
- Sutter medical foundation is prime contractor for physician services
- **IPA is subcontractor for risk contracts**
  - Parallel PPO contracting by foundation and IPA given clinical integration
  - Knox Keene license will allow combined contracting for foundation and independent physicians, hospitals and other network providers
  - Sutter Health centralized the managed care contracting functions for its hospitals and physicians

Many examples of IPA wraps—this component may be a critical element of any ECH affiliation mechanism so that our independents have a viable near-term future.
**Sutter Health managed care contracting**

**What did hospitals get?**
- Strong, sustainable hospital-physician integrated provider network
- Shared risk and reward
- Analytic tools and data to support team-based care delivery
- Economies of scale in centralized managed care contracting

**What did physicians get?**
- Independent physician have a secure managed contracting home
- Key role in population health management
- Shared risk and reward
- Reimbursement replacement opportunities

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### Section 2

**Funds Flow and Finance Models: The Nut and the Split**
Current FFS payment models do not support appropriate levels of care coordination, which are key to mitigating expenditures...

...but shared savings models create incentives for providers to redesign their care management strategies to manage care across the continuum, thus removing costs from the system.
Beneficiary visits between PCPs and Specialists are different in well managed environment than traditionally expected

Contrary to expectations in the ‘PCP as gatekeeper’ model, the shift from FFS to managed care environments is often associated with increased utilization of specialists, presumably as specialists assume greater responsibility for managing the care of more complex patients.

PCP vs. Specialist Visits per 1k Patients Across Care Delivery Environments

<table>
<thead>
<tr>
<th>Care Delivery Environment</th>
<th>PCP Visits</th>
<th>Specialist Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Population</td>
<td>80%</td>
<td>20%</td>
</tr>
<tr>
<td>Medicare Population</td>
<td>78%</td>
<td>22%</td>
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</tbody>
</table>

Source: The Thomson Reuters 2010 Commercial and Medicare MarketScan® databases, PwC Analysis.

Care management needs vary across a population due to the diversity of health profiles (per 25,000 lives)

The Medicare population has a significantly higher rates of chronic disease vs. the commercial population.

<table>
<thead>
<tr>
<th>Chronic Conditions</th>
<th>Population % of Pop.</th>
<th>Population with only ≥1 Chronic Conditions %</th>
<th>Population with ≥2 Chronic Conditions %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asthma (ASTH)</td>
<td>4.1%</td>
<td>16.4%</td>
<td>44.6%</td>
</tr>
<tr>
<td>Congestive Heart Failure (CHF)</td>
<td>0.3%</td>
<td>1.9%</td>
<td>7.6%</td>
</tr>
<tr>
<td>Chronic Artery Disease (CAD)</td>
<td>0.3%</td>
<td>8.5%</td>
<td>11.5%</td>
</tr>
<tr>
<td>Depression + Diabetes (DBD)</td>
<td>3.4%</td>
<td>18.4%</td>
<td>23.4%</td>
</tr>
<tr>
<td>Diabetes (DM)</td>
<td>0.7%</td>
<td>7.0%</td>
<td>13.2%</td>
</tr>
<tr>
<td>Congestive Heart Failure (CHF)</td>
<td>0.3%</td>
<td>4.7%</td>
<td>95.3%</td>
</tr>
<tr>
<td>COPD</td>
<td>5.9%</td>
<td>10.0%</td>
<td>90.0%</td>
</tr>
<tr>
<td>Cardiovascular Disease (CAD)</td>
<td>2.9%</td>
<td>7.3%</td>
<td>92.7%</td>
</tr>
<tr>
<td>Depression + Adult+ Pediatric (DEP)</td>
<td>3.7%</td>
<td>9.2%</td>
<td>90.8%</td>
</tr>
<tr>
<td>Diabetes (DM)</td>
<td>10.0%</td>
<td>12.2%</td>
<td>87.8%</td>
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<tr>
<td>Hypertension (HT)</td>
<td>44.6%</td>
<td>24.0%</td>
<td>76.0%</td>
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<td>Hyperlipidemia (HL)</td>
<td>28.6%</td>
<td>15.3%</td>
<td>84.7%</td>
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<tr>
<td>Hypertension (HT)</td>
<td>44.6%</td>
<td>24.0%</td>
<td>76.0%</td>
</tr>
<tr>
<td>Low Back Pain (LBP)</td>
<td>5.2%</td>
<td>13.7%</td>
<td>86.3%</td>
</tr>
</tbody>
</table>

Source: The Thomson Reuters 2010 Commercial and Medicare MarketScan® databases, PwC Analysis.
Section 2 – Funds Flow and Finance Models

Cost of Care 2010 Commercial Cost Savings breakdown ($M) total population – Service Category*

<table>
<thead>
<tr>
<th>Service Category</th>
<th>Baseline Data</th>
<th>FFS Allowed Utilization &amp; Amounts</th>
<th>FFS Allowed Utilization &amp; Amounts: More significant care coordination</th>
<th>PMPM Change</th>
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<tbody>
<tr>
<td></td>
<td>Unit Amount</td>
<td>Utilization PPM</td>
<td>Aggregate ($ in M)</td>
<td>Utilization PPM</td>
</tr>
<tr>
<td>Inpatient Hospital</td>
<td>Admits Per 1k</td>
<td>$85,518 per admit</td>
<td>460</td>
<td>$87,057</td>
</tr>
<tr>
<td></td>
<td>Skilled Nursing Days Per 1k</td>
<td>$101 per day</td>
<td>263</td>
<td>$127</td>
</tr>
<tr>
<td></td>
<td>Outpatient Hospital Visits Per 1k</td>
<td>$160 per visit</td>
<td>773</td>
<td>$91.45</td>
</tr>
<tr>
<td></td>
<td>Professional</td>
<td>$150.96</td>
<td>64</td>
<td>$160.96</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>$7.24</td>
<td>64</td>
<td>$7.24</td>
</tr>
<tr>
<td></td>
<td>Prescriptions Scripts Per 1k</td>
<td>$138 per script</td>
<td>1,145</td>
<td>$94.50</td>
</tr>
</tbody>
</table>

Total Health Care Services Cost $448,600 $352,100 $34,610 $19,000

% of Aggregate Cost Savings

1. 80% of the avoidable costs for the commercial population is outside the inpatient setting.
2. Properly implementing protocols on PCP and Specialist visits as well avoidance of outpatient hospital services can account for more than 50% of the potential cost reduction for the commercial population.

* The assessment is based upon The Thomson Reuters 2010 Commercial MarketScan® database.

ACO Fundamentals and Financials • Massachusetts Medical Society

October 2, 2012

Section 2 – Funds Flow and Finance Models

Cost of Care 2010 Commercial Cost Savings breakdown ($M) total population – Professional Service Category*

<table>
<thead>
<tr>
<th>Service Category</th>
<th>Baseline Data</th>
<th>FFS Allowed Utilization &amp; Amounts</th>
<th>FFS Allowed Utilization &amp; Amounts: More significant care coordination</th>
<th>PMPM Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unit Amount</td>
<td>Utilization PPM</td>
<td>Aggregate ($ in M)</td>
<td>Utilization PPM</td>
</tr>
<tr>
<td>Office Visit - PCP-Family</td>
<td>Visits per 1k</td>
<td>$465 per visit</td>
<td>73</td>
<td>$470</td>
</tr>
<tr>
<td>Office Visit - Specialist</td>
<td>Visits per 1k</td>
<td>$1,115 per visit</td>
<td>1,057</td>
<td>$1,020</td>
</tr>
<tr>
<td>OP Labs</td>
<td>Visits per 1k</td>
<td>$67 per visit</td>
<td>1,580</td>
<td>$1,520</td>
</tr>
<tr>
<td>Path</td>
<td>Visits per 1k</td>
<td>$27 per visit</td>
<td>1,651</td>
<td>$1,640</td>
</tr>
<tr>
<td>Radiology</td>
<td>Visits per 1k</td>
<td>$47 per visit</td>
<td>1,249</td>
<td>$1,240</td>
</tr>
<tr>
<td>Skilled Nursing Days Per 1k</td>
<td>$85 per day</td>
<td>238</td>
<td>$264</td>
<td>10.1</td>
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<tr>
<td>Hospice Days Per 1k</td>
<td>$275 per day</td>
<td>10</td>
<td>$274</td>
<td>0.8</td>
</tr>
<tr>
<td>Prescription Drugs Scripts Per 1k</td>
<td>$113 per script</td>
<td>1,075</td>
<td>$27.9</td>
<td>641</td>
</tr>
<tr>
<td>Other</td>
<td>$95 per visit</td>
<td>1,483</td>
<td>$43.68</td>
<td>1,206</td>
</tr>
</tbody>
</table>

Total Professional Services Cost $44,100 $35,200 $34,610 $19,000

% of Aggregate Cost Savings

1. There is a $96.5M cost reduction potential to the FFS commercial population by properly coordinating patient care across all professional service sites. However:
2. 35% of the savings is attributed to fewer PCP/Family visits.
3. Specialist visit costs will increase by $42 M to manage more complex cases.

* The assessment is based upon The Thomson Reuters 2010 Commercial MarketScan® database.

ACO Fundamentals and Financials • Massachusetts Medical Society

October 2, 2012
Cost of Care 2010 Medicare Cost Savings breakdown ($M) total population – Service Category*

<table>
<thead>
<tr>
<th>Service Category</th>
<th>Baseline Data</th>
<th>FFS Allowed Utilization &amp; Amounts</th>
<th>FFS Allowed Utilization &amp; Amounts - More significant care coordination</th>
<th>PMPM Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unit</td>
<td>Amount</td>
<td>Utilization $/Units</td>
<td>PMPM $/Unit</td>
</tr>
<tr>
<td>Inpatient Hospital</td>
<td>Admits Per 1K</td>
<td>$14,248 per admit</td>
<td>$206.47</td>
<td>$128.1</td>
</tr>
<tr>
<td>Hospital</td>
<td>Days Per 1K</td>
<td>$324 per day</td>
<td>$324.27</td>
<td>$25.6</td>
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<tr>
<td>Outpatient Hospital</td>
<td>Visits Per 1K</td>
<td>$215.28 per visit</td>
<td>$215.28</td>
<td>$62.0</td>
</tr>
<tr>
<td>Professional</td>
<td>Days Per 1K</td>
<td>$215.28 per day</td>
<td>$215.28</td>
<td>$62.0</td>
</tr>
<tr>
<td>Other</td>
<td>Visits Per 1K</td>
<td>$10.71 per visit</td>
<td>$211.71</td>
<td>$8.2</td>
</tr>
<tr>
<td>Prescription Drugs</td>
<td>Scripts Per 1K</td>
<td>$156.92 per script</td>
<td>$51.5</td>
<td>$8.2</td>
</tr>
</tbody>
</table>

Total Health Care Services Cost $1,076 $650 $920 $384.6

% of Aggregate Cost Savings

1. To properly manage the Medicare population, primary care organizations will have to fundamentally change how they coordinate their patient care:
   - PCP / Family visits / costs will decrease by 50%
   - Specialty visits / costs will increase by more than 100%
   - Providers may increase utilization of pathology / laboratory services for diagnostic purposes

* The assessment is based upon The Thomson Reuters 2010 Commercial MarketScan® database

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PwC
Section 2 – Funds Flow and Finance Models

Example Funds Flow from Employer to Provider

Employer

Administrative/marketing
Reinsurance/retention/profit

Managed Care
Organization/Payer

Out of Area & Reserves

Medical Management
Network Administration

IDS

PCPs
Specialists
Ancillaries
Acute Hospitals
Non-acute Hospitals

Non-Profit: Physician Group Impact

Non-faculty PO
• Employees
• Leased Employees
• PSA

Faculty Practice
Plan

Health System

Independent PO

Others
Physician Groups / Networks / Hospitals / Health Systems

Funds Flow Streams:
• Fee-for-Service Revenues: $21.5M
• Shared Savings: $1.5M
• PMPM Care Management Fees: $3M

Current Funds Flow:
• Fee-for-Service Revenues: $24.0M
Independent PO Benefit: $2M

Board (e.g. Physician Majority; PCP Majority of Physicians)

PP

Care Management
Organization and Management Services
(CMO / MSO)

Risk Product
Revenues

Risk Product
Contracts

Payors
• BCBS
• Others

Risk Product
Payments (base and incentives)
Non-Profit: Health System Impact

**Funds Flow Streams**
- Fee-for-Service Revenues: $36M
- Shared Savings: $1.5M
- PMPM Fee: $1M

Health System Impact before cost reduction: ($1.5M)

Payors
- BCBS
- Others?

**Funds Flow Streams**
- Fee-for-Service Outflows: $75M
- Shared Savings Payable: $3M
- PMPM Care Management Fee Payable: $4M

Payer Impact: Mitigate premium trends

Risk Product Contracts

Non-Faculty PO
- Employees
- Leased Employees
- PSAs

Faculty Practice Plan

Health System

Independent PO

Others
- Physician Groups / Networks / Hospitals / Health Systems

Non-Profit: Payer Impact

**Funds Flow Streams**
- Fee-for-Service Revenues: $36M
- Shared Savings: $1.5M
- PMPM Fee: $1M

Health System Impact before cost reduction: ($1.5M)

Payors
- BCBS
- Others?

**Funds Flow Streams**
- Fee-for-Service Outflows: $82M
- Shared Savings Payable: $3M
- PMPM Care Management Fee Payable: $4M

Payer Impact: Mitigate premium trends

Risk Product Contracts

Non-Faculty PO
- Employees
- Leased Employees
- PSAs

Faculty Practice Plan

Health System

Independent PO

Others
- Physician Groups / Networks / Hospitals / Health Systems
Care Management Models and Shared Risk – It Takes a Village

Objectives – It Takes a Village

Define ACO Quality Metrics
Describe Care Management Models
Identify Key Success Factors
Objectives – It Takes a Village

Define ACO Quality Metrics
Describe Care Management Models
Identify Key Success Factors

Providers consider four key factors when evaluating the cost and benefits of adopting an ACO model

ACO Adoption Considerations

Partnering
- Mitigating risk
- Integrating care
- Improving quality
- Sharing infrastructure

Cost of Care
- Reducing variable costs
- Reducing operating expenses

Financial Incentives
- Compensation strategies
- Shift from fee for service to global pricing
- Aligning incentives
- Timely cost monitoring

Beneficiaries
- Attracting more beneficiaries to the network
- Tailoring program to meet the needs of individuals
Adopting an ACO model can have immediate upfront costs but long term improvement in quality of care through use of metrics

<table>
<thead>
<tr>
<th>ACO Models</th>
<th>ACO Metric Model</th>
<th>Potential Impact of ACO and Metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Governing Body: CMS</td>
<td></td>
</tr>
<tr>
<td>Medicare Shared Savings</td>
<td>Advance Payment ACO Model</td>
<td>Pioneer ACO Model</td>
</tr>
</tbody>
</table>

- Ensures care management is compatible with patient choice through transparency and governance
- Patients see lower premiums as part of the ACO cost sharing model
- Significant upfront costs with moderate returns
  - Providers will have to spend millions (care managers, systems, IT staff, etc.) to get 50 or 60 cents back in 18 months
- Potential for patients to have little choice contradicting the idea of patient centered care
  - Patients are placed into an ACO through employers, doctors, and hospitals with no choice

Source: PwC analysis; Wall Street Journal interviews with Donald Berwick, Former CMS Administrator, Tom Scully, Partner at Welsh Carson Anderson & Stowe, and Jeff Goldsmith, President of Health Futures

Developing population health management capabilities is a critical element in the transformation journey.
Objectives – It Takes a Village

Define ACO Quality Metrics
Describe Care Management Models
Identify Key Success Factors

Key organizational capabilities that facilitate the delivery of holistic care management models

Health Information Technology
- Electronic medical record
- Data warehouse
- Predictive modeling
- Provider information
- Disease registry
- Patient portal

Care Management Interventions
- Disease management
- Case management
- Multidisciplinary care teams
- Home care
- Patient navigators
- Post discharge care

Quality and Performance Improvement
- Six sigma
- Physician champions
- Standardization
- Clinical care pathways
- Performance data
Payers and providers have leveraged quality metrics to identify key improvements in care

<table>
<thead>
<tr>
<th>Grouping</th>
<th>Organization Name</th>
<th>Patient Care Giver (PCG)</th>
<th>Care Coordination (CC)</th>
<th>Preventative Health (PH)</th>
<th>At Risk (AR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician Groups</td>
<td>Multi-Specialty Physician Groups*</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Health Plans</td>
<td>Group Health</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Geisinger Health Plan</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>State Government</td>
<td>Community Health North Carolina</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Medicare</td>
<td>Horizon BlueCross Blue Shield</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>Care Improvement Plus</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

*Case study comprised of 10 hospitals

Source: PwC analysis

PwC October 2, 2012
## Model 1: Multi-Specialty Physician Group Practice Demonstration

### Model Description
Model used to identify successful health care redesign and care management models that can be replicated and spread across the health care system. Physicians are rewarded for:

- Improved patient outcomes through coordinating care for patients with chronic illness, multiple co-morbidities, and transitioning care settings

### Model Strategies

<table>
<thead>
<tr>
<th>Model Strategies</th>
<th>Return on Investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Issued Gaps in Care reports</td>
<td>- MSPGPs earned a collective $107.5 million in performance payments</td>
</tr>
<tr>
<td>- Implemented “Best Practice Guidelines”</td>
<td>- Medicare savings totalled $134 million</td>
</tr>
<tr>
<td>- Clinical work flow redesign</td>
<td></td>
</tr>
<tr>
<td>- Maintained Disease Registries</td>
<td></td>
</tr>
</tbody>
</table>

### Impact Achieved

Performance increase in quality metrics from baseline year 1 to performance year 5:

- 11% on diabetes measures
- 12% on heart failure measures
- 6% on coronary artery disease measures

- 9% on cancer screening measures
- 4% on hypertension measures

Source: CMS Medicare Physician Group Practice Demonstration, July 2011

---

### Best practices within multi-specialty physician demonstration program

- **University of Michigan**
  - Transitional care call back
  - Complex care coordination program
  - Pharmacy facilitated discharge

- **Marshfield Clinic**
  - Anti-coagulation care management
  - Heart failure program
  - HIT enhancements

- **Dartmouth-Hitchcock Clinic**
  - Evidence-based guidelines
  - Work flow redesign
  - Patient education

Source: PwC, October 2, 2012
### Model 2: Group Health Medical Home Initiative

#### Model Description

**Multidisciplinary team** of physicians, registered nurses (RN), nurse practitioners, case managers, etc. that coordinate care prior to a physicians visit. Coordination includes:
- Review of patients records prior to appointments to highlight acute, chronic, or preventative care needs
- Arrangement of care needs is completed prior to visit

#### Model Strategies

- Increase clinical staff
- Outreach to infrequent users
- Expand role of clinical pharmacist
- Collaborative care plans for patients

#### Return on Investment

- Pilot ROI 21 months following implementation was 1.5:1
- Higher cost for PCPs, lower costs for specialists, ER visits, inpatient care

#### Impact Achieved

- Fewer visits (6%) to PCP offices
- Improvements of patient experience, physician experience, quality of care: 20-30 percent greater for three of the four composites
- Lower all-cause inpatient admissions (6%)

Source: AHIP Center for Policy Research: Innovations in Reducing Preventable Hospital Admissions, Readmissions, and Emergency Room Use, June 2010

---

### Model 3: ProvenHealth Navigator Medical Home Initiative

#### Model Description

Medical home initiative to improve primary care for patients and physicians by increasing patients’ access to health care through implementation of innovative technology and streamlining administrative functions, such as:
- Sharing Electronic Health Records, leveraging predictive modelling, enhancing discharge transitions and on-site medical home support

#### Model Strategies

- Patient Portals
- Care transitions program
- Disease management
- On-site nursing home support

#### Return on Investment

- Estimated ROI of more than 2 to 1 for the initiative
- Up front stipends for physicians
- Bonus payments

#### Impact Achieved

- 18% reduction in hospital admissions/ 20% reduction in readmissions
- 7% reduction in total PMPM costs ($500 per enrollee per year)
- Statistically significant improvements in quality of preventive (74.0% improvement), coronary artery disease (22.0%), and diabetes care (34.5%)

Source: AHIP Center for Policy Research: Innovations in Reducing Preventable Hospital Admissions, Readmissions, and Emergency Room Use, June 2010
### Model 4: Medicaid Sponsored Patient Centered Medical Home Interventions Initiatives

#### Model Description

**Public-private partnership** initiative that brings together **regional networks** of physicians, nurses, pharmacists, etc. to support an innovative delivery model. Model links beneficiaries to a **primary care home**, provides technical assistance to improve **chronic care services**, and adds a patient care coordination fee to help improve care.

#### Strategic Interventions
- Quality Measurement and Feedback Initiative
- State wide Care Management Information System
- Disease management programs

#### Return on Investment
- Saved nearly 1.5 billion dollars in Medicaid claims from 2007-2009
- Enhanced PMPM fees

#### Impact Achieved
- 93% of asthmatics received appropriate maintenance medications
- 15% improvement on diabetes quality measures
- 40% decrease in hospitalizations for asthma
- 16% lower emergency department visit rate

---

### Model 5: The Medicare Advantage Emergency Room Initiative

#### Model Description

**Multidisciplinary teams convene monthly** to review records of Medicare Advantage members who account for the greatest portion of ER visits in an effort to reduce emergency room visits by Medicare members. Focus was on disease and case management of frequent flyers.

#### Strategic Interventions
- Medication reconciliation
- Social work assistance
- Patient education
- Mental health assistance

#### Return on Investment
- 36% reduction in ER use among Medicare members

#### Impact Achieved
- In 2009, ER use **declined by 35.9%** among **Medicare Advantage** members who had eight or more emergency room visits during the previous year
**Model 6: Medicare Advantage Chronic Special Needs Plan Initiative**

**Model Description**

Model of care around diabetes that applied population-based and individualized patient outreach programs under the umbrella of a regional preferred provider organization to identify gaps in care and promote primary care.

**Strategic Interventions**

- House calls Program
- 24/7 nurse care management and coaching hotline
- Social services / End-of-life planning

**Return on Investment**

- Enhancing primary care produces long term net cost savings for the special-needs plan

**Impact Achieved**

- Lower rates of hospitalization and readmission
- 19% lower risk-adjusted hospital days per enrollee
- 7% higher risk-adjusted physician office visits

**PwC October 2, 2012**


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**The Veterans Health Administration Medical Home staffing model also provides a benchmark for population health management**

**Core Team** – Assigned to 1 panel of 1,200 patients
- 1 Provider FTE
- 1 RN Care Manager FTE
- 1 Clinical Associate FTE (LPN, MA, or Health Tech)
- 1 Clerk FTE

**Other Team Members** – Assigned to multiple panels
- Clinical Pharmacy Specialist – 3 Panels
- Clinical Pharmacy Anticoagulation – 5 Panels
- Social Work – 2 Panels
- Nutrition – 5 Panels
- Case Managers
- Trainers
- Integrated Behavioral Health
  - Psychologist – 3 Panels
  - Social Worker – 5 Panels
  - Case Manager – 5 Panels
  - Psychiatric – 10 Panels

**For each parent facility**
- 1 Health Promotion Disease Prevention FTE
- 1 Health Behavior Coordinator FTE
- 1 My HealthVet Coordinator FTE

**Other Team Members**

*Panel size of 1,200 patients

Source: VHA Implementation of Patient Centered Medical Homes – Joanne M. Shear, MS, FNP – BC, Department of Veterans Affairs Patient Care Services

**PwC October 2, 2012**
Objectives – It Takes a Village

Define ACO Quality Metrics
Describe Care Management Models
Identify Key Success Factors

The design of successful care management models

1. In-patient risk stratification for triaging patients on the basis of resource consumption
2. Post-discharge readmission modeling for reducing readmission rates. The model can be aligned with care management and care follow-ups to improve quality of care and reduce readmissions
3. Connection of community resources relevant to the patient for enhanced support and improved adherence
4. Patient empowerment through care coordination
Patient and family engagement are the cornerstone of successful care management model

Core attributes of care management models (1 of 2)

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
<th>Actions</th>
</tr>
</thead>
</table>
| Patient and family engagement | • Education and counseling of patients and families to enhance their active participation in their own care including informed decision making | • Patients and families/caregivers are knowledgeable about condition and plan of care  
• Patient and family-centered transition communication  
• Development of self-care management skills |
| Medication management  | • Ensures the safe use of medications by patients and their families and based on patients’ plans of care | • Assessment of patient’s medications intake  
• Patient and family education and counseling about medications  
• Development and implementation of a plan for medications management as part of the patient’s overall plan of care |
| Transition planning    | • Facilitates the safe transition of patients from one level of care to another including home or from one practitioner to another | • Clearly identify practitioner or care team member to facilitate/coordinate the patient’s transition plan  
• Management of patient and family transition needs  
• Use of formal transition planning tools  
• Completion of a transition summary |
| Information transfer   | • Shares important care information among patient, family, caregiver and healthcare providers in a timely and effective manner | • Implementation of clearly defined communication models  
• Use of formal communication tools  
• Clearly identified practitioner to facilitate timely transfer of important information |
Core attributes of care transition interventions (2 of 2)

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Description</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Follow-up care</td>
<td>Facilitates the safe transition of patients from one level of care or provider to another through effective follow-up care activities</td>
<td>Patients and families timely access to key healthcare providers after an episode of care as required by patient's condition and needs</td>
</tr>
<tr>
<td>Provider engagement</td>
<td>Demonstrates ownership, responsibility and accountability for the care of the patient and family/caregiver at all times</td>
<td>Clearly identified patient's personal physician (primary care provider)</td>
</tr>
<tr>
<td>Shared accountability across providers and organizations</td>
<td>Enhancing the transition of care process through accountability for care of the patient by both the healthcare provider (or organization) transitioning and the one receiving the patient</td>
<td>Clear and timely communication of the patient's plan of care</td>
</tr>
</tbody>
</table>

Success in Care Delivery Transformation requires development of increasing complex capabilities
Questions