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***Agenda***

- 1 Governance – Form Follows Function
- 2 Funds Flow and Finance Models
- 3 Care Management and Shared Risk

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***With you today from PwC***

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ACO Fundamentals and Financials • Massachusetts Medical Society  
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October 2, 2012

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**Section 1**  
***Governance – Form Follows Function***

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**"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"**

**Ezekiel Emanuel, *New York Times*, Jan. 30, 2012**

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## **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

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## ***Common Attributes to Most ACOs***

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### ***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”

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## 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 compliance 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.

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## Six core structural components necessary for an

Each core component...	Seeks to...
1. A commitment to providing patient-centric care to be considered at the center of all clinical decision-making	<ul style="list-style-type: none"> <li>• Engage the patient / family (caregiver)</li> <li>• Encourage disease self management</li> <li>• Increase patient satisfaction</li> <li>• Share accountability for the patient's health</li> </ul>
2. A health home that provides primary and preventive care and coordinates all other care	<ul style="list-style-type: none"> <li>Provide care that is:               <ul style="list-style-type: none"> <li>• Accessible</li> <li>• Personalized</li> <li>• Continuous</li> </ul> </li> <li>• Family-centered</li> <li>• Coordinated</li> <li>• Culturally effective</li> </ul>
3. Population health and data management capabilities	<ul style="list-style-type: none"> <li>• Aggregate patient health status data</li> <li>• Stratify populations based on risk and needs</li> <li>• Engage patients in self management</li> <li>• Enable connectivity to ensure mobility and transference of records</li> <li>• Support workflow tools to assist physicians with evidence-based protocols</li> <li>• Integrate robust application of technology</li> </ul>
4. Robust provider network that delivers care across the entire continuum with top quality outcomes at reduced cost	<ul style="list-style-type: none"> <li>Provide facilities across the continuum, including:               <ul style="list-style-type: none"> <li>• Hospitals</li> <li>• Health home, PCP extenders, FQHCs, wellness and other pre-admission services / providers</li> <li>• Rehabilitation centers and other post-acute providers</li> </ul> </li> <li>• Mental health providers</li> <li>• Palliative and hospice care</li> <li>• Telehealth connectivity for bio-metric data and consults</li> <li>• PCPs and specialists</li> </ul>
5. A well functioning governance structure capable of course changes—physician self management and self-governance	<ul style="list-style-type: none"> <li>Provide leadership that requires:               <ul style="list-style-type: none"> <li>• Vertical, timely and decisive decision-making</li> <li>• Focus on transformation of the culture of partnering organizations</li> <li>• Shift vision from volume-based to value-based</li> </ul> </li> <li>• Formalization of partnership roles with providers in joint governance and operations management</li> <li>• Self management and self governance among physicians</li> <li>• Management of the new ACO business model</li> </ul>
6. Payer-provider partnerships	<ul style="list-style-type: none"> <li>Partnerships around:               <ul style="list-style-type: none"> <li>• Predictive modeling</li> <li>• High-cost case management</li> <li>• Disease management</li> <li>• Provide performance measurement</li> </ul> </li> <li>• Network and medical management</li> <li>• Financial reporting</li> <li>• Shared value propositions</li> <li>• Negotiated funds flow and aligned incentives</li> </ul>

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## ***Questions Organizations Should Ask Themselves***

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### ***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?

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### ***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

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### ***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

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## ***Requirements for ACOs***



Strategy	Structure	People / Partners	Process	Technology
1. Executive Management 2. Financial 3. Population Health 4. Outcomes Strategy 5. Mission / Vision / Culture 6. Clients	<b>1. Organizational Structure</b> <b>2. Governance</b> 3. Licenses 4. Accreditation 5. Insurance 6. Legal Issues 7. Regulatory Compliance 8. Patient Rights and Responsibilities	1. Delivery System Configuration 2. Physician/staff population ratios 3. Provider contracting 4. Payer partnership strategies	1. Claims Processing 2. Member Services 3. Care Management / Delivery Model	1. HIT 2. EHR/EMR 3. Meaningful Use Requirements 4. Data Connectivity in "Real Time" 5. Data coordination and Management

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## ***What Decisions Need to be Made?***

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### ***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***



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***For Profit & Nonprofit Models:  
Identifying a Clear Authority Matrix***

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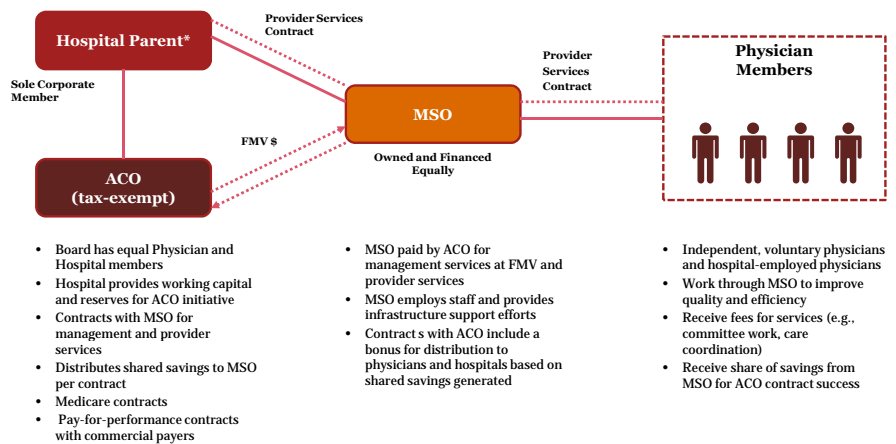
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***Nonprofit Tax Exempt Model***

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## Nonprofit Tax Exempt Model Structure

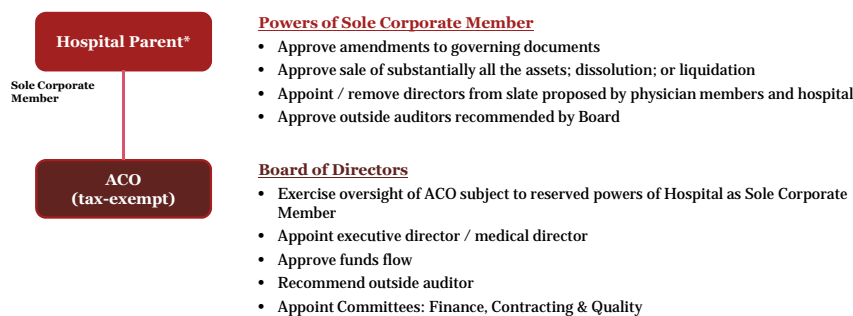


\* Hospital Parent must be nonprofit for ACO subsidiary to be tax-exempt

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— Equity  
 ..... Contract  
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## Nonprofit Tax Exempt Model Governance



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

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 ..... Contract  
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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

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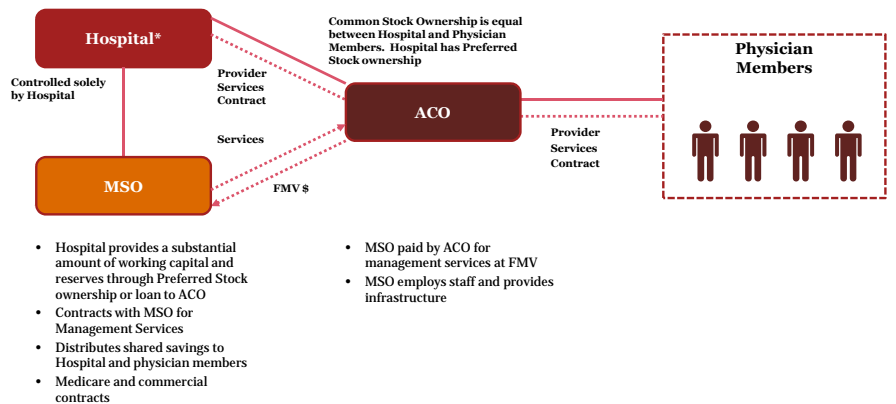
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### ***For-Profit Corporation Model***

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### Nonprofit Tax Exempt Model Structure



\* 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?

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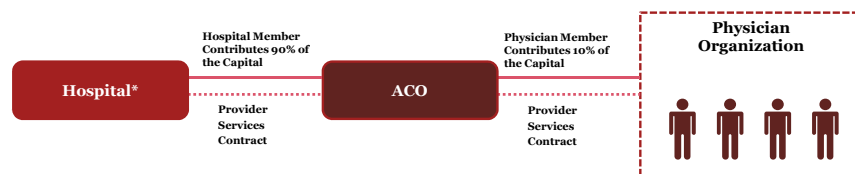
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## LLC Model

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## 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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Equity  
Contract  
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### ***Reserve Powers of Hospital Member***

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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 or 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

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### ***Powers of the Board (equal representation)***

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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

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### ***Nonprofit Tax Exempt Model Pros and Cons***

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#### **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 hospitals is dominant member
- Does the offering of stock constitute the sale of a security under federal or your state's laws?

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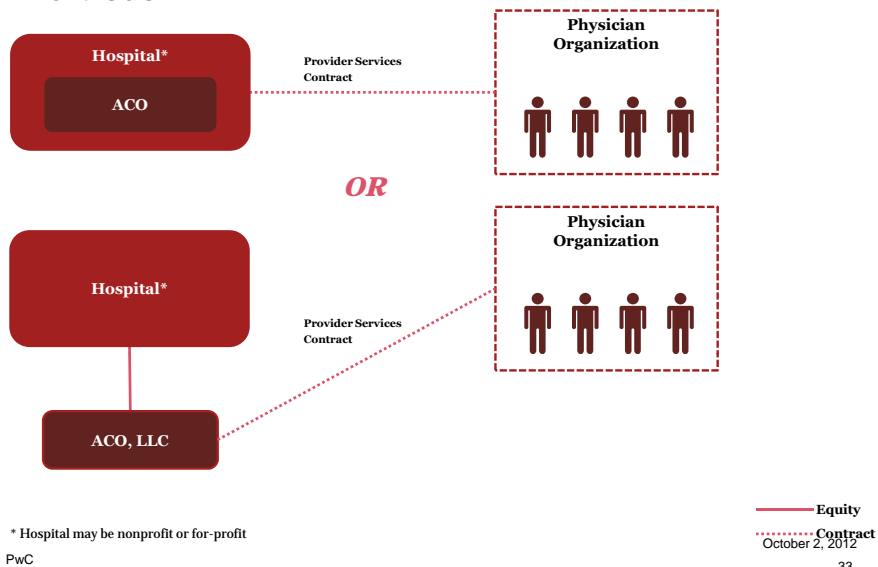
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### ***Hospital Division Model / Single Member LLC Model***

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### LLC Model



### Nonprofit Tax Exempt Model Pros and Cons

#### Pros

- Allows hospital to disproportionately fund capital expenses
- Hospital-owned, single member LLC can be disregarded entity or 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***

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### ***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***

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## Aetna-Inova Joint Venture

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## 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."

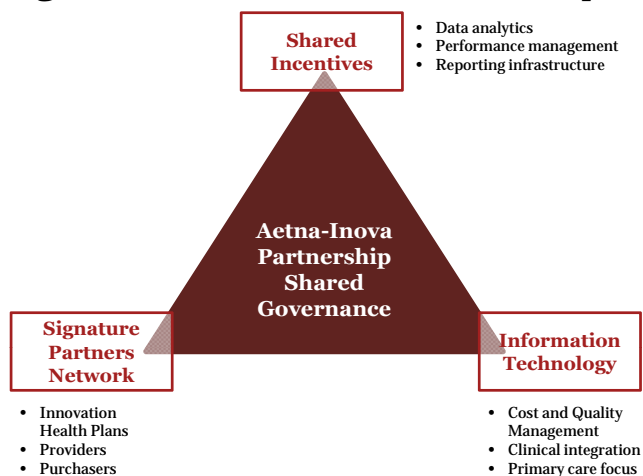
### Objectives of the Joint Venture

- 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  
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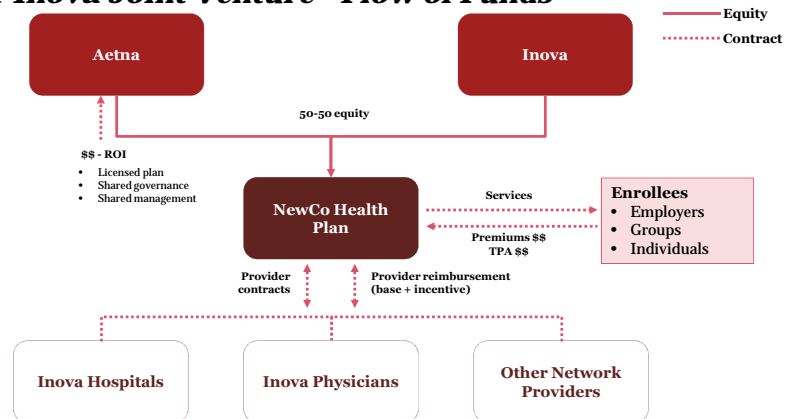
### ***“Core Ingredients of Aetna-Inova Partnership”***



Source: “Advisory Board Spotlight: Aetna and Inova Joint Venture.” 2011  
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### ***Aetna-Inova Joint Venture - Flow of Funds***



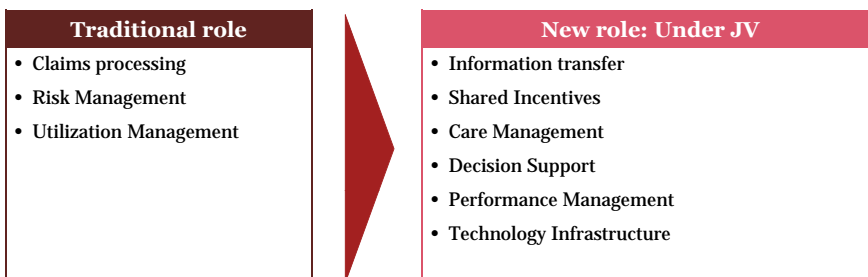
- Providers are not exclusive and will continue to contract with other payers and self insured employers
- This is a unique model

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## ***Beyond the traditional role of a health plan***

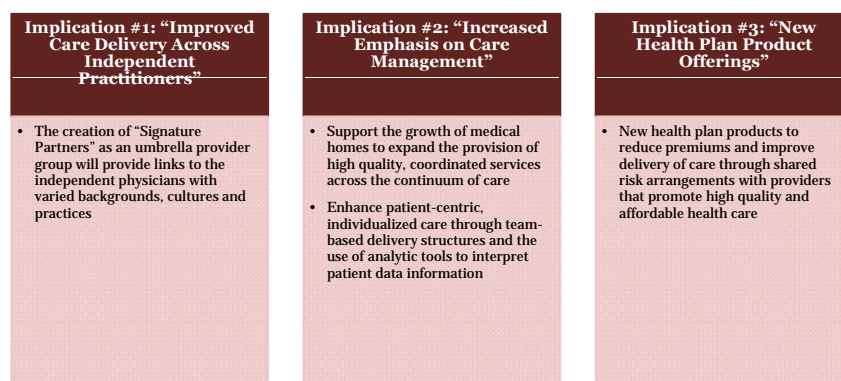
*"As the healthcare market shifts towards a population management focus, health plans have taken an active role in supplying providers with logistical and analytic support for building a value-based delivery system that will produce high quality, efficient care."*



Source: "Advisory Board Spotlight: Aetna and Inova Joint Venture," 2011  
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## ***Positive implications for physicians and patients***



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

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### ***Anthem-Blue Cross Contractual Venture***

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***Anthem-Blue Cross:******Innovative, contractual, shared “skin in the game”***

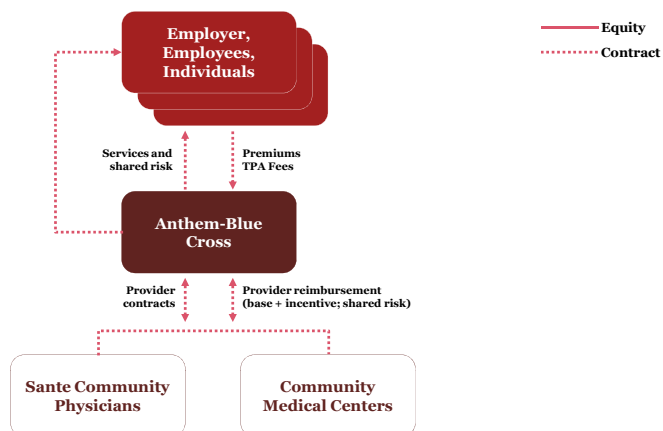
Contractual venture (not shared ownership) between payer (ABC), hospital system (Community Medical Centers, Fresno), physicians (Sante Community Physicians, IPA) and employers (school districts) all sharing risk and reward. Contractual venture highlights:

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

- Providers are not exclusive and will continue to contract with other payers and self insured employers

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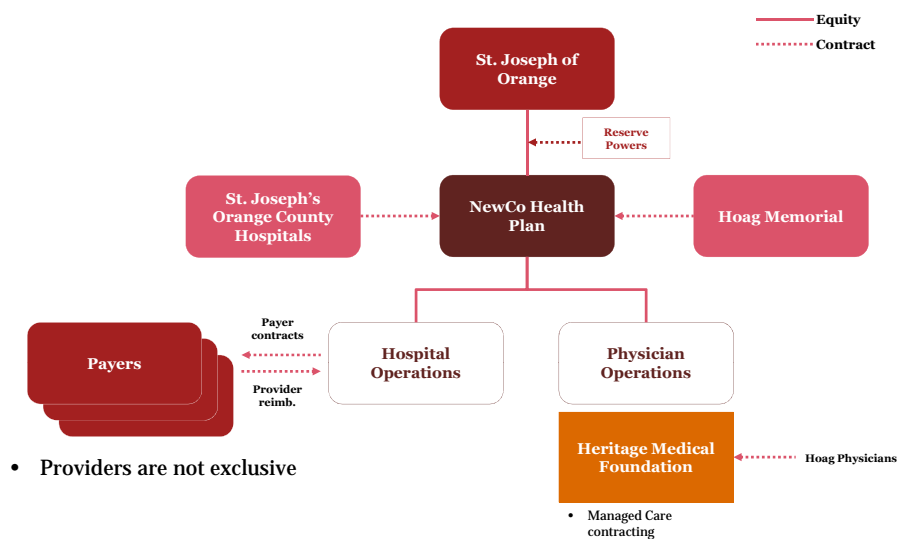
### ***Hoag Memorial Hospital – St. Joseph of Orange Affiliation***

- 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***



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## ***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***

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

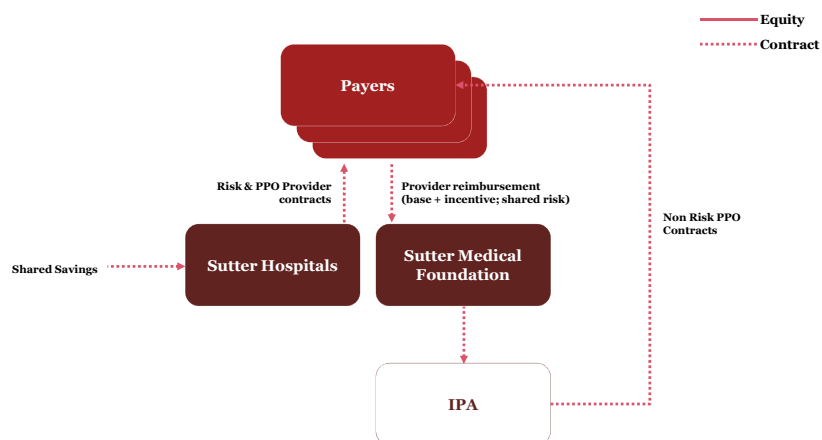
- Described as an affiliation, not a merger or acquisition
- Sutter medical foundation is prime contractor for physician services
- **IPA is subcontractor for risk contracts**
- Parallel PPO contracting by foundation and IPA given clinical integration
- Knox Keene license will allow combined contracting 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

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



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### ***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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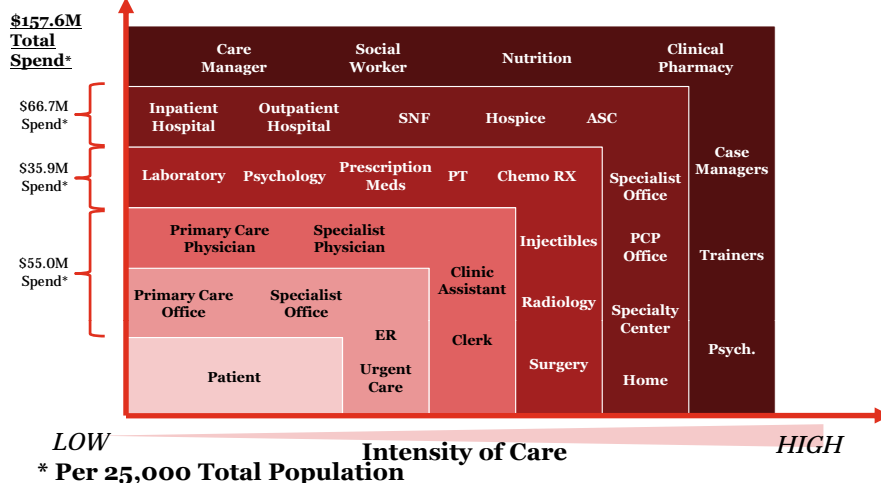
## **Section 2**

### ***Funds Flow and Finance Models: The Nut and the Split***

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Section 2 – Funds Flow and Finance Models

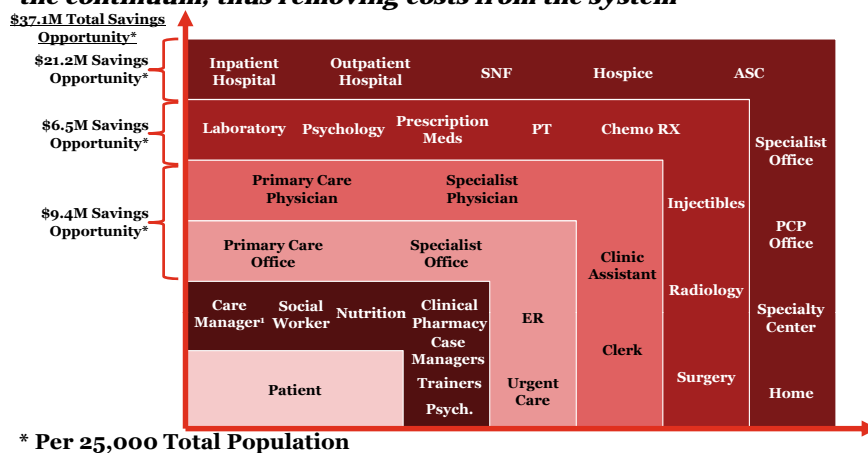
**Current FFS payment models do not support appropriate levels of care coordination, which are key to mitigating expenditures...**



Source: The Thomson Reuters 2010 Commercial and Medicare MarketScan® databases, PwC Analysis Commercial and Medicare FFS Spend per 25,000 Total Patient Population  
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Section 2 – Funds Flow and Finance Models

**...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**

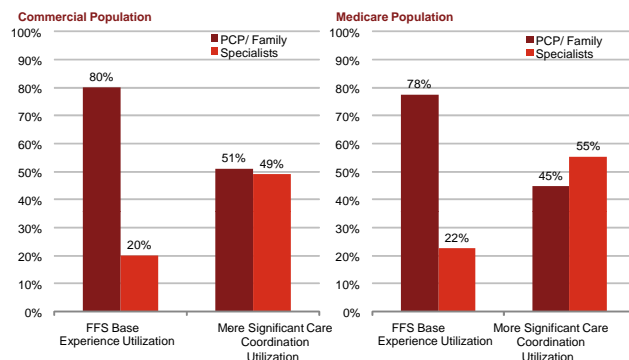


\*Cost savings opportunity associated with moving from the FFS baseline experience in a less managed care environment to FFS allowed under a more highly managed care environment  
\*Repositioning of interdisciplinary care team to manage patient's care across settings and to ensure that the patient receives the right level of care at the right time  
Source: The Thomson Reuters 2010 Commercial and Medicare MarketScan® databases, PwC Analysis Commercial and Medicare FFS Spend per 25,000 Total Patient Population  
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### ***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/ Family vs. Specialist Visits per 1k Patients Across Care Delivery Environments**



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

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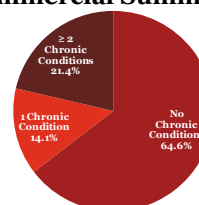
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### ***Care management needs vary across a population due to the diversity of health profiles (per 25,000 lives)***

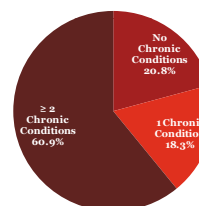
The Medicare population has a significantly higher rates of chronic disease vs. the commercial population

Population	% of Pop.	Population with only 1 Chronic Condition	Population with ≥ 2 Chronic Conditions
<b>Total Commercial Lives</b>		<b>14.1%</b>	<b>21.4%</b>
<b>Commercial Chronic Conditions:</b>			
Asthma (ASTH)	4.1%	56.0%	44.0%
Congestive Heart Failure (CHF)	0.1%	11.2%	88.8%
COPD	0.3%	35.0%	65.0%
Coronary Artery Disease (CAD)	0.5%	8.5%	91.5%
Depression Adult + Pediatric (DEP)	3.2%	48.0%	52.0%
Diabetes (DM)	3.3%	18.9%	81.1%
Hypertlipidemia (HL)	13.3%	34.4%	65.6%
Hypertension (HT)	10.8%	29.5%	70.5%
Low Back Pain (LBP)	3.4%	49.7%	50.3%
<b>Total Medicare Lives</b>		<b>18.3%</b>	<b>60.9%</b>
<b>FFS Medicare with Chronic Conditions:</b>			
Asthma (ASTH)	1.0%	10.0%	90.0%
Congestive Heart Failure (CHF)	0.7%	4.7%	95.3%
COPD	5.9%	10.0%	90.0%
Coronary Artery Disease (CAD)	2.9%	7.3%	92.7%
Depression Adult + Pediatric (DEP)	3.7%	9.2%	90.8%
Diabetes (DM)	10.0%	12.2%	87.8%
Hypertlipidemia (HL)	28.6%	15.3%	84.7%
Hypertension (HT)	44.6%	24.0%	76.0%
Low Back Pain (LBP)	5.2%	13.7%	86.3%

#### **Commercial Summary**



#### **Medicare Summary**



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

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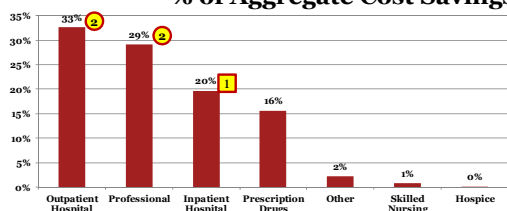
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Section 2 – Funds Flow and Finance Models

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

Service Category	Baseline Data		FFS Allowed Utilization & Amounts			FFS Allowed Utilization & Amounts More significant care coordination			PMPM Change
	Unit	Amount	Utilization / Units	PMPM	Aggregate (\$\$ in M)	Utilization / Units	PMPM	Aggregate (\$\$ in M)	
Inpatient Hospital	Admits Per 1K	\$15,318 per admit	69	\$ 87.57	\$ 244.1	50	\$ 64.23	\$ 179.0	\$ 23.33
Skilled Nursing	Days Per 1K	\$61 per diem	240	\$ 1.23	\$ 3.4	57	\$ 0.29	\$ 0.8	\$ 0.94
Hospice	Days Per 1K	\$216 per diem	12	\$ 0.22	\$ 0.6	6	\$ 0.12	\$ 0.3	\$ 0.10
Outpatient Hospital	Visits Per 1K		775	\$ 91.45	\$ 254.9	390	\$ 52.59	\$ 146.6	\$ 38.86
Professional				\$ 160.96	\$ 448.6		\$ 126.34	\$ 352.1	\$ 34.61
Other				\$ 7.34	\$ 20.5		\$ 4.66	\$ 13.0	\$ 2.68
Prescription Drugs	Scripts Per 1K		11,343	\$ 94.10	\$ 262.27	10,354	\$ 75.61	\$ 210.7	\$ 18.49
<b>Total Health Care Services Cost</b>				<b>\$ 443</b>	<b>\$ 1,234.3</b>		<b>\$ 324</b>	<b>\$ 902.6</b>	
Savings \$\$							\$ 119.02	\$ 331.7	
Savings %							26.9%	26.9%	

#### % of Aggregate Cost Savings



- 80% of the avoidable costs for the commercial population is outside the inpatient setting
- 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® databases

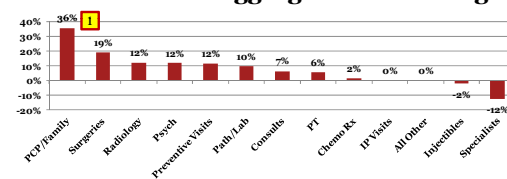
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Section 2 – Funds Flow and Finance Models

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

Service Category	Baseline Data		FFS Allowed Utilization & Amounts			FFS Allowed Utilization & Amounts More significant care coordination			PMPM Change
	Unit	Amount	Utilization / Units	PMPM	Aggregate (\$\$ in M)	Utilization / Units	PMPM	Aggregate (\$\$ in M)	
Office Visits - PCP/Family	Visits Per 1K	\$94 per visit	2,933	\$ 22.87	\$ 63.7	1,343	\$ 10.47	\$ 29.2	\$ 12.40
Office Visits - Specialists	Visits Per 1K	\$83 per visit	733	\$ 5.70	\$ 15.9	1,285	\$ 10.00	\$ 27.9	\$ (4.30)
Consults	Visits Per 1K	\$200 per visit	272	\$ 4.73	\$ 13.2	141	\$ 2.44	\$ 6.8	\$ 2.29
Preventive Visits	Visits Per 1K	\$112 per visit	1,075	\$ 10.00	\$ 27.9	641	\$ 5.96	\$ 16.6	\$ 4.03
IP Visits	Visits Per 1K	\$127 per visit	27	\$ 0.29	\$ 0.8	25	\$ 0.26	\$ 0.7	\$ 0.02
Surgeries	Visits Per 1K	\$179 per visit	1,549	\$ 23.10	\$ 64.4	1,105	\$ 16.47	\$ 45.9	\$ 6.62
Path/Lab	Procedures Per 1K	\$23 per procedure	6,081	\$ 11.65	\$ 32.5	4,330	\$ 8.29	\$ 23.1	\$ 3.35
Radiology	Procedures Per 1K	\$120 per procedure	1,359	\$ 13.56	\$ 37.8	938	\$ 9.36	\$ 28.1	\$ 4.20
Injectibles	Procedures Per 1K	\$274 per procedure	286	\$ 6.52	\$ 18.2	314	\$ 7.15	\$ 19.9	\$ (0.64)
Chemo Rx	Procedures Per 1K	\$1,159 per procedure	37	\$ 3.57	\$ 9.9	31	\$ 3.00	\$ 8.4	\$ 0.56
Psych	Visits Per 1K	\$89 per visit	1,102	\$ 8.17	\$ 22.8	543	\$ 4.03	\$ 11.2	\$ 4.14
PT	Visits Per 1K	\$33 per visit	2,483	\$ 6.84	\$ 19.1	1,783	\$ 4.91	\$ 13.7	\$ 1.93
All Other				\$ 43.98	\$ 122.6	0	\$ 43.98	\$ 122.6	\$ -
<b>Total Professional</b>				<b>\$ 160.96</b>	<b>\$ 448.6</b>		<b>\$ 126.34</b>	<b>\$ 352.1</b>	
Savings \$\$							\$ 96.5	\$ 96.5	
Savings %							21.5%	21.5%	

#### % of Aggregate Cost Savings



- There is a \$96.5M cost reduction potential to the FFS commercial population by properly coordinating patient care across all professional service sites. However:

- 36% of the savings is attributed to fewer PCP/Family visits
- Specialist visit costs will increase by \$12 M to manage more complex cases

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

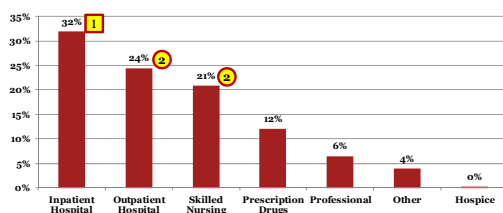
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Section 2 – Funds Flow and Finance Models

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

Service Category	Baseline Data		FFS Allowed Utilization & Amounts			FFS Allowed Utilization & Amounts More significant care coordination			PMPM Change
	Unit	Amount	Utilization / Units	PMPM	Aggregate (\$\$ in M)	Utilization / Units	PMPM	Aggregate (\$\$ in M)	
Inpatient Hospital	Admits Per 1K	\$14,248 per admit	238	\$ 282.27	\$ 118.1	194	\$ 232.10	\$ 97.1	\$ 50.17
Skilled Nursing	Days Per 1K	\$317 per diem	2,675	\$ 70.71	\$ 29.6	1,441	\$ 38.08	\$ 15.9	\$ 32.62
Hospice	Days Per 1K	\$228 per diem	39	\$ 0.73	\$ 0.3	17	\$ 0.32	\$ 0.1	\$ 0.41
Outpatient Hospital	Visits Per 1K		1,134	\$ 148.28	\$ 62.0	822	\$ 109.92	\$ 46.0	\$ 38.36
Professional				\$ 333.03	\$ 139.3		\$ 322.84	\$ 135.0	\$ 10.19
Other				\$ 19.71	\$ 8.2		\$ 13.43	\$ 5.6	\$ 6.28
Prescription Drugs	Scripts Per 1K		26,227	\$ 221.71	\$ 92.74	27,318	\$ 202.82	\$ 84.84	\$ 18.88
<b>Total Health Care Services Cost</b>				<b>\$ 1,076</b>	<b>\$ 450.3</b>		<b>\$ 920</b>	<b>\$ 384.6</b>	
Savings \$\$							\$ 156.92	\$ 65.6	
Savings %							14.6%	14.6%	

#### % of Aggregate Cost Savings



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

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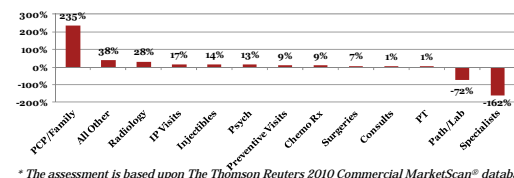
- 1 68% of the avoidable costs for the commercial population is outside the inpatient setting
- 2 Properly implementing protocols to avoid skilled nursing and outpatient hospital services can account for 45% of the potential cost reduction for the FFS Medicare population

Section 2 – Funds Flow and Finance Models

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

Service Category	Baseline Data		FFS Allowed Utilization & Amounts			FFS Allowed Utilization & Amounts More significant care coordination			PMPM Change
	Unit	Amount	Utilization / Units	PMPM	Aggregate (\$\$ in M)	Utilization / Units	PMPM	Aggregate (\$\$ in M)	
Office Visits - PCP/Family	Visits Per 1K	\$94 per visit	6,285	\$ 49.16	\$ 20.6	3,227	\$ 25.24	\$ 10.6	\$ 23.92
Office Visits - Specialists	Visits Per 1K	\$91 per visit	1,824	\$ 13.87	\$ 5.8	3,993	\$ 30.35	\$ 12.7	\$ (16.48)
Consults	Visits Per 1K	\$214 per visit	60	\$ 1.06	\$ 0.4	54	\$ 0.96	\$ 0.4	\$ 0.10
Preventive Visits	Visits Per 1K	\$118 per visit	289	\$ 2.84	\$ 1.2	194	\$ 1.90	\$ 0.8	\$ 0.94
IP Visits	Visits Per 1K	\$108 per visit	969	\$ 8.72	\$ 3.6	781	\$ 7.03	\$ 2.9	\$ 1.69
Surgeries	Visits Per 1K	\$153 per visit	3,772	\$ 48.07	\$ 20.1	3,716	\$ 47.35	\$ 19.8	\$ 0.72
Path/Lab	Procedures Per 1K	\$35 per procedure	3,525	\$ 10.32	\$ 4.3	6,045	\$ 17.69	\$ 7.4	\$ (7.37)
Radiology	Procedures Per 1K	\$99 per procedure	3,251	\$ 26.74	\$ 11.2	2,899	\$ 23.85	\$ 10.0	\$ 2.90
Injectibles	Procedures Per 1K	\$209 per procedure	1,165	\$ 20.25	\$ 8.5	1,081	\$ 18.70	\$ 7.9	\$ 1.46
Chemo Rx	Procedures Per 1K	\$1,109 per procedure	157	\$ 14.56	\$ 6.1	148	\$ 13.64	\$ 5.7	\$ 0.92
Psych	Visits Per 1K	\$95 per visit	493	\$ 3.92	\$ 1.6	325	\$ 2.59	\$ 1.1	\$ 1.34
PT	Visits Per 1K	\$42 per visit	2,948	\$ 10.33	\$ 4.3	2,930	\$ 10.26	\$ 4.3	\$ 0.06
All Other				\$ 123.17	\$ 51.5		\$ 123.17	\$ 51.5	\$ -
<b>Total Professional</b>				<b>\$ 333.03</b>	<b>\$ 139.3</b>	<b>0</b>	<b>\$ 322.84</b>	<b>\$ 135.0</b>	
Savings \$\$							\$ 4.3	\$ 4.3	
Savings %								3.1%	

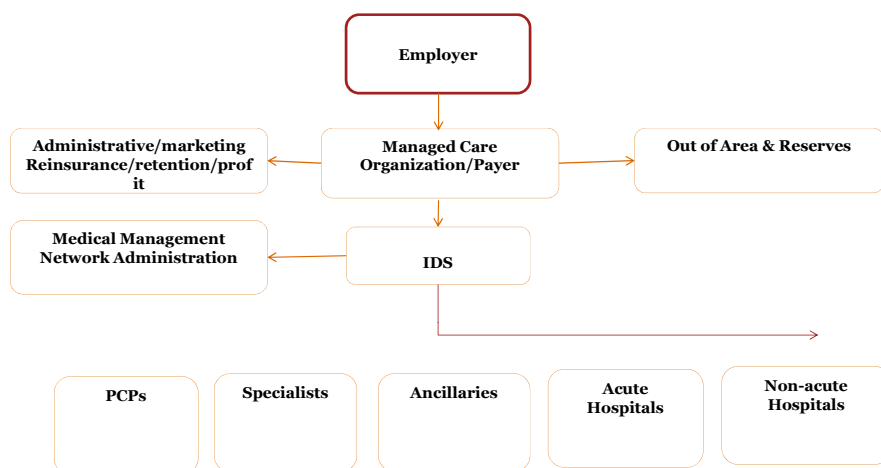
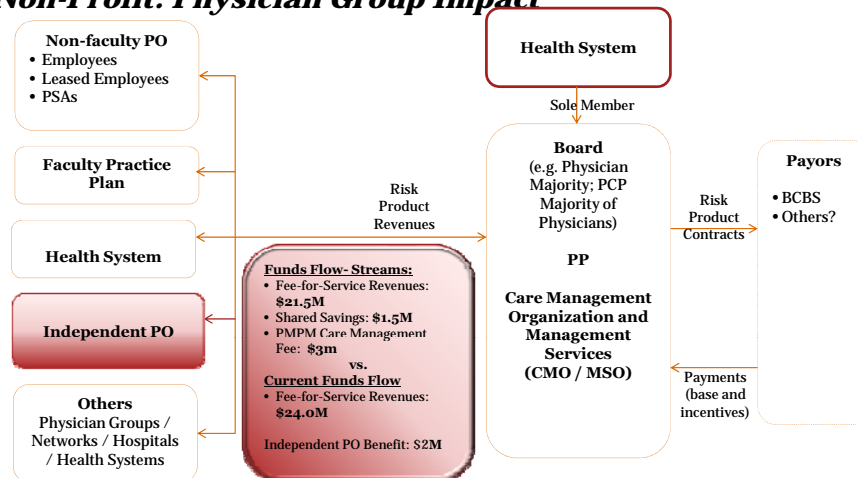
#### % of Aggregate Cost Savings



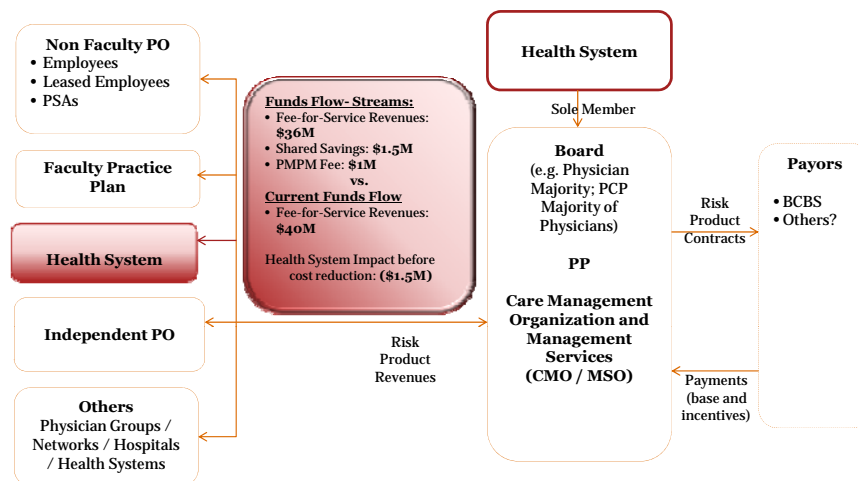
\* The assessment is based upon The Thomson Reuters 2010 Commercial MarketScan® databases

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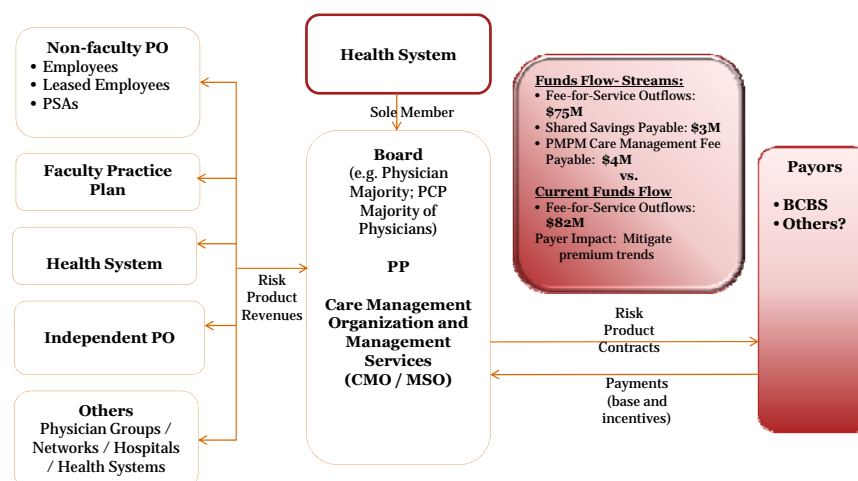
1. To properly manage the Medicare population, primary care organizations will have to fundamentally change how they coordinate their patient care:
  - 1 PCP / Family visits / costs will decrease by 50%
  - 2 Specialty visits / costs will increase by more than 100%
2. Providers may increase utilization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

**Example Funds Flow from Employer to Provider****Non-Profit: Physician Group Impact**

### Non-Profit: Health System Impact



### Non-Profit: Payer Impact





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***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**

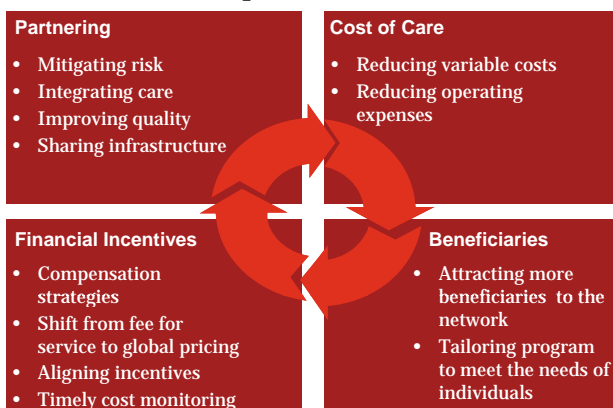
**Identify Key Success Factors**

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

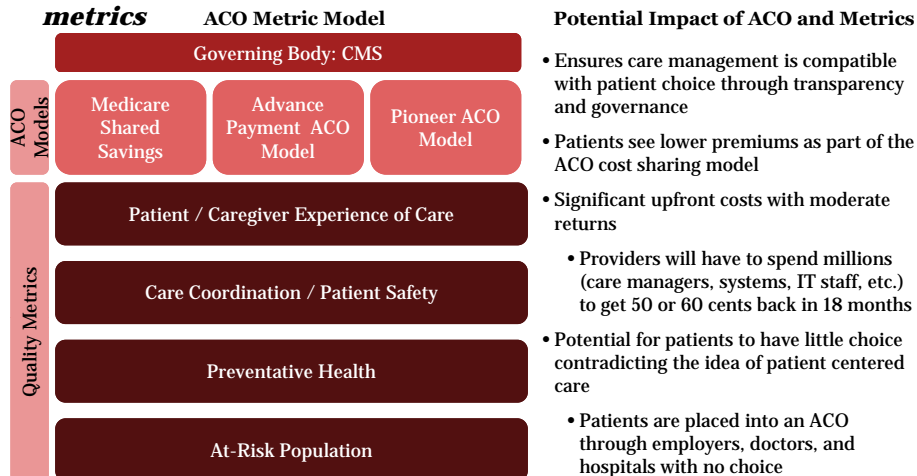
### **ACO Adoption Considerations**



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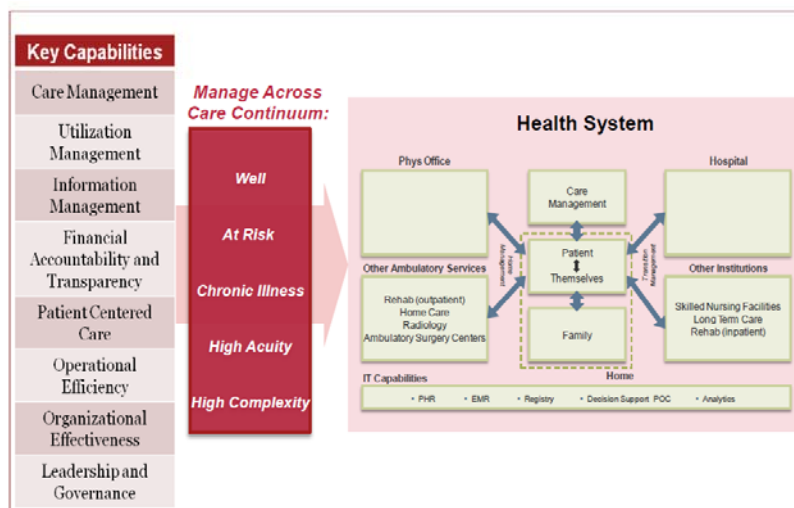
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***Adopting an ACO model can have immediate upfront costs but long term improvement in quality of care through use of metrics***



Source: PwC analysis; Wall Street Journal interviews with Donald Berwick, Former CMS Administrator, Tom Scully, Partner at Welsh Carson Anderson & Stowe, and Jeff Goldsmith, Preside of Health Futures  
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***Developing population health management capabilities is a critical element in the transformation journey.***



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## ***Objectives – It Takes a Village***

Define ACO Quality Metrics

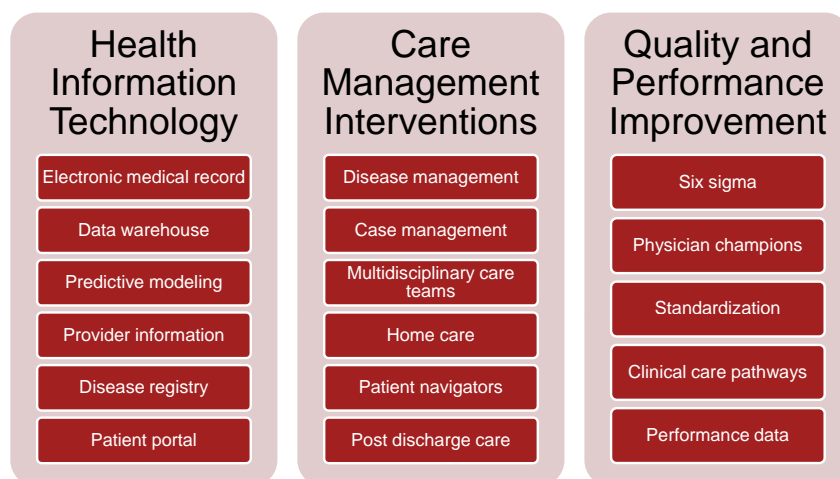
Describe Care Management Models

Identify Key Success Factors

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



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***Payers and providers have leveraged quality metrics to identify key improvements in care***



PwC \*Case Study Hospitals: Billings Clinic, Dartmouth Clinic, The Everett Clinic, Forsyth Medical Group, Geisinger Health System, Marshfield Clinic, Middlesex Health System, Park Nicollet Health Services, St. John Health System, Univ. of MI Faculty Group Practice

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***Majority of payers and providers have seen improvement in quality outcomes through risk sharing models***

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

PwC \*Case study is comprised of 10 hospitals  
Source: PwC analysis

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PCG CC PH AR

### ***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**

- Issued Gaps in Care reports
- Implemented "Best Practice Guidelines"
- Clinical work flow redesign
- Maintained Disease Registries

#### **Return on Investment**

Earnings over the 5 year demonstrate:

- MSPGPs earned a collective \$107.5 million in performance payments
- Medicare savings totalled \$134 million

#### **Impact Achieved**

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

- 11% on diabetes measures
- 9% on cancer screening measures
- 12% on heart failure measures
- 4% on hypertension measures
- 6% on coronary artery disease measures

PwC Source: CMS Medicare Physician Group Practice Demonstration, July 2011

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### ***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

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**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%)

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

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**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%)

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

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### ***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

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### ***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

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### ***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**

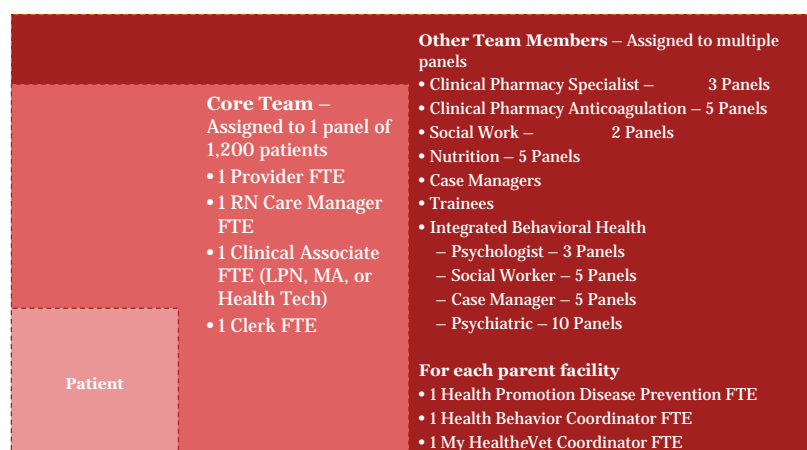
- **Lower rates** of hospitalization and readmission
- **19% lower** risk-adjusted hospital days per enrollee
- **7% higher** risk-adjusted physician office visits c

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Source: HEALTH AFFAIRS 31, NO. 1 (2012): – ©2012 Project HOPE— The People-to-People Health Foundation, Inc.

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



\*Panel size of 1,200 patients

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

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## ***Objectives – It Takes a Village***

**Define ACO Quality Metrics**

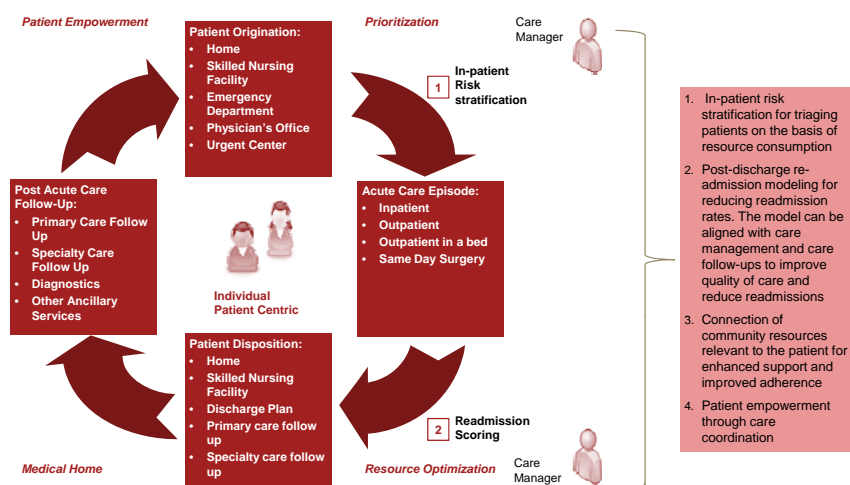
**Describe Care Management Models**

**Identify Key Success Factors**

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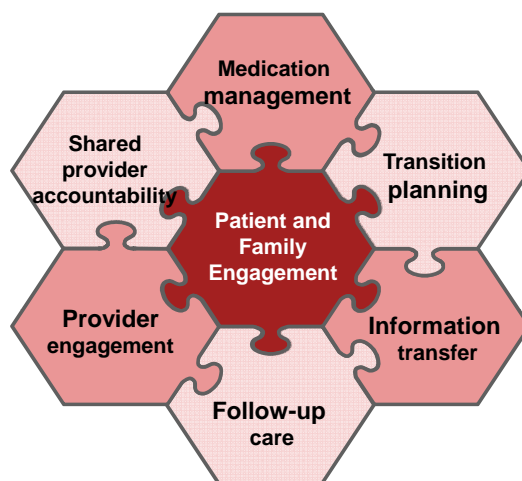
## ***The design of successful care management models***



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***Patient and family engagement are the cornerstone of successful care management model***



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***Core attributes of care management models(1 of 2)***

Attribute	Description	Actions
Patient and family engagement	<ul style="list-style-type: none"> <li>Education and counseling of patients and families to enhance their active participation in their own care including informed decision making</li> </ul>	<ul style="list-style-type: none"> <li>Patients and families/caregivers are knowledgeable about condition and plan of care</li> <li>Patient and family-centered transition communication</li> <li>Development of self-care management skills</li> </ul>
Medication management	<ul style="list-style-type: none"> <li>Ensures the safe use of medications by patients and their families and based on patients' plans of care</li> </ul>	<ul style="list-style-type: none"> <li>Assessment of patient's medications intake</li> <li>Patient and family education and counseling about medications</li> <li>Development and implementation of a plan for medications management as part of the patient's overall plan of care</li> </ul>
Transition planning	<ul style="list-style-type: none"> <li>Facilitates the safe transition of patients from one level of care to another including home or from one practitioner to another</li> </ul>	<ul style="list-style-type: none"> <li>Clearly identify practitioner or care team member to facilitate/coordinate the patient's transition plan</li> <li>Management of patient and family transition needs</li> <li>Use of formal transition planning tools</li> <li>Completion of a transition summary</li> </ul>
Information transfer	<ul style="list-style-type: none"> <li>Shares important care information among patient, family, caregiver and healthcare providers in a timely and effective manner</li> </ul>	<ul style="list-style-type: none"> <li>Implementation of clearly defined communication models</li> <li>Use of formal communication tools</li> <li>Clearly identified practitioner to facilitate timely transfer of important information</li> </ul>

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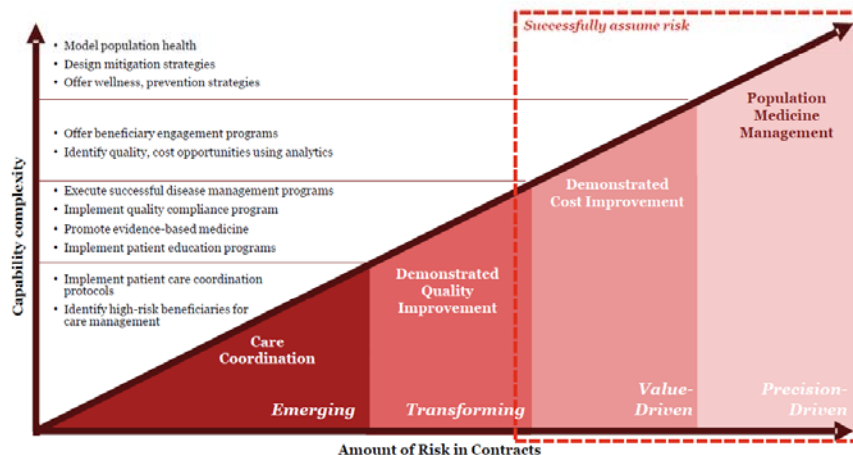
### ***Core attributes of care transition interventions (2 of 2)***

Attribute	Description	Actions
Follow-up care	<ul style="list-style-type: none"> <li>Facilitates the safe transition of patients from one level of care or provider to another through effective follow-up care activities</li> </ul>	<ul style="list-style-type: none"> <li>Patients and families timely access to key healthcare providers after an episode of care as required by patient's condition and needs</li> <li>Communicating with patients and/or families and other healthcare providers post transition from an episode of care</li> </ul>
Provider engagement	<ul style="list-style-type: none"> <li>Demonstrates ownership, responsibility and accountability for the care of the patient and family/caregiver at all times</li> </ul>	<ul style="list-style-type: none"> <li>Clearly identified patient's personal physician (primary care provider)</li> <li>Use of nationally recognized practice guidelines (evidence-based guidelines)</li> <li>Patient and family education and counseling activities</li> <li>Open and timely communication among healthcare providers, patients and families</li> <li>Hub of care management activities</li> </ul>
Shared accountability across providers and organizations	<ul style="list-style-type: none"> <li>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</li> </ul>	<ul style="list-style-type: none"> <li>Clear and timely communication of the patient's plan of care</li> <li>Ensuring that a healthcare provider is responsible for the care of the patient at all times</li> <li>Assuming responsibility for the outcomes of the care transition process by both the provider (or organization) sending and the one receiving the patient</li> </ul>

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### ***Success in Care Delivery Transformation requires development of increasing complex capabilities***



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***Questions***

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