

# How to Design, Structure and Pilot Value-Based Care Delivery Systems and Payment Models



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Presented by:

pmpm<sup>®</sup> Consulting Group Inc.  
1900 Point West Way, Suite 111  
Sacramento, CA 95815  
(916) 565-6130  
[info@pmpm.com](mailto:info@pmpm.com)



CONSULTING GROUP INC.

# Today's Agenda



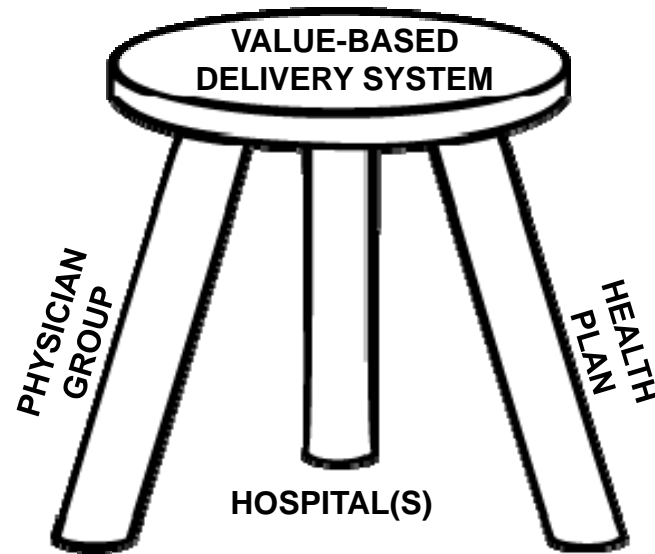
- Value-based episodes of care and medical home payment models
- Implementation process for pilot project
- Question and answer session

# Setting the Stage



**Karen F. Taranto**  
- Principal -

# Setting the Stage



# Setting the Stage



- Reform objective
- Variation in costs without quality/outcome differences
- Likely reforms based on value purchasing; bundled payments; quality/outcomes assessments
- Industry recognizes need change
- “Triple aim” of reform, per Don Berwick is to:
  - “Produce simultaneous improvement of the individual experience of care”
  - “Improvement of the health of populations”
  - “Reduction in per capita costs of health care”

# Setting the Stage



- Challenge—identify changes that will:
  - Demonstrate improved outcomes/cost effectiveness
  - Offer value-based payment model(s)
  - Account for variations

# Setting the Stage



- Retain/grow commercial base: collaboration
- Move ahead to benefit early from reform
- Review key models that incentivize fundamental changes
- Focus on success stories

# Overview of Value-Based Purchasing Payment Reform Models

## Shared Savings or Gainsharing

- Determine cost per patient for high-cost diagnoses/conditions
- Share cost information
- Share savings in total cost
- Maintain/improve outcomes
- Builds on existing physician-patient relationship
- Straightforward; helps gain physician support
- Alters pay, not way patient accesses care
- Ambulatory care for chronic diseases; limited application

Example – CMS – PGP (Physician Group Practices Demonstration)

- Share of savings for managing care of population

# Overview of Value-Based Purchasing Payment Reform Models

## Narrow Network

- **Select group within large physician network**
- **Health plan, hospital, medical group venture**
- **Actual cost compared to expected cost**
- **Patients steered through lower cost**
- **Employers pressure use**
- **May serve as “medical home”**
- **Payment model varies**
- **Sharing savings through improved care management**

# Overview of Value-Based Purchasing Payment Reform Models

Sponsor	Program Name	Key Characteristic
➤ Aetna	➤ Aexcel	➤ Members use narrow network or pay differential to use three tiers of physicians
➤ PacifiCare	➤ Signature Value Advantage	➤ Patients using network pay 10% co-pay versus 30% outside network
➤ United Health Group	➤ UnitedHealth Premium	➤ Physicians receive increased fee schedule based on quality/cost ratings
➤ Blue Cross of CA	➤ Power Select HMO	➤ 30% of physicians comprise network; accept lower fees to belong
➤ Premera Blue Cross, WA	➤ Premera Dimensions	➤ Four tiers in network; cost-effectiveness sole criterion for selection to network
➤ Blue Cross Blue Shield, TX	➤ BlueChoice Solutions	➤ Lower premiums and higher benefit levels in narrow network
➤ Humana	➤ Smartnet	➤ Higher deductibles and co-pays outside of narrow network
➤ CIGNA Healthcare	➤ CIGNA Care Network	➤ Estimate differential of \$10/\$30 per office visit outside of narrow network
➤ HealthPartners	➤ Distinctions	➤ Three-tiered network with tier one having lowest co-pays
➤ CalPERS/Blue Shield		➤ Initiated California's first narrow network
➤ Hill Physicians/CHW/Blue Shield	➤ NetValue	➤ Entities at financial risk if cost reduction goals fall short in this pilot program

# Overview of Value-Based Purchasing Payment Reform Models

## Global Payments

- Capitation: all-inclusive payment for defined services regardless of care provided
- Ongoing performance measures/reporting to counter under-utilization

### Example - BC/BS of Massachusetts

- Health status-adjusted global payment; performance incentives

# Overview of Value-Based Purchasing Payment Reform Models

## Bundling of Payments for Episodes-of-Care

- All services associated with episode of care are “bundled”
- Single payment based on resources needed
- Care consistent with clinical guidelines

### Example – Evidence Informed Case Rates

#### **Prometheus – (ECR)**

- Rate specifies clinical practice for diagnosis; aggregates costs; includes severity adjustment
- Determines what science should treat clinical profile; not solely current patterns of care
- Covers 50% of healthcare expense; simple conditions, rare diseases remain fee-for-service
- 10% withhold from physicians for chronic care; 20% for acute care
- Scorecard monitors clinical process/outcomes; patient experience; cost-efficiency
- Half paid for proven good quality (services correlated with CPG; outcome)
- Must meet quality to be considered for efficiency bonus
- Compared based on utilization to gain efficiency bonus
- Criticism: exclusive reliance on CPGs
- Difficult to implement; developers providing access to software, Scorecard, ECRs

# Overview of Value-Based Purchasing Payment Reform Models

## Example – Chronic Disease and Specific Diagnoses Focused

### Geisinger – ProvenCare

#### Entity Overview – Succeeding by executing organizational change:

- Transforming using insurance product (Geisinger Health Plan) and clinical delivery system
- Regional electronic health information sharing platform used by 10 hospitals and 700 private practices; Geisinger physicians and non-Geisinger caregivers access information 24/7
- Nearly 800 employed physicians; more than 40 sites; admit to 15 local hospitals, admit to Geisinger's three specialty hospitals only when necessary

#### Acute Episodic Care Program (“The Warranty”) – ProvenCare

- Translating CPGs into best practice; hardwired into EHR; document reason for exception
- Rate includes preop, surgery, inpatient stay, 90-days follow up, associated complications and treatment

#### Chronic Disease – ProvenCare (“Bundled” Care)

- Applied evidence/consensus-based best practice to chronic diseases
- Designed each best practice into care pathways
- Primary caregivers have chosen pay based on how many diabetic patients reach optimal levels

# Overview of Value-Based Purchasing Payment Reform Models

## Comprehensive Payment for Comprehensive Care – Medical Home

- Entity paid to take responsibility for providing/coordinating care
- PCPs (or specialists) provide care AND coordinate other clinical/non-physician personnel
- Care team creates plan with patients/families
- Adopts/implements health information technology
- Face-to-face visits, telephone, email, other modes
- Evidence-based medicine and clinical decision support tools
- May replace FFS for PCP with capitation to cover salaries of team, infrastructure, other expenses
- Case management fee and P4P

# Overview of Value-Based Purchasing Payment Reform Models

## Comprehensive Payment for Comprehensive Care – Medical Home

Demonstrate proficiency in at least five NCQA metrics:

- Written standards for access and communications
- Use of paper-based or electronic charting tools to organize clinical information
- Adoption/implementation of evidence-based guidelines for three conditions
- Tracking system to test and identify abnormal results
- Tracking referrals with paper-based or electronic system
- Use of data to show this standard is met
- Use of data to identify patients with important diagnoses/conditions
- Active support of patient self-management
- Measurement of clinical and/or service performance by physicians or across a practice
- Reporting performance across the practice or by physician

AAFP cornerstones:

- Practice Organization
- Patient Experience
- Quality Measures
- Health IT

# Overview of Value-Based Purchasing Payment Reform Models

## Example

### Geisinger's ProvenHealth Navigator (Advanced Medical Home)

- 30,000 Medicare recipients and 3,000 commercial patients
- "Embedded" nurses, paid by Health Plan, part of community practice team;
- Physicians expected to know patient and family
- Team follows all care, help access specialists/social services, follow patient admitted to hospital, contact/see at home post-discharge re: medication dosages
- Use Geisinger's health plan to redesign work of community-based clinicians; pay incentives
- Payback to health plan first year through reduced admits/readmits

#### Other Examples:

- Group Health Insurance and Health Plan of New York (HIP) has also initiated this model

# Overview of Value-Based Purchasing Payment Reform Models

Example

## **CMS Medicare Medical Home Demonstration Project**

- Had planned 2010 initiation
- Test: better health; lower costs
- Not pursuing due to reform legislation
  
- Partner with existing multi-payer medical home pilots
- Advanced Primary Care Practice Demonstration
  
- HRSA and CMS co-launch three-year medical home demonstration in 2011 for FQHCs

# Overview of Value-Based Purchasing Payment Reform Models

## Comprehensive Payment for Comprehensive Care Accountable Care Organizations (ACOs)

- Accountability rests with entity comprised of primary care, specialists, at least one hospital;
- Share responsibility
- Could receive bonus or face lower payments
- Designed by Dr. Elliot Fischer of Dartmouth
  
- Can look different one from the other (physician-hospital association, integrated delivery system, academic medical center)
- **H.R. 3200** requires DHHS to pilot no later than January 1, 2012; test different payment incentive models
  - Legal structure; take risk
  - Sufficient PCPs
  - Only participating providers
  - Ability to report
  - Notify beneficiaries
  - Contribute to best practices network
  - Use patient centered processes
  
- Complement medical homes and bundling:
  - If responsible for all patients
  - Incentive to keep patients healthy; reduce admissions
  - Incentive to balance supply and demand
  
- Challenges:
  - Incentive to drop patients
  - How to determine bonuses/penalties?
  - How to set resource use targets?

# Overview of Value-Based Purchasing Payment Reform Models

## Example

### Dartmouth Medical School – Extended Hospital Staff

- Care coordinated; spans specialties and settings
- Redefines practice of medicine as hospital-associated multi-specialty group practice
- Defines physician's primary hospital
  - ✓ Bill most inpatient work;
  - ✓ No inpatient work, where most Medicare patients admitted
- Patients assigned to physician providing most outpatient care; then identified with physician's primary hospital
- Performance measures analyzed at level of extended hospital medical staff

## **Pulling It Together – October 27, 2009**

by Drew Altman, Ph.D.

President and CEO

The Henry J. Kaiser Family Foundation

### **The “Third School” for Controlling Health Care Costs?**

- One School: The Regulators – control total resources
- The Other School: The Marketeers – control cost through competition
- The Third School: The System Reformers – create a smarter health care system
  - Bend cost curve from inside out
  - Create smarter health care system: information base, new delivery models and payment incentives

# Clinical Modeling and Change



**Jerry Yucht, M.D.**  
- Physician Consultant -

# Clinical Modeling and Change



**The pendulum is constantly swinging: managing care <> managing costs.**

**We are now in an environment where it is necessary to do both.**

- New models of healthcare delivery
  - Revolve around patient centered medical home
  - Incorporate quality/outcome measures
  - Utilize IT systems/EHR
  - Foster collaboration among members of a team in both the inpatient and outpatient settings
  - Are value rather than service oriented
  - Include episodes of care

# Clinical Modeling and Change



**Patients and providers must make choices to effect positive changes in processes, outcomes, and costs.**

- Informed decisions by patients/providers about treatment options
- Patients may need to choose providers with better outcomes in order to save on premiums and out of pocket costs, and receive better care
- Providers need to apply evidence-based medicine to demonstrate improved quality, control costs, and maintain patient base

# Clinical Modeling and Change



**Outcomes are more challenging to identify and measure than are processes.**

- Short term: Reduced ER visits, hospital admissions and readmissions, days missed from work/school
- Intermediate Term: Blood pressure controlled, reduced use of rescue drugs for asthma, improved patient satisfaction with healthcare
- Long term: Reduced end-organ damage in diabetes, reduction in low birth weight infants, improved satisfaction with care at end of life

# Clinical Modeling and Change



## **Programs for commercially insured patients vs. Medicare population**

- Costs and services need to be analyzed to establish historical experience and quantify risk; maybe your patients really are sicker
- Back pain, colorectal cancer screening, chest pain, childhood immunizations, management of asthma, obstetrical care, obesity, etc.
- Emphasize successful programs to maximize marketing advantages: e.g.; early detection of colon cancers with fewer complications
- Extension of innovative patient care programs under CMS to commercial plans.

# New Models of Diabetes Care and Payment



## **Diabetes: Chronic, controllable**

- Many patients, high cost
- Chronic disease, many potential complications
- Controllable with early, aggressive care

# New Models of Diabetes Care and Payment



## Improved outcomes

- DCCT and UKPDS showed improved control and reduced complications
- Short term: Reduced hospital admissions and readmissions, ER visits, work-loss days
- Long term: Reduced incidence of microvascular damage, stroke, CHF

# New Models of Diabetes Care and Payment



## **Multidisciplinary care teams**

- Physicians, nurses, nutritionists, educators, pharmacists, social workers
- Provide ongoing, proactive services
- Difficult/impossible for solo or small practice to implement
- Only applicable to large, multispecialty groups

# New Models of Diabetes Care and Payment



## Medical Home

- Prominent among the new models of care delivery and payment
- Patients identified using administrative data
- Collaboration with payors and employers to provide incentives to patients to obtain all care through your medical group
- Need to have care within network to ensure compliance with program and to make quality measure and outcomes reliable
- MD visits, group visits, education materials provided to patients
- Records, scheduling available to patients through E-mail

# New Models of Diabetes Care and Payment



## Quality measures

- Use EMR to prompt evaluations and report results to team members
- At defined intervals: HcA1c, LDL, HDL, triglycerides, urine microalbumin, blood pressure, foot exams, dilated eye exam
- Reduced ER visits, inpatient hospital days
- Incorporate in payment method

# New Models of Diabetes Care and Payment



## Inpatient care

- Diabetics may need inpatient care
  - Despite best efforts of Care Team
  - Wide spectrum of diagnoses: Blood sugar out of control, sepsis, major cardiovascular disorder
  - Medical Home payment would include inpatient care

# New Models of Diabetes Care and Payment



## Episode of Care/Bundled Payments

- Single payment to cover all costs of inpatient care (physician and hospital)
- Analysis of historical costs for physicians and hospitals will require cooperation from hospitals and payors
- Similar to DRG system, but with payment to both physicians and hospitals
- Consider complications and co-morbidities, as do DRGs
- Consider re-admissions
- Hospital and physicians have incentive to perform better

# New Models of Diabetes Care and Payment



## Quality measures

- Must be part of payment calculation to improve outcomes while controlling costs
- Incorporate state-of-the-art quality measures as appropriate
- For diabetics: aggressive blood sugar control, fluid and renal status
- Timely performance of diagnostic and therapeutic procedures
- Prompt involvement of appropriate consultants
- Timely communication with care team at medical home to ensure smooth transition to outpatient care

# Gaining Physician Buy-In



**Gaining buy-in of physicians and their support staff is an integral component of launching any pilot study**

- This is achieved in part by:
  - Understanding their work flow and recognizing how change will impact what they do on a daily basis
  - Soliciting physicians as partners in the development of performance indicators
  - Aligning physicians' compensation in a meaningful way with the achievement of performance targets

# Design of Pilots Using an Example that Involves Combining Medical Home with Episode Case Rates



**Henry W. Zaretsky, Ph.D.**

- Health Economist -

Russ Foster

- Principal -

# General Description of Design, Goals and Objectives



- Agreement between medical group, hospital(s) and major payer(s) for provision of services based on episodes of care for selected diagnoses/condition modules
- Bundled payments should include hospital services (could possibly work without)
- Medical home nucleus of delivery model
- Plan members obtaining some primary care from medical group with specified conditions assigned for project's duration
- Medical group patients without these conditions could be assigned to project, if later diagnosed with applicable conditions

# General Description of Design, Goals and Objectives



## **Incentives for patients will include:**

- 1) Online access to medical record and primary care provider (i.e., medical home)
- 2) Knowledge that provider payments will be quality/outcome driven
- 3) A medical home; and
- 4) Knowledge that medical group delivery system is a “center of excellence” in treating their condition

# General Description of Design, Goals and Objectives



- For each selected condition, a base-line cost/utilization profile developed based on historical data
- Base-line includes all providers (physician, ancillary, pharmacy, hospital and post-hosp)
- Best practices treatment protocols developed from the best evidence-based findings available
- Evidence-based guidelines priced in terms of available data, including medical group's payment rates, hospital's payment rates, percentages of billed charges or Medicare rates

# General Description of Design, Goals and Objectives



- For selected conditions, bundled payment rates will be negotiated with health plan
- Rates will include bonuses based on various quality and outcome metrics
- Base-line data is an essential “denominator” for comparison purposes

## **Steps:**

1. Develop base-line data
2. Analyze data and select conditions
3. Assess Risk
4. “Price” the bundled service
5. Implement pilot

# Develop Base-Line Database



- Compile historical data on total health care utilization and costs across all providers (professional, ancillary, pharmacy, hospital and post-hospital) for calendar-year 2009
- Demographic, socioeconomic (to extent available), diagnostic, procedure and outcomes data included
- If historical data can be risk-adjusted, all the better.

# Develop Base-Line Database



- Plan members included in database will be those that, during 2009, obtained their primary care through medical group
- Members should reside in defined geographic area(s)
  - For non-medical group providers, costs will be estimated through, for example, percentage of billed charges or Medicare rates
  - If the latter is adopted, medical group rates will also be priced in terms of Medicare and a multiplier(s) applied later

# Analysis of Historical Data



- Develop utilization and cost profiles for entire episodes of treatment for various diagnoses
- If episodes are not self-contained within CY 2009, select patient-specific time periods beginning with their first PCP visit during 2008
- Profiles include averages, ranges, other statistical measures; broken out by patient demographics, types of providers, available quality indicators and outcomes
- Exclude events not relevant to episode

# Analysis of Historical Data



- After this information is analyzed, select diagnoses to form bases for pilots
- Analysis establishes base-line of utilization, costs, outcomes to compare against pilot results
- This base-line would be useful in itself, **even if the process stops there, in terms of assessing current delivery system**

# Assess Risk



- The objective is to be reasonably confident that the group is able to manage risk.
- Requires appropriate risk adjustments to fairly match projected costs and revenues.
- Geisinger's Provencare case rate for CABG was based on:
  - 1) The projected cost of routine services, and
  - 2) One-half of the average historical cost for treating complications
- Geisinger accepted fixed reimbursement, assumed risk of complications, and was provided protection for outliers

# Assess Risk

**Once a detailed analysis is made of current practice patterns and related costs relevant to a given diagnosis/condition/process, then the full risk assessment would include:**

- Determining what care delivery change interventions are necessary to
  - Implement a treatment protocol
  - Institute a care management system (e.g., medical home)
- Quantifying any new cost implications of these interventions to identify what can be achieved
- Determining what utilization and/or cost reductions are necessary to match expected revenues and reduce risk

# Price the Bundled Service



- Select 2-5 conditions in historical database
- Develop treatment guidelines (across all providers) based on evidence-based, best practices criteria
- Guidelines could be based on medical group experience, Medicare, Institute for Clinical Systems Improvement, Geisinger, Prometheus, and other respected sources
- Price the guidelines in terms of projected costs and acceptable risk
- Price the medical home
- Negotiate bundled payment

# Implement Pilot



- Establish a monitoring system to measure and track costs, revenues, outcomes on at frequent intervals
- Compare results to base-line in terms of cost, utilization, outcomes and quality, controlling for patient demographics and other variables not influenced by the providers (i.e., valid, rigorous statistical tests)
- Thus, in designing the process every effort should be made to assure sufficient data and controls to enable meaningful evaluation.
- To demonstrate value to payers and patients, two key results are essential:

# Implement Pilot



1. Increased value per dollar spent, in terms of greater effectiveness through
  - reduced ER use
  - Reduced inpatient use, including readmissions
  - Better outcomes
  - Use of evidence-based medicine
2. Reduced sick days and work-loss days attributed to better care

## Estimated Annual Cost of Managing a Type 2 Diabetes Patient with no Complications at Medicare Payment Rates\*

E/M Services	Units/Year	Total Annual Cost
MD/nurse visit, initial	1	\$114.15
MD/nurse visit, follow-up	3	\$187.89
Self-mgmt. Education	10	\$210.60
Medical nutrition therapy, initial	1	\$24.72
Medical nutrition therapy, follow-up	2	\$43.92
Multidisciplinary team conference	4	\$132.72
Dilated eye exam	1	\$75.37
Dental exam	1	\$100.00
Other potential team (e.g., pharmacist, psychologist) estimate	1	\$100.00

Laboratory	Units/Year	Total Annual Cost
HgA1C	3	\$40.65
Lipid profile	1	\$15.73
Serum creatinine	1	\$7.16
Urinalysis for protein	1	\$3.57
Urine for microalbumin	1	\$6.39

Immunizations	Units/Year	Total Annual Cost
Pneumococcal Immunization**	0.03	\$0.63
Pneumococcal vaccine**	0.03	\$0.99
Influenza vaccination	1	\$19.02
Influenza vaccine	1	\$13.22

**Total Cost** **\$1,096.74**

\*Based on Appendix 4, Team Care: Comprehensive Lifetime Management for Diabetes, National Institutes of Health and the Centers for Disease Control and Prevention, 2001.

\*\*One-time, assumes 30-year life expectancy from date of diagnosis.

## If Hospitalization is Included\*

	Discharges per 1,000 Diabetics	LOS	PD/1000	Cost per 1000 @ \$2,800 Per PD	Cost per Diabetic
1st Listed Dx	35.9	4.7	169	\$472,444	\$472
Any Listed Dx	321.0	4.9	1,573	\$4,404,120	\$4,404
Midpoint	178.5	4.8	857	\$2,398,368	\$2,398

Sources: Discharge rates and length of stay, CDC 2005.  
Sutter General per diem Medicare reimbursement, OSHPD 2007.

\* Not based on normative guidelines, but on actual national utilization.

# Getting Started



**Karen F. Taranto**  
- Principal -

