TRANSFORMING TO POPULATION HEALTH
Achieving accountable, high-quality, cost-effective care for the patients we serve

BQA
Transforming Population Health

Cliff Fullerton, MD, MS, FAAFP
Chief Medical Officer BQA
VP Chronic Disease and Care Redesign BHCS
Today’s Update

- Population Health
- BQA Update
- Our Approach to Population Care
- Early Results

What is Population Health?

“The health outcomes of a group of individuals, including the distribution of such outcomes within the group”

What We Know
What is Driving Our Agenda?

Value

Value = Quality (+Access)
Cost

The New Game of Health Care

First-Curve to Second-Curve Markets
How will health systems successfully navigate the shift from first-curve to second-curve economics?

Volume-Based First Curve
Fee-for-service reimbursement
High quality not rewarded
No shared financial risk
Acute inpatient hospital
IT investment incentives not seen by hospital
Stand-alone care systems can thrive

Value-Based Second Curve
Payment rewards population value: quality and efficiency
Quality impacts reimbursement
Partnerships with shared risk
IT critical for population health management
Realigned incentives, encouraged coordination

The Future of the Healthcare Marketplace: Playing the New Game, Ian Morrison, PhD
What is the Top Priority?

Walmart Upping the Ante on Population Health

Moving beyond retail clinics

Potential Evolution of Health Care Products

Scope of Services

<table>
<thead>
<tr>
<th>Basic Retail Clinic</th>
<th>Full Primary Care</th>
<th>Health Insurance Exchange</th>
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“That’s where we are going now. Full primary care services in five to seven years.”

Vice President Health and Wellness Payer Relations

4,600+
Number of Walmart stores in the United States

4.2 Miles
Median distance between a residence and Walmart

33%
Estimated portion of US population that visits Walmart every week

Source: The Advisory Board Company, in
And not only Walmart….

**Walgreens**
- Phase 1 Locations Identified
- PCP oversight and staffing agreed
- Physician planning meeting completed
- Walgreen clinics to be included in-network for BHCS Employee Health Plan

**CVS**
- Collaboration Agreement Proposal received
- Agreement parameters are currently in “active discussion”

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**Empowered Consumers**

**What is Reference Pricing?**

*The Calpers Story*
- Reference pricing is a shift away from copays and deductibles
- The focus is on reducing the price paid by the insurer
- The insurer tells the enrollee the price it will pay for a given procedure or diagnostic. Any price difference will have to be paid by the enrollee

**Hospital A:**
- Total Hip Price: $30,000
- Out of Pocket Cost to Enrollee: $0

**Hospital B:**
- Total Hip Price: $42,000
- Out of Pocket Cost to Enrollee: $12,000
Reference Pricing

Reference Pricing Shifts Market

CalPERS knee and hip replacement surgery compared to Anthem BCBS:

<table>
<thead>
<tr>
<th>Years</th>
<th>CalPERS HIGH-PRICE hospitals</th>
<th>CalPERS LOW-PRICE hospitals</th>
<th>Anthem HIGH-PRICE hospitals</th>
<th>Anthem LOW-PRICE hospitals</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>40%</td>
<td>30%</td>
<td>25%</td>
<td>20%</td>
</tr>
<tr>
<td>2010</td>
<td>20%</td>
<td>10%</td>
<td>5%</td>
<td>0%</td>
</tr>
</tbody>
</table>

CalPERS PPO members had a $30,000 payment limit to hospital charges in addition to usual coinsurance. Low-price hospitals agreed to value-based purchasing design rates, quality and access standards.

Health Care is Evolving Faster

"Creation of ACO’s represent the most significant force in driving the shift, practically and culturally, from volume to value."

ACO’s (Most Significant)

- Meaningful use
- Hi Tech
- Big Data
- Personalized Medicine
- EMR Adoption
- Decreasing Costs

Forces Evolving Health Care
BQA Update

2012/13 Accomplishments

**Strategic Development**
- Mission
- Vision
- Culture
- Strategic financial plan and operating budget developed

**Governance**
- Physician-led Board of Managers
- Five primary committees activated
- Twenty-five subcommittees

**Network Development**
- Network adequacy
- Credential verification
- Regional care needs assessment
- Exceeded budgeted revenue stream through FY13

**Information Technology**
- Informatics infrastructure
- Data analytics implementation
- Physician dashboard
- Member website deployment
- EMR subsidy program

**Care Management**
- RN Health Coaches
- Care Coordinators
- PCMH Design
- Population Health

**Contracting/Compensation**
- BHCS Employee Health Plan
- Aetna MA
- Humedica MA
- Scott & White Health Plan
- Shared Savings Distribution Model
BQA Recognized in “top 100”

Others Named to the List Include:
- Advocate Walgreens Well Network
- Advocate Health Care
- Carolinas HealthCare System
- Cedars-Sinai
- Cleveland Clinic Florida
- Dean Clinic and St. Mary’s Hospital
- Memorial Herman Health System
- Scott & White Healthcare Walgreens Well Network
- Texas Health Resources

Network Membership Update

<table>
<thead>
<tr>
<th>Category</th>
<th>Total</th>
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<tbody>
<tr>
<td>Physician Members</td>
<td>2,030</td>
</tr>
<tr>
<td></td>
<td>(PCP 338) 17%</td>
</tr>
<tr>
<td></td>
<td>(SCP 1692) 83%</td>
</tr>
<tr>
<td>In Process</td>
<td>338</td>
</tr>
<tr>
<td></td>
<td>(PCP 10) 3%</td>
</tr>
<tr>
<td></td>
<td>(SCP 328) 97%</td>
</tr>
<tr>
<td>Sub-Total</td>
<td>2,368</td>
</tr>
<tr>
<td></td>
<td>(PCP 348) 15%</td>
</tr>
<tr>
<td></td>
<td>(SCP 2020) 85%</td>
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</tbody>
</table>
The Baylor Preferred Network adds 53 for adult patients for geographic reasons (employees that live as far away as Oklahoma), and some 500 pediatricians who are medical staff members at Cook Children's (Fort Worth) and Dallas Children's.

Network Development

Adequate Network

- Serves 250 - 500,000 patients

Narrow Network

- Employed: 600
- Independent: 1,700

BQA was never meant to be an employment strategy
A “Complete” Network

Evolve and Continuously Update Network Adequacy

Post Acute Care
- >26 SNF Selected for contracting
- 10 Home Health Agencies selected for contracting
- 3 Hospices

Children’s Hospital Strategy
- Active discussions and facility commitment for both Dallas and Cook Children’s Hospital
- Physician inclusion likely to be unique for each facility

Best Care/Clinical Integration

Best Care/Clinical Integration Committees

Cris Brown/Megan Harkey
Staff Support

Brad Lembecke, Committee Chair,
BQA Board Member and Medical Director
Stuart Black MD
Julie Campbell
Andrew Chung MD (Med Dir)
Marsha Cox
Robert Fine MD
Clyd Fullerton MD (CMO)
Rob Goldstein MD
Steve Harris MD
Steve Hays MD
Scott Holliday DO (Med Dir)
Beth Houser
Roger Khetan MD
Rob Kowal MD (Med Dir)
Glenn Ledbetter MD
Mike Massey MD (Med Dir)
Sina Matin MD
Catherine Raver MD
Emergency Medicine (Robert Risch MD)
Endocrinology (Sumana Gangi MD)
General Surgery (Sina Matin MD)
Heart Failure (Shelly Hall MD)
Inpatient/Hospitalists
(Matt Cantrell MD/ Roger Khetan MD)

Musculoskeletal (Alan Jones MD)
Nephrology (Steven Hays MD)
Neurosciences (Stuart Black MD)
Pulmonary/Critical Care
(Stuart McDonald MD)
Readmissions (Brad Lembecke MD)
Women’s Health
(Steve Harris MD/Rob Watson MD)
CI: Physician Driven Care

Care Protocols/Metrics

• BQA care protocols establish baselines for which improvements in care can be compared against and monitored

• These evidence-based protocols assist BQA’s efforts to standardize care and ultimately reduce unnecessary health care costs

Subcommittees Producing Approved Care Protocols/Metrics

<table>
<thead>
<tr>
<th>Protocols: 27</th>
<th>Metrics: 51</th>
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<tbody>
<tr>
<td>Low Back Pain</td>
<td>1 Payer Performance 5</td>
</tr>
<tr>
<td>Primary Care/Cardiology</td>
<td>6 Cardiology 1</td>
</tr>
<tr>
<td>Musculoskeletal</td>
<td>1 Neurology 1</td>
</tr>
<tr>
<td>Women’s Health</td>
<td>3 Women’s Health 1</td>
</tr>
<tr>
<td>Hospitalists</td>
<td>2 Primary Care Diabetes 5</td>
</tr>
<tr>
<td>Primary Care APHS</td>
<td>6 Primary Care Depression 5</td>
</tr>
<tr>
<td>Primary Care Women’s Health APHS</td>
<td>3 Readmissions 1</td>
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<tr>
<td>Primary Care Hypertension</td>
<td>1 PAC SNF 5</td>
</tr>
<tr>
<td>Readmissions</td>
<td>2 PAC HH 17</td>
</tr>
<tr>
<td>Emergency Medicine</td>
<td>1 PAC Hospice 6</td>
</tr>
<tr>
<td>General Surgery</td>
<td>1 Recommendations Neurology 4</td>
</tr>
</tbody>
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Initial Priorities

• 90% In-Network Referral Target

• View BQA Secure Website 8 months out of 12 (Clinical Integration Measure). Current performance up to almost 70%

• Basic Shared Savings Opportunities
  • Generic Drug Utilization
  • Outpatient Imaging
  • Preventable readmission avoidance
  • Low-Back Pain Protocol Adherence (Generally: No Advanced Imaging for Initial Acute Back Pain)
**Keys to Clinical Integration**

**BQA Status**

- 11 RN Health Coaches
- 1 Social Worker
- Monthly RN HC cases have increased tenfold from (170 – 1700)
- 78 Care Protocols/Metrics approved by BQA Board

**BQA Expected to obtain Demonstrable Clinical Integration status by End of FY13**

- BQA has over 300 NCQA recognized Level 3 PCMH physicians
- Certification for 65 independent PCP physicians in progress
- PCMH model presents substantial financial opportunities
- 75% of BQA member physicians expected to be connected to HIE by end of CY13
- Baylor HIE Sandlot connectivity go live: 4Q13
- Humedica fully implemented by end of CY13
- BQA added to BHCS 360Fresh Predictive Analytics Tool
- Explorys added to BIS' pre-approved projects list
- BQA Physician Dashboard tracks performance
- Humedica Reports: Over 400 standard reports for inpatient and outpatient metrics; Fully Granular to patient; EHR, Claims, HIE feeds

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**Building the Population Health Infrastructure**

**ACO Cautions**

- Build adequate Network
- Invest in Informatics
- Don’t underestimate difficulty of changing culture
- Don’t overestimate your capability for risk
- Focus on highest opportunities

**Playbook for Population Health**

- Set a prioritized list of key initiatives
- Invest in basic information exchange, analytics, and patient-facing technology
- Develop preferred partner network with shared culture and accountability
- Train and deploy existing staff to match new demand for patient services
Our Approach to Population Care

• Key Populations
• IT/Informatics
• PCMH
• Care coordination

Meet Our Three Patient Populations

HIGH PATIENT COMPLEXITY DRIVING OUTSIZED PATIENT COSTS

...REQUIRES CREATING THREE UNIQUE PATIENT POPULATIONS, WITH THREE COMPLEMENTARY CARE MODELS

Source: The Advisory Board Company interviews and analysis
These patients have at least one complex illness, multiple comorbidities and psychosocial problems.

The Ideal Care Team
- The typical high-risk patient should have a one-on-one relationship with the health system, principally through a PCMH and a high-risk RN Health Coach, Others

**PROVIDERS SHOULD AIM TO:**
1. Deliver intensive, comprehensive, and coordinated management
2. Avoid unnecessary care by proactive management.

Source: The Advisory Board Company interviews and analysis

## The Rising-Risk Patient
Represent 15% of the population and have conditions and risk factors that could push them into the high-risk category if not addressed.

The Ideal Care Team
- The typical rising-risk patient should be managed in the medical home

**PROVIDERS SHOULD AIM TO:**
1. Avoid unnecessary spending and keep these patients from becoming high-risk by carefully managing HTN, Diabetes, COPD, Asthma, CAD
2. Manage these patients in enhanced primary care such as the medical home.

Source: The Advisory Board Company interviews and analysis

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### The Low-Risk Patient
Roughly 80% of patients fall into this category. Either healthy or a single well-managed chronic condition. Typically looking for convenient access to the services they need the most.

The Ideal Care Team
- Available primary care, accessible after hours care, Virtual visits, Extensive Self-help and Wellness

**PROVIDERS SHOULD AIM TO:**
1. Keep the patient healthy
2. Maintain their loyalty to the system
3. Collect data on the patient so you can treat them more effectively with easy access when they do need care

Source: The Advisory Board Company interviews and analysis

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80% PATIENTS
Team, Midlevel, and E-visits. Very active Portal use.

4,500 PATIENTS
Average panel size of medical home under capitation among top performers
Four Chronic Conditions Comprise 74% of Costs

- Cardiovascular Disease: 33%
- Cancer: 20%
- Diabetes: 11%
- Obesity: 10%
- Other Chronic: 9%
- All Other: 17%
- Total Health Care Costs: 100%

80% Heart Disease/Stroke
30% - 60% Type II
80% Nearly all can improve

% Preventable


IT/Informatics

- **Humedica**
  - Humedica provides integrated clinical and financial analytics reports
  - Phase I implementation of Humedica ambulatory data completed July 17th
  - Phase II implementation of Humedica claims and inpatient data to be complete October 18th
  - Majority of BQA data currently direct to Humedica

- **Explorys**
  - As we implement Explorys (a cloud-based big data solution), we will gradually move to the overall IT structure vision as depicted

- **360Fresh**
  - Explorys overall data aggregator of BHCS’ comprehensive clinical/financial data (includes data from BQA members not otherwise represented in BHCS data repositories)

- **Care Coordination Tool** (in Evaluation)

BQA Vision for IT Structure

Tools needed to manage BQA in fiscal year 2013
Patient Centered Medical Home

Intent

Patient centered, safe, high quality, coordinate care, timely, efficient, equitable.
Which is more likely to deliver?
Which is more work and has more cost?
Which do you want?

2011 PCMH Content and Scoring
FY13 PCMH Statistics

- 68 Primary Care Clinics are NCQA recognized
- 281 physicians
- 59 Nurse Practitioners or Physician Assistants
- First clinic applying for re-recognition
- Spreading to independent practices

Care Coordination
RN HEALTH COACH

RN Health Coaches (11)/Social Worker (1)

<table>
<thead>
<tr>
<th>Certified Diabetes Educator</th>
<th>Advanced Asthma Certification</th>
<th>Case Management Experience</th>
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Augments PCMH for high risk populations

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<thead>
<tr>
<th>Supports Transitions of Care and Navigation</th>
<th>Care Coordination</th>
<th>Chronic Disease Management</th>
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Payer investment growing

2012: 2 contracts covering 9,000 members
2013: 5 contracts covering approx. 60,000 members

RN Health Coach responsibilities

- Self-management support and goal setting
- Health status assessment
- Medication management
- Health system navigation (facilitates access to appropriate levels of care)
- Care coordination among providers and services
- Care plan development and communication with health team

RN Health Coach/PCP Workflow

Data-driven High Risk Reports
PCP Referrals
Transitional Care (High Risk Inpatient/ED)
Handoffs from inpatient Care Coordinators

RN Health Coach/Patient Interventions
Care Plan
Review/Revise Care Plan

PCP
11/20/2013

Monthly RN Health Coach Cases

- All = active chronic care management, transition, and patients in outreach process
- Average September caseload per active RN Health Coach (post-training period) = 210
- Benchmark caseloads: Hartford Healthcare Medical Group (GPIN) 150-175, Gordian Consulting 150 – 200

Patient Success Story: “Doris”

Positive Patient Outcome
- Patient compliance improved to 85%
- Lowered A1c to 11.4 in three months
- Recently acknowledged “I feel good for the first time in a long time”
Evaluators include leadership representing:
- Information Technology
- Care Coordination (BHCS, HTPN, BQA)
- BQA Administration

Tool will support workflow and automate patient tracking and reporting.

Decision narrowed to two tools based on: functionality, technology, integration capabilities, and cost.

Ongoing in-depth evaluation of six vendors over last six months.

Early Results
Generic Prescribing

To further improve the generic prescribing rate for both BCBS and Baylor Employee Health Plan

We will focus on four medication classes:
- Antihyperlipidemic medications
- Antihypertensive medications
- Proton pump inhibitors
- Antidepressant medications

Low Back Pain

Analysis reveals that imaging within 28 days accounts for only 10% of the total cost associated with low back pain.

Task Force
Low Back Pain Task Force continues work and analysis of claims data to break down costs by site of care.
Preventive Services

**Flu Vax**

<table>
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<th>Year</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<tbody>
<tr>
<td>HEDIS Average</td>
<td>51.00%</td>
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**Colon Cancer Scr**

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<th>2013</th>
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<td>44.82%</td>
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**Pap Smear**

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<tr>
<th>Year</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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</thead>
<tbody>
<tr>
<td>HEDIS Average</td>
<td>74.55%</td>
<td>74.55%</td>
<td>74.55%</td>
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*HEDIS number is FY12

Diabetes Management

**Diabetes POA (D5)**

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<td>74.55%</td>
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**A1C**

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<td>HEDIS Average</td>
<td>74.55%</td>
<td>74.55%</td>
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</table>

**Blood Pressure**

**LDL**

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<th>Year</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
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<td>74.55%</td>
</tr>
</tbody>
</table>

*HEDIS number is FY12
Humedica Reporting

DM patients with ALL recommended testing

197 physicians with BTE for DM recognition
21% of BCBS Texas total

Asthma

Controller Therapy

Severity Assessment
### Readmission Penalty Comparison

<table>
<thead>
<tr>
<th>Performance Period</th>
<th>2013 (July 1, 2008 to June 30, 2011)</th>
<th>2014 (July 1, 2009 to June 30, 2012)</th>
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<tbody>
<tr>
<td></td>
<td>BHCS</td>
<td>System 2</td>
</tr>
<tr>
<td>Percent of Hospitals Penalized</td>
<td>18%</td>
<td>61%</td>
</tr>
<tr>
<td>Average Penalty</td>
<td>0.24%</td>
<td>0.31%</td>
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<tr>
<td>BHCS Penalty</td>
<td>$202K</td>
<td></td>
</tr>
<tr>
<td>BHCS Potential Penalty</td>
<td>$3.8m</td>
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Quality Measures and Operational Efficiencies

- **Manage Resources**
  - Use existing BHCS/HTPN resources as appropriate

- **Understand/Manage Costs**
  - To provide services (i.e., Care Coordination, Disease Management)
  - Deliver them efficiently using automated resources where possible

- **Meet Our Targets**
  - “Heavy Lifting” essential to meet/exceed targets resides with Best Care Committee and clinical sub-committees
  - Care Coordination/Care Management team AND the individual Physician and Hospitals

- **Humedica beginning to provide actionable information to physician leadership/committees**

Let’s Not Forget

- To remember the importance of our relationship with the patient. That trust is key to improving care.
- To improve quality and service while protecting the care team.
- To create a Checklist culture that manages populations but not one that causes a checklist to block your view of the individual.