Using Data, Information, and Knowledge to Improve the Health of our Most Vulnerable Populations

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Professor, Medicine
Oregon Health & Science University
Hartford Center Featured Research on Aging, May 2018
Background and disclaimer

- This talk claims to be focused primarily on data, information, and knowledge; informatics is the study of these topics.

- Most of the talk – and informatics in practice - is about humans: their health, their interactions, and how they collaborate.

- Also: I’ve a history of non-exclusive licensing of technology, but none in the last 3 years.
Mission of Care Management Plus

is to better understand how data, information, and knowledge can assist in transforming health for our most vulnerable patient populations.

Identifying vulnerable people
Risk stratification and segmentation

Tailoring care to these needs

Improving outcomes
Case study

**Ms. Viera:** a 75-year-old woman with diabetes, systolic hypertension, mild congestive heart failure, arthritis and recently diagnosed cognitive impairment.
Ms. Viera and her caregiver come to clinic with several problems:

1. Hip and knee pain
2. Trouble taking all of her current 12 medicines
3. Dizziness when she gets up at night
4. Low blood sugars in the morning
5. and a recent fall
And Out in the hall:

6. The caregiver confidentially notes he is exhausted.
7. Money is running low for additional medications.
How can the primary care team handle these issues?
Past: Heroism in the face of multiple illnesses

- Multiple chronic conditions increase risk and coordination exponentially (5 or more: 90x risk of hospitalization; 10x prescriptions; 13 providers vs. 2)

- To manage preventive and chronic illnesses in a primary care panel of 2500 patients would take 18 hours a day

- Patients with multiple illnesses have better process quality scores but more ‘preventable’ hospitalizations

Anderson, 2004; Woolf, 2002; Baron, 2007, 2010; Werner 2008
Incrementalism vs. longitudinal care

http://www.newyorker.com/magazine/2017/01/23/the-heroism-of-incremental-care
The Norm: (Un)Coordinated Care

12 Specialists (7 ongoing)

Ms. Viera

1 Primary Care Team

BP Pain Heart Bones Diabetes

Dorr, Frontiers of Engineering
At Intermountain Healthcare, worked with 22 primary care clinics and the Chronic Care Collaborative to create:
A team-focused model with - care managers - changed health information technology (HIT) for population health

_Funded by John A. Hartford Foundation, NLM, AHRQ, and Gordon and Betty Moore Foundation_
Intervention: Care Management Plus

**Care management**
- **Care manager**
  - Assess & plan
  - Catalyst
  - Structure

- **Technology**
  - Access
  - Best Practices
  - Communication

**Referral**
- For any condition or need
- Focus on certain conditions

**Evaluation**
- Ongoing with feedback
- Based on key process and outcome measures

*Larger infrastructure: Electronic Health Record, quality focus*

Anderson, 2004; Woolf, 2002; Baron, 2007, 2010; Werner 2008
Does CMP make a difference?

**Study design**
- Controlled clinical trial in 7 intervention clinics – adding care managers + technology – compared to 15 control clinics
- CM patients matched to controls on key characteristics
- Difference-in-difference design

**Outcomes**
- Adherence to guidelines for chronic illness
- Mortality
- Utilization, including hospitalizations
- Provider productivity (work Relative Value Units, wRVU)
Guideline Adherence: Results

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overdue for HbA1c test</td>
<td>0.79*</td>
</tr>
<tr>
<td>HbA1c Tested</td>
<td>1.42*</td>
</tr>
<tr>
<td>HbA1c in control (&lt;7.0)</td>
<td>1.24*</td>
</tr>
</tbody>
</table>

*p<0.01

Dorr, HSR, 2005
In CM+, Odds of dying were reduced significantly.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Time</th>
<th>CM+</th>
<th>Control</th>
<th>Absolute difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Patients</td>
<td></td>
<td>(N=1,144)</td>
<td>(N=2,288)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>at 1 year</td>
<td>6.5%</td>
<td>9.2%</td>
<td>-2.8%</td>
</tr>
<tr>
<td>Deaths</td>
<td>at 2 years</td>
<td>13.1%</td>
<td>16.6%</td>
<td>-3.4%</td>
</tr>
<tr>
<td>Pts with Comorbid conditions</td>
<td></td>
<td>(N=557)</td>
<td>(N=1114)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>at 1 year</td>
<td>6.2%</td>
<td>10.6%</td>
<td>-4.4%</td>
</tr>
<tr>
<td>Deaths</td>
<td>at 2 years</td>
<td>12.9%</td>
<td>18.2%</td>
<td>-5.3%</td>
</tr>
</tbody>
</table>

Dorr, JAGS, 2008
Reduction in hospitalizations from CM+

**In One Year**
- CM: 20%
- CTL: 40%

**In Two Years**
- CM: 10%
- CTL: 20%

- OR = 0.65; p = 0.036
- OR = 0.56; p = 0.013

*Dorr, JAGS, Dec 2008*
Improving the ‘quadruple’ aim of health care

Patients live longer, report being healthier, chronic conditions (diabetes, depression) in better control

20-40% reduction in hospitalizations, cost

Improved patient and family experience

Improved care manager and provider experience

Population Health

Clinician Experience

Per capita cost

Patient Experience

www.ohsu.edu/cmp/ Publications
Dissemination from discovery to implementation to policy

Policy
- Referral
  - For any condition or need
  - Focus on certain conditions
- Care management
  - Care manager
    - Assess & plan
    - Catalyst
    - Structure
  - Technology
    - Access
    - Best Practices
    - Communication
  - Evaluation
    - Ongoing with feedback
    - Based on key process and outcome measures
- PCP/CPC+

Policy guidance

Policy implementation

Practice transformation

Technical assistance

TRAINING
- CPC/CPC+
- Better Care Playbook
- Care management
  - Care manager
    - Assess & plan
    - Catalyst
    - Structure
  - Technology
    - Access
    - Best Practices
    - Communication
  - Referral
    - For any condition or need
    - Focus on certain conditions
  - Evaluation
    - Ongoing with feedback
    - Based on key process and outcome measures

Larger infrastructure: Electronic Health Record, quality focus
Replication: in the field, clinics focused on Care Coordination reduce utilization more than quality clinics

% of high risk clinic patients with 1 or more ED visit in 6 months **before** and **after** study enrollment
Dissemination to over 400 clinical teams

SFHP (12 sites)
OHSU (9 teams)
PeaceHealth (50 teams)
Intermountain (25 teams)
Colorado Access (16 teams)
HealthCare Partners (2 sites)
Daughters of Charity (5 teams)
NEQCA
Care Management Plus training has reached roughly 1000 individuals (90% nurses)

<table>
<thead>
<tr>
<th>Core curriculum</th>
<th>Online experiential</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2 day in person</td>
<td>8-10 sessions on line</td>
</tr>
<tr>
<td>Motivational interviewing</td>
<td>Geriatric syndromes</td>
</tr>
<tr>
<td>Risk assessment + tailoring care</td>
<td>Complex illness</td>
</tr>
<tr>
<td>Implementation science / being a change agent</td>
<td>Case-based for people in practice to bring cases</td>
</tr>
</tbody>
</table>

~30 ANCC CEU credits, CME credits

*Good opportunity for alignment with nursing faculty and professionals – looking for collaborators*
How can we use data, information, and knowledge to better care for vulnerable populations?

• By predicting *poor outcomes*

• By more accurately and efficiently capturing *complex* needs

• And *inserting* this information and knowledge when it is needed by disseminating technology
Prediction of at risk, vulnerable populations

<table>
<thead>
<tr>
<th>Risk</th>
<th>Definition (e.g.)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Highest</strong></td>
<td>Multiple Social, Behavioral, Mental, and Chronic issues</td>
</tr>
<tr>
<td>1-5%</td>
<td>Severe/ uncontrolled illness or multiple controlled issues</td>
</tr>
<tr>
<td>5-10%</td>
<td>Controlled, stable issues</td>
</tr>
<tr>
<td>25-40%</td>
<td>Preventive needs or limited chronic issues</td>
</tr>
<tr>
<td>&gt;50%</td>
<td></td>
</tr>
</tbody>
</table>
Risk prediction and scoring

Algorithmic risk score

Adjudicated risk score

Targeted services by risk category

Pure clinical intuition

“Of your patients, who would you not be surprised if they ended up in the hospital / had a major health issue / died in the next year?”

Hierarchical Condition Categories (HCC; CMS); DxCG; ACG; Charlson Comorbidity Score; etc.
Adjudication or Human Review is important for successful risk stratification at the point of care.

**Figure 1a.** Individual perceptions of risk stratification outcomes.

<table>
<thead>
<tr>
<th>Perception</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I often feel that our RS scores are correct</td>
<td>0%</td>
<td>25%</td>
<td>75%</td>
</tr>
<tr>
<td>I agree with our RS scores</td>
<td>5%</td>
<td>40%</td>
<td>55%</td>
</tr>
<tr>
<td>I am confident in our RS process</td>
<td>13%</td>
<td>44%</td>
<td>43%</td>
</tr>
<tr>
<td>Our RS process is ideal</td>
<td>14%</td>
<td>49%</td>
<td>42%</td>
</tr>
</tbody>
</table>

**Figure 3a.** Composite risk stratification perception by algorithm type

- **Human Review Alone:**
  - Disagree: 2%
  - Neutral: 43%
  - Agree: 55%

- **Computer + Adjudication:**
  - Disagree: 5%
  - Neutral: 71%
  - Agree: 24%

- **Computer Algorithm Alone:**
  - Disagree: 89%
  - Neutral: 11%

From Ross et al, *under review.*
Survey of 99 persons from 37 clinics engaged in risk stratification.
Adults with High Needs Have Higher Health Care Spending and Out-of-Pocket Costs

- **Total adult population**: 231.7 million
- **Three or more chronic diseases, no functional limitations**: 79.0 million
- **Three or more chronic diseases, with functional limitations (high need)**: 11.8 million

- **Average annual out-of-pocket spending**:
  - 1: $702
  - 2: $1,157
  - 3: $1,669

- **Average annual health care expenditures**:
  - 1: $4,845
  - 2: $7,526
  - 3: $21,021

**Note:** Noninstitutionalized civilian population age 18 and older.


Identification can lead to segmentation ... to help tailor care and allocate resources
But the data quality doesn’t allow us to detect risk well or segment.

Sensitivity was highest in encounters (.55), and specificity in the Problem List (.82). Combining all information led to sensitivity of .95 and specificity of .19.
And rarely has accurate biopsychosocial characteristics.

Figure 1. Overlapping Biopsychosocial Domains

Biological and medical needs (X)
- disease burden symptoms

Psychological and Behavioral needs (Y)
- chronic stress
- self-efficacy

Social needs (Z)
- social isolation
- financial stress

Disease exacerbations
Unplanned healthcare utilization

Exhibit 1
Poverty and Social Isolation Are More Prevalent Among High-Need Patients

Percent reporting experiencing . . .

<table>
<thead>
<tr>
<th></th>
<th>Not high-need adults</th>
<th>High-need adults</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social isolation</td>
<td>15</td>
<td>37*</td>
</tr>
<tr>
<td>Any material hardship</td>
<td>32</td>
<td>62*</td>
</tr>
<tr>
<td>Emotional distress</td>
<td>28</td>
<td>53*</td>
</tr>
</tbody>
</table>

Notes: Social isolation = Reported often feeling left out, lacking companionship, or feeling isolated from others. Any material hardship = Reported worry or stress about having enough money to pay rent/mortgage, pay gas/oil/electric, or buy nutritious meals in the past year.
* Significantly different from not high-need adults at the p<0.05 level.
How can we get better data? Reduce data collection demands...

- Classification and Regression Trees (CART) on
- The Health and Retirement Study (N=16,640 persons 50+)
- To predict 2 year worsening in health (e.g., associated with functional loss)

Koroukian et al., JGIM 2016
And improve technology to help us do better...

The **High Risk Patient List Report** provides a means to track and enroll high risk patients. It also stores multiple risk calculations and what approaches have been used to address needs.
Advanced reminder systems for complex tasks

Prioritized Population Reminders
As a task list

Make reports interactive

Care Manager Encounter Tickler List

Care Manager All Care Managers

Scheduled Date, Scheduled Time, Encounter Type, Reason, EHR ID, First Name, Last Name, Phone, PCP, Notes
Goals:
What brings you joy?
What matters in life? or
Increase walking 5 times per week or
A1c < 8.0%

A major issue as people age is the desire to remain at home, but this may require a caregiver; how do we know when a caregiver is engaged?

### Patient Worksheet and Care Plan

<table>
<thead>
<tr>
<th>B620, M200</th>
<th>Export to PDF</th>
<th>Print Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRN: 2006209763014</td>
<td>Sex: F</td>
<td>DOB: 01/01/1952</td>
</tr>
<tr>
<td>Phone:</td>
<td>PCP: Hillary Caseman</td>
<td></td>
</tr>
<tr>
<td>Care Manager: John Cavil</td>
<td>Caregiver:</td>
<td></td>
</tr>
</tbody>
</table>

#### Diagnoses
- Anemia, Dementia, Depression, Diabetes, Hyperlipidemia, Hypertension, Obesity, Renal Failure, Seizures, Thyroid Disease

#### Utilization
- ED Visit: 12/22/2012
- Last Office Visit: 05/25/2014
- Hospitalization: No Hospitalizations.
- Next Visit: None Scheduled.

#### Care Actions

<table>
<thead>
<tr>
<th>Prevention Status</th>
<th>Diabetes Status</th>
<th>Hypertension Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHQ (18+) PHQ past due</td>
<td>DM: eye exam due</td>
<td>HTN: BP Control BP HIGH</td>
</tr>
</tbody>
</table>

#### Vital Results

<table>
<thead>
<tr>
<th>Vital Name</th>
<th>Vital Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>SYSTOLIC (24 mos)</td>
<td>120.0</td>
</tr>
<tr>
<td>DIASTOLIC (24 mos)</td>
<td>80.0</td>
</tr>
<tr>
<td>BMI (24 mos)</td>
<td>27.0</td>
</tr>
</tbody>
</table>

#### Medications

<table>
<thead>
<tr>
<th>Medication</th>
<th>Dosage</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amoxicillin 500 mg tablet</td>
<td>Take 2,000 mg by mouth as needed (dental prophylaxis). Take 1 hour prior to dental procedures</td>
<td></td>
</tr>
<tr>
<td>Lamotrigine 150 mg tablet</td>
<td>Take 150 mg by mouth once daily. Give at 5pm</td>
<td></td>
</tr>
</tbody>
</table>

#### Patient Care Coordination Plan

**Patient goal:** to spend more time with grandchildren

**Caregiver:** social isolation; connect to group and education classes; consider respite

---

**Identify Caregiver**

**Enter patient and caregiver derived information and goals**
Answer: we usually do not...

<table>
<thead>
<tr>
<th>Status</th>
<th>Patients</th>
<th>Average Age</th>
<th>Deceased</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caregiver reported</td>
<td>3277</td>
<td>59.7</td>
<td>348 (10.6%)</td>
</tr>
<tr>
<td>No caregiver reported</td>
<td>161,151</td>
<td>43.2</td>
<td>2415 (1.5%)</td>
</tr>
</tbody>
</table>

1.9% of all population; 9.8% of high risk population
One can use the sociotechnical framework to understand why this happens ...

<table>
<thead>
<tr>
<th>Simplified Sociotechnical Domains</th>
<th>Sub-domains</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Domain name</strong></td>
<td><strong>Sub-domains</strong></td>
</tr>
<tr>
<td><strong>Culture</strong></td>
<td>• Patients &amp; Families</td>
</tr>
<tr>
<td></td>
<td>• Leadership</td>
</tr>
<tr>
<td></td>
<td>• Teamwork</td>
</tr>
<tr>
<td></td>
<td>• Psychological Safety</td>
</tr>
<tr>
<td></td>
<td>• Burnout/Resilience</td>
</tr>
<tr>
<td><strong>Process</strong></td>
<td>• Structured Communication</td>
</tr>
<tr>
<td></td>
<td>• Reliable Processes &amp; Policy</td>
</tr>
<tr>
<td></td>
<td>• Process Improvement</td>
</tr>
<tr>
<td></td>
<td>• Organizational Learning</td>
</tr>
<tr>
<td><strong>Technology</strong></td>
<td>• Usability</td>
</tr>
<tr>
<td></td>
<td>• Usefulness</td>
</tr>
<tr>
<td></td>
<td>• Workflow</td>
</tr>
<tr>
<td></td>
<td>• Safety</td>
</tr>
</tbody>
</table>
Caregiver at Facility
<Caregiver at Other Facility>
<Other caseworker / financial>

Family Comments
7/01/2015  Cara Facility
<Caregiver at Facility>
<Caregiver at Other Facility> <Other caseworker / financial>
Caregiver at Facility X
Patient Care Coordination Note

Working care plan last updated on 08/12/2015 by RN

Background (barriers, recent life changes, reason for referral to care management): Patient has complex medical history. Patient lives in a Nursing Care Facility.

Care Plan

Patient's goal(s) of care: To be determined.

Patient's completed goal(s):
- Received 2014 Flu Shot

Health team goal(s):
- Medication adherence
- Illness avoidance
- Early identification and treatment of future illness

Action plan:
- Encourage patient to continue to take 100% of all medications from facility staff
- Patient to avoid sick contacts
- Encourage patient/facility to call for early symptoms of illness

Next scheduled contact with RN Care Manager: (Reason for next contact: Status check)

Lab Results

<table>
<thead>
<tr>
<th>Component</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CD4ABSOULTE</td>
<td>290^</td>
</tr>
<tr>
<td>CD4PERCENT</td>
<td>17.0^</td>
</tr>
<tr>
<td>HIVPCR</td>
<td>Undetected</td>
</tr>
</tbody>
</table>
Spreading the value of caregiver identification

• What **benefit** does the system, the team, and the individual get from engaging the caregiver?

• How do we minimize the **cost** of recording, tracking, educating caregivers?

• How do we instill a culture of continuous improvement in engaging caregivers?

http://journals.sagepub.com/doi/pdf/10.1177/0272989X10386382; Center for Health Enhancement Systems Studies
http://journals.sagepub.com/doi/abs/10.1177/089826439801000102

Figure 1 Model of how CHESS connects patients/caregivers to key others in cancer experience.
Attempting to standardize the work when there are complex, overlapping workflows

http://cqpi.wisc.edu/seips-main.htm
Technical Assistance: Gathering and synthesizing evidence

• 5 Foundations engaged the National Academies of Medicine

VITAL DIRECTIONS FROM THE NATIONAL ACADEMY OF MEDICINE
Tailoring Complex Care Management for High-Need, High-Cost Patients

Segment populations by need

Avoid ‘incrementalism’ in favor of coordination and longitudinal approaches

Improve planning, including electronic connections

Refine models

Improve capacity – training and informatics

Blumenthal and Abrams, JAMA 9/2016
Summary

Better using data, information and knowledge to improve health of vulnerable populations requires

• Reorganizing teams and systems
• Improving technology
• Changing policy
• Changing incentives; AND
• Significant facilitation, including by innovators
Thank you!

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Family

Oregon Health & Science University
  • Bhavaya Sachdeva
  • Melanie Marzullo
  • Raja Cholan
  • Nicholas Colin
  • Matthew Storer

Colleagues and Mentors
  • Cherie Brunker, MD
  • Adam Wilcox, PhD
  • Bill Hersh, MD
  • Paul Clayton, PhD
Improving data quality: standard data mapping and transformation
Improving data quality: encouraging better mapping

**PheKB Phenotype: Dementia (excerpt)**

<table>
<thead>
<tr>
<th>PhenX Protocol Name</th>
<th>PhenX ID</th>
<th>LOINC Name</th>
<th>LOINC Code</th>
<th>CDE Name</th>
<th>CDE ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Mental Status Screener - Adult</td>
<td>PX130701</td>
<td>62769-0</td>
<td>Adult Cognitive Assessment Score</td>
<td>307613</td>
<td>0</td>
</tr>
</tbody>
</table>

... subvariables under this level with logic

**Human Phenotype Ontology: Dementia**

Keywords: human phenotype ontology

Class: Dementia

Terms: http://purl.obolibrary.org/obo/hp_0606728

**Evaluation**

- Availability
- Feasibility
- Accuracy
- Currency
- Completeness
- Representativeness

www.ohdsi.org
Data quality and use of data

• The Sims stages of data grief (as adapted from Kübler-Ross)
Advanced reminder systems for complex tasks

Prioritized Population Reminders

As a task list

Make reports interactive
Gaps slowing progress

• Quality of data and information
• Accessibility and generalizability of knowledge
• Delivery for inclusion
• Uptake and fidelity of improvements (models of care)
High priority elements and current gaps

- Efficient, meaningful data and information -> data quality is poor
- Targeted, intelligent, flexible prediction ->
  - Individual level
  - Population level
- Data driven improvement science -> **data quality improvement, then performance improvement**
- Adaptable visualization based on principles
- New models of care that include facilitation
CPC Classic Lessons Learned

CPC Technical Assistance Survey:
58 responses representing 52 practices

**Most Significant Changes:**
1. Care Management
2. BH Integration
3. Staffing Changes
4. Hospital Follow-ups
5. PFAC Implementation
6. Risk Stratification

**Biggest Challenges:**
1. Physician & Staff Buy-In
2. Turnover/Staffing
3. Reporting
4. Data-Related Issues
5. Shared Decision Making
6. Care Plans

![Bar chart showing reliance on TA for changes](chart)
- Completely: 25 responses
- Quite a bit: 10 responses
- Somewhat: 5 responses
- Not at all: 4 responses
- Unsure/Not Applicable: 4 responses

*COUNT of changes

![Bar chart showing resources used to address challenges](chart)
- Other CPC Practice: 40 respondents
- CPC Connect: 35 respondents
- OHSU FF: 30 respondents
- OHSU RIF: 25 respondents
- TMF/CMS Directly: 20 respondents
- Did not seek outside support: 15 respondents
- Unable to Resolve Challenge: 5 respondents
- Other: 0 respondents

*PERCENTAGE of respondents
Incentive redesign - tie closely to expected goals: TOPMED trial

Cluster Randomized Controlled Trial in 8 clinics

Patient Centered Primary Care Home evaluation, Training

**Intervention**
- Incentives with multiplier
- Focused Practice Support
- Rapid cycle IT improvement

**Control**
- Same incentives without multiplier
- General Practice Support
- Same IT components
Physicians who referred to care managers (‘users’) were **8% more productive** than peers in the same clinic.

- change was seen in early ‘high use’ and ‘adopters’
Policy to Technical Assistance: Comprehensive Primary Care (CPC) and CPC+

- National advanced primary care medical home model
- Initial phase 2012-2016; Plus phase 2017-2022
- Aim: strengthen primary care through
  - regionally-based multi-payer payment reform, and
  - care delivery transformation
- 2 tracks
- 14 regions - ~2700 practices
- 5 years
# Policy: Significant payment changes

<table>
<thead>
<tr>
<th></th>
<th>CPC</th>
<th>CPC+ Track 1</th>
<th>CPC+ Track 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PBPM Risk-Adjusted Care Management Fee</strong></td>
<td>$20 average (PY 1-2); $15 average (PY 3-4)</td>
<td>$15 average</td>
<td>$28 average</td>
</tr>
<tr>
<td><strong>Underlying Payment Structure</strong></td>
<td>Standard FFS</td>
<td>Standard FFS</td>
<td></td>
</tr>
<tr>
<td><strong>Quality &amp; Cost Performance Incentive</strong></td>
<td>Retrospective regional shared savings</td>
<td>Prospective, at-risk practice-level incentive payment ($2.50 opportunity) (PBPM)</td>
<td>Prospective, at-risk practice-level incentive payment ($4.00 opportunity) (PBPM)</td>
</tr>
</tbody>
</table>

*CPCP is ~10% larger than historical FFS to compensate for more comprehensive services*