Outline

1. Diabetes Burden at HealthCare Partners
2. Pay for Performance for Patients (P4P4P)
3. Usual Care for Diabetic Patients at HCP
4. Diabetes Group Appointments
5. Future Plans
6. Conclusions
HealthCare Partners Medical Group Background

- Physician-owned Group & IPA Serving greater Los Angeles and Orange Counties
- Facilities/Physicians
  - 66 Staff Model Facilities (Primary Care, Urgent Care, Walk-In, Ambulatory Surgery, Pharmacy)
  - 753 IPA Medical Offices
- Physicians
  - 235 Employed
  - 975 IPA
  - 290 Specialists Employed
- ~575,000 + lives
  - ~479,000 commercial, ~99,000 senior

Health Plans Accepted: 14 Medicare Advantage, 8 Commercial (HMO/POS)
HealthCare Partners Medical Group Background

- Comprehensive data warehouse to identify patients with chronic diseases
  - Individual patient data and reporting is available to all PCPs
  - Inpatient and outpatient claims
  - Laboratory results
  - Pharmacy usage
- Electronic Medical Record (EMR)
- High risk programs: Physician- or NP-led strategies: House Calls; Comprehensive Care Clinics; ESRD
- Disease Management Programs:
  - RN/RD/Health Educator staff targeted to facilitate patient self management
Diabetes Burden at HealthCare Partners

Patient Disease Population

<table>
<thead>
<tr>
<th>Population by Region</th>
<th>1</th>
<th>2</th>
<th>SB/LB</th>
<th>5</th>
<th>6</th>
<th>Totals</th>
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</thead>
<tbody>
<tr>
<td>Diabetes 2009</td>
<td>21,202</td>
<td>6,562</td>
<td>24,696</td>
<td>3,993</td>
<td>59,789</td>
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<tr>
<td>Diabetes 2010*</td>
<td>24,473</td>
<td>7,389</td>
<td>26,351</td>
<td>5,971</td>
<td>64,184* (criteria modified)</td>
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</tr>
<tr>
<td>Diabetes 2011</td>
<td>17,561</td>
<td>6,197</td>
<td>18,877</td>
<td>4,949</td>
<td>52,251</td>
<td></td>
</tr>
<tr>
<td>Diabetes 2012</td>
<td>18,109</td>
<td>7,328</td>
<td>19,880</td>
<td>5,384</td>
<td>58,160</td>
<td></td>
</tr>
</tbody>
</table>

- 11% increase with diabetes 2011-2012
- Continual increase in patient population with diabetes (11%)
- Certified Diabetes Educators often work in tandem with Endocrinologists, reducing Dr. time educating patients
- 2013 Trend: Diabetes Group Appointment expansion to target patients not at goal
Pay for Performance for Patients (P4P4P): Financial Incentives to Improve Glycemic Control

Study Purpose

- Determine the effectiveness of the DGA alone on outcomes (Hemoglobin A1c)
- Determine the effectiveness of the DGA and financial incentives on participation and outcomes.
Pay for Performance for Patients: Financial Incentives to Improve Glycemic Control

Study Objectives

- Identify and provide support for high-risk patients from Disease Registry
- Assess impact of financial incentives on increasing participation in Diabetes Group Appointments (DGA)
- Assess impact of financial incentives on increasing the number of patients who reduce their HbA1c and reach goal
  - Hemoglobin A1c (HbA1c) <7.0%
  - HbA1c <8.0% for patients 65 or older
Pay for Performance for Patients: Financial Incentives to Improve Glycemic Control

**Study Goals**

- Increase each patient’s understanding of diabetes and change behavior through:
  - An active, team approach -- including peers
  - Engage patients in their care and set goals
- Improve clinical outcomes
Usual Care for Diabetic Patients at HCP

Treatment before start of Diabetes Group Appointments

• After diagnosis
  • All diabetics, including high risk
    o Health Enhancement classes first
      • Diabetes Survival Skills, Diabetes Management Series, Diabetes Nutrition, and Diabetes Support
    o One-on-one with Registered Nurse/Certified Diabetes Educator or Registered Dietitian/Certified Diabetes Educator (if necessary)
    o Endocrinology consult as needed
Diabetes Group Appointments

Study Population

- Determined for each HealthCare Partners participation site from the Diabetes Registry
  - Exclusions
    - Type 1 Diabetics
    - Gestational Diabetes
    - Dementia Patients
Diabetes Group Appointments

Randomization of Study Population

• Patients within the study population were randomized into three groups
  1. Baseline comparison group: usual diabetes care with no DGA at this time
  2. DGA with no financial incentives
  3. DGA with financial incentives
Diabetes Group Appointments

Invitation of Study Groups to DGA

- Invitation letter sent
  - Described either non-incentive or incentive DGA
- Patients were called and registered
  - Calls tracked through Invitation Response Survey
- Appointment reminder calls 2 days prior to appointment
- Doctor review patients’ charts 1 day prior to appointment
Diabetes Group Appointments

About the Appointment

• 2.5 hour free group appointment with about 10 patients
• Once a month, at same time each month
• Groups in English and Spanish, depending on site
• Those involved in the appointment:
  • Health Educator (1-2)
  • Registered Dietitian, Certified Diabetes Educator
  • Registered Nurse, Certified Diabetes Educator
  • Endocrinologist, Internist, or Nurse Practitioner
  • Medical Assistant (1-2)
Diabetes Group Appointments

Values Checked at First Appointment

- Blood drawn for baseline HbA1c and LDL levels
  - Ensures eligibility for DGA and that values have not changed
  - Levels assessed every three months
- Diabetic foot checks
  - Checked every six months following
- Weight, blood pressure, and fasting blood glucose
  - Checked at every appointment
- PHQ-9 survey for depression
Diabetes Group Appointments

What Happens at Each Appointment?

- Healthy Breakfast Demo
- Conversation Maps: 9-week curriculum
- One-on-one with RD/CDE or RN/CDE
- Comments from the doctor
- Patient Action Plan
- Patient Satisfaction Survey
  - Given every appointment
- PAM-13
  - Given at second appointment
  - Given after every A1c draw, post 2nd appointment
Diabetes Group Appointments

Conversation Map Curriculum

• On the Road to Better Managing Diabetes
• Diabetes and Healthy Eating
• Diabetes Nutrition with a Registered Dietitian
• Carbohydrate Counting
• Action of Diabetes Medication with a Registered Nurse
• Monitoring your Blood Glucose
• Complications of Uncontrolled Diabetes
• Continuing your Journey with Diabetes
• Exercise
My Action Plan

I __________________ have agreed with my health care provider that to improve my health I will:

1. Choose ONE of the activities below:
   - Take my medications
   - Work on something that's bothering me
   - Stay more physically active!
   - Cut down on smoking
   - Improve my food choices
   - Reduce my stress
   - Check my blood sugar

2. Choose your confidence level:
   - Very sure
   - Somewhat sure
   - Not sure at all

3. Complete below for the chosen activity:
   What: __________________________
   How much: _____________________
Diabetes Group Appointments

Patient Satisfaction Survey

- Administered at end of each appointment
- Incentive and non-incentive surveys
- Questions:
  - Socio-demographic characteristics
  - Availability of the appointment and barriers to appointment attendance
  - Courtesy and helpfulness of staff
  - Patient impression of his/her health
  - Willingness to recommend the appointment
Diabetes Group Appointments

PAM-13

- Given at the 2\textsuperscript{nd} appointment and every three months post
- Scored survey from strongly disagree to strongly agree
- Assesses a patient’s knowledge, skills and confidence for self-management
  - Are DGAs contributing to increased patient engagement?
- Questions:
  - Am I taking an active role in my care?
  - Do I understand my conditions and what causes them?
  - Do I know how to prevent conditions or find solutions?
### PAM - 13 SAMPLE QUESTIONS

<table>
<thead>
<tr>
<th>Question</th>
<th>Disagree Strongly</th>
<th>Disagree</th>
<th>Agree</th>
<th>Agree Strongly</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. When all is said and done, I am the person who is responsible for taking care of my health</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2. Taking an active role in my own health care is the most important thing that affects my health</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>3. I am confident I can help prevent or reduce problems associated with my health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I know what each of my prescribed medications do</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I am confident that I can tell whether I need to go to the doctor or whether I can take care of a health problem myself.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. I am confident that I can tell a doctor concerns I have even when he or she does not ask.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. I am confident that I can follow through on medical treatments I may need to do at home</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. I understand my health problems and what causes them.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. I know what treatments are available for my health problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. I have been able to maintain (keep up with) lifestyle changes, like eating right or exercising</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Diabetes Group Appointments

What if a Patient Misses an Appointment?

- Health educator calls patient
- Completes Missed DGA Appointment Follow-Up Survey
  - Lists if patient no showed, cancelled, or dropped DGA
  - Why patient missed appointment
  - What can we do to help them
- If a patient “no shows” three consecutive appointments, then dropped from DGA
Diabetes Group Appointments

When a Patient Reaches Goal

- Goal
  - HbA1c <7.0%
  - HbA1c <8.0% for patients 65 or older
- Gift basket
  - Diabetes book, diabetes cookbook, measuring cups and spoons, brown rice, and diabetic seasonings
- Certificate and acknowledgment during DGA
Diabetes Group Appointments

When a Patient Reaches Goal

• Patient Graduation Survey
  • Administered at final appointment or via phone call later
  • Questions
    o Have you made lifestyle changes?
    o What was helpful or motivating about the DGA?
    o Would you like to be part of a support group?
    o If applicable: Were the incentives motivating?
Diabetes Group Appointments

How Does the Incentive Group Differ?

• Incentives
  • Patient attendance: $40 for attending first meeting
  • Lottery: Chance for patient to win $40 cash or a gift card (Target or CVS) at each meeting
    o Done through wheel spin
  • Outcomes: Patient will receive $40 for each 0.5 reduction in HbA1c
## Diabetes Group Appointments

**Costs of Implementing the DGA: First DGA Appointment**

<table>
<thead>
<tr>
<th>Item</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conversation map</td>
<td>$900 (provided by Merck)</td>
</tr>
<tr>
<td>Breakfast</td>
<td>$25-35</td>
</tr>
<tr>
<td>Medical and Invitation Supplies</td>
<td>$385</td>
</tr>
<tr>
<td>Kitchen Supplies</td>
<td>$167</td>
</tr>
<tr>
<td>Food and Visual Models + Handouts</td>
<td>$680</td>
</tr>
<tr>
<td>Doctor Chart Review (2 Hours)*</td>
<td>$193.40</td>
</tr>
<tr>
<td>Health Educator (11 Hours)*</td>
<td>$282.15 (per educator)</td>
</tr>
<tr>
<td>RD/CDE (5 Hours)*</td>
<td>$165.15</td>
</tr>
<tr>
<td>RN/CDE (6 Hours)*</td>
<td>$271.50</td>
</tr>
<tr>
<td>Medical Assistant (3 Hours)</td>
<td>$48.69</td>
</tr>
<tr>
<td>Doctor in DGA (3 Hours)*</td>
<td>$290.10</td>
</tr>
<tr>
<td>Incentive per patient</td>
<td>$40 (per patient)</td>
</tr>
<tr>
<td>Gift Card</td>
<td>$40 (cash or gift card)</td>
</tr>
</tbody>
</table>

All California salary estimates from: [http://www.bls.gov/oes/current/oes_nat.htm#29-0000](http://www.bls.gov/oes/current/oes_nat.htm#29-0000)
# Diabetes Group Appointments

## Costs of Implementing the DGA: DGA Appointments per Month

<table>
<thead>
<tr>
<th>Item</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakfast</td>
<td>$25-35</td>
</tr>
<tr>
<td>Graduate Gift Baskets (as needed)</td>
<td>$35</td>
</tr>
<tr>
<td>Doctor Chart Review (2 Hours)*</td>
<td>$193.40</td>
</tr>
<tr>
<td>Health Educator (9 Hours)*</td>
<td>$230.85 (per educator)</td>
</tr>
<tr>
<td>RD/CDE (5 Hours)*</td>
<td>$165.15</td>
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</tr>
<tr>
<td>Gift Card</td>
<td>$40 (cash or gift card)</td>
</tr>
<tr>
<td>A1c Drop Costs (as needed)</td>
<td>$40 per 0.5 drop per patient</td>
</tr>
</tbody>
</table>

All California salary estimates from: [http://www.bls.gov/oes/current/oes_nat.htm#29-0000](http://www.bls.gov/oes/current/oes_nat.htm#29-0000)
Diabetes Group Appointments

What Currently is Happening

- 18 DGAs at 9 Sites
  - Arcadia, Downey, Fountain Valley, Glendora, Huntington Park, Manhattan Beach, Mission Hills, Montebello, Willow
- 265 Patients Enrolled
  - 134 Non-Incentive
  - 131 Incentive
- 11 Patients Graduated
- Study continues until December 31, 2013
Diabetes Group Appointments

Patient Demographics

- **Age**
  - Range: 25-86, Average: 60

- **Gender**
  - Incentive: 52% Males, 48% Females
  - Non-Incentive: 37% Males, 63% Females

- **Language**
  - 85% English, 15% Spanish

- **Education**
  - Incentive: 35% High School
  - Non-Incentive: 43% High School
# Diabetes Group Appointments

## Current Total Patient Earnings During Incentive DGA

<table>
<thead>
<tr>
<th>Time Frame</th>
<th>Costs</th>
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<tbody>
<tr>
<td>September – December 2012</td>
<td>$1,880.00</td>
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<tr>
<td>January 2013- Present</td>
<td>$5,840.00</td>
</tr>
<tr>
<td>Total Costs</td>
<td>$7,720.00</td>
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</table>
## Diabetes Group Appointments

### Overall Non-Incentive Outcomes

<table>
<thead>
<tr>
<th>Outcomes Measured</th>
<th>Pre</th>
<th>Post</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1C Level Average</td>
<td>9.37 % (sample 94)</td>
<td>8.40% (sample 43)</td>
<td>0.97 % ↓</td>
</tr>
<tr>
<td>LDL Average</td>
<td>96.06 (sample 87, not including 5 too high to calculate)</td>
<td>86.39 (sample 32)</td>
<td>9.67 ↓</td>
</tr>
</tbody>
</table>

### Overall Incentive Outcomes

<table>
<thead>
<tr>
<th>Outcomes Measured</th>
<th>Pre</th>
<th>Post</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1C Level Average</td>
<td>9.60 % (sample 89)</td>
<td>9.08% (sample 39)</td>
<td>0.52 % ↓</td>
</tr>
<tr>
<td>LDL Average</td>
<td>95.32 (sample 85, not including 4 too high to calculate)</td>
<td>86.68 (sample 28, not including 1 too high to calculate)</td>
<td>8.64 ↓</td>
</tr>
</tbody>
</table>
Diabetes Group Appointments

Challenges in Implementation

- Many different sites participating, with many different doctors and health educators
  - Wanted certain aspects of the appointment to be different
    - Some doctor one-on-one
    - Extra exclusions for one site
- Response Rate
- Randomization among a patient population
  - Some family members randomized to different groups or not eligible, even though had diabetes
Diabetes Group Appointments

Challenges in Implementation

• Socio-economic status and health literacy differences among patients
• Appointment times
  • Many patients could not get out of work
    o Weekend and evening classes preferred
• Hard to get resources for DGA
  • Doctor time
• Planning of DGA
  • Delays due to sites
Diabetes Group Appointments

Challenges in Implementation

- Group and IPA Physicians
- 1099 Form
  - Patients will get taxes taken out if make $600 or more
Future Plans

What We Will Do Next

• Continue collecting data until December 31, 2013
• Expand study to other Health Enhancement classes
Conclusions

What the Data Show so Far

- DGA is helping patients lower A1c and LDL values
  - Results inconclusive as the DGAs are still in process
- Confounders so far
  - Variations across sites
  - Selection into incentive and non-incentive groups
  - Small observation numbers
Acknowledgements

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DGA Highlights
Questions?