Achieving Value-Based Quality from the Bottom Up: Empowering Care Teams With Data Aligned with Outcomes Metrics

PCPCC Annual Fall Meeting Pre-Conference Workshop

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October 14, 2013
Learning Objectives

1. Appreciation for complexity of quality measures incorporated in nearly all value-based payment models.

2. Realizing that having the “analytics” does not translate into “closing the care gaps” required to move the needle.

3. Recognition that technology-enabled functions are essential to achieve the scale required to manage populations.
Patient-Centered Medical Home Model Has Traction

- Primary care is experiencing a renaissance
- PCMH initiatives are achieving better health, better care, and lower costs
- PCMH initiatives are reaching the tipping point with broad public and private sector support
- PCMH initiatives offer both short-term and long-term cost savings
Move from Volume to Value is Underway

90% of health plans expect value-based payment models to impact their top three business objectives.

40% predict that in three years, value-based models will support more than half of their businesses.

Number of Accountable Care Organizations Over Time by Sponsoring Entity

ACOs by State

ACOs

- 30+
- 20-29
- 15-19
- 10-14
- 5-9
- 2-4
- 1
- 0

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</table>
However, We Are Still in Transition…

**Current View**
- 30 Patients Per Day
- 14 have Chronic Conditions
- Unknown Health Risks
- Visits Too Short for Coaching

**New Population View**
- 2500 Patient Population
- 900 have Chronic Conditions
- 1100-1250 have Mod-High Health Risk
- Care Teams Leveraged by HIT
“Mind the Gap”: Real Health System Profile

A fully-deployed EMR
Pursuing ACO and shared savings
Embracing PCMH & NCQA Certified recognition
Attested for Meaningful Use Stage 1, planning for Stage 2
Hired Care Managers in some or all primary care practices
Implemented Disease vs. Patient-Centric Registries

No total population reports
Quality meetings without reliable performance data
Clinical staff who spend more hours compiling patient reports than caring for patients
P4P incentives not fully realized
Care coordination “communication-challenged”
Inability to scale & engage all patients everyday…
PHM is a “Work in Progress”

**Major Goals…**

- **Strategic Drivers**
  - PCMH Recognition
  - MSSP Award
  - Integration of PCP Acquisitions
  - Direct Employer Contracting

- **Financial Incentives**
  - Payer P4P
  - MSSP Shared Savings
  - MU Stage 2

**…But Emerging PHM**

- **PHM Infrastructure**
  - Common EMR but Use Varies
  - CMs Employed and Payer-Subsidized
  - Patient Portal and HIE Coming Soon

- **Best Practices**
  - Workflows Largely Manual
  - Actionable Data Minimal
  - Care Teams Not at “Top of License”
  - Medical Neighborhood Loosely Coordinated
  - Focused on “Tip of the Iceberg”
NCQA Study of Level 3 Medical Homes:
Most Challenging “Must Pass” Elements

1. Using data to support population health:
   • Generating lists, proactively reminding patients about needed services (2D)
2. Care management:
   • Carrying out functions such as pre-visit preparation, providing written care plans (3C)
3. Referral tracking and follow up:
   • Giving the receiving site reason for the referral, providing electronic summaries of care, tracking referral status (5B)

Why? Manual processes are insufficient
This is HARD: No Quality, No Shared Savings

- Pioneer ACOs met quality **reporting** in 2012, but expressed concern about meeting **performance** benchmarks for 2013
- 9 Pioneers switched to MSSP or dropped out after Year 1

Table 1: The ACO GPRO Quality Measures from the Medical Record 2012 Measurement Period

<table>
<thead>
<tr>
<th>ACO #</th>
<th>Domain</th>
<th>Measure Title</th>
<th>Pay for Performance Phase-In</th>
<th>PY3</th>
<th>PY2</th>
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<td>Care Coord./Fit Safety</td>
<td>Medication Reconciliation: Reconciliation After Discharge from an Inpatient Facility</td>
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<td>13</td>
<td>Care Coord./Fit Safety</td>
<td>Fall: Screening for Fall Risk</td>
<td>R</td>
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<td>14</td>
<td>Preventive Health</td>
<td>Influenza Immunization</td>
<td>K</td>
<td>P</td>
<td>P</td>
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<tr>
<td>15</td>
<td>Preventive Health</td>
<td>Pneumococcal Vaccination</td>
<td>K</td>
<td>P</td>
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<td>16</td>
<td>Preventive Health</td>
<td>Adult Weight Screening and Follow-up</td>
<td>K</td>
<td>P</td>
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<td>17</td>
<td>Preventive Health</td>
<td>Tobacco Use Assessment and Tobacco Cessation Intervention</td>
<td>K</td>
<td>P</td>
<td>P</td>
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<td>18</td>
<td>Preventive Health</td>
<td>Depression Screening</td>
<td>K</td>
<td>P</td>
<td>P</td>
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<td>19</td>
<td>Preventive Health</td>
<td>Colorectal Cancer Screening</td>
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<td>20</td>
<td>Preventive Health</td>
<td>Mammography Screening</td>
<td>K</td>
<td>P</td>
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<td>21</td>
<td>Preventive Health</td>
<td>Proportion of Adults 18+ who had their Blood Pressure Measured within the preceding 2 years</td>
<td>K</td>
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<td>At Risk: Population - Diabetes</td>
<td>Diabetes Composite (All or Nothing Scoring): Hemoglobin A1c Control (&lt;=8%)</td>
<td>R</td>
<td>P</td>
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<tr>
<td>23</td>
<td>At Risk: Population - Diabetes</td>
<td>Diabetes Composite (All or Nothing Scoring): Low Density Lipoprotein (&lt;=100)</td>
<td>R</td>
<td>P</td>
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<td>24</td>
<td>At Risk: Population - Diabetes</td>
<td>Diabetes Composite (All or Nothing Scoring): Blood Pressure &lt;140/90</td>
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<td>P</td>
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<td>25</td>
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<td>Diabetes Composite (All or Nothing Scoring): Tobacco Use</td>
<td>R</td>
<td>P</td>
<td>P</td>
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<td>26</td>
<td>At Risk: Population - Diabetes</td>
<td>Diabetes Composite (All or Nothing Scoring): Aspirin Use</td>
<td>R</td>
<td>P</td>
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<tr>
<td>27</td>
<td>At Risk: Population - Diabetes</td>
<td>Diabetes Mellitus: Hemoglobin A1c Poor Control (&lt;=9%)</td>
<td>R</td>
<td>P</td>
<td>P</td>
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<td>28</td>
<td>At Risk: Population - Hypertension</td>
<td>Hypertension (HTN): Blood Pressure Control</td>
<td>R</td>
<td>P</td>
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<td>29</td>
<td>At Risk: Population - Ischemic Vascular Disease</td>
<td>Ischemic Vascular Disease (IVD): Complete Lipid Profile and LDL Control &lt;=100 mg/dl</td>
<td>R</td>
<td>P</td>
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<tr>
<td>30</td>
<td>At Risk: Population - Ischemic Vascular Disease</td>
<td>Ischemic Vascular Disease (IVD): Use of Aspirin or Another Antithrombotic</td>
<td>R</td>
<td>P</td>
<td>P</td>
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</table>
ACHIEVING CARE COORDINATION MEASURES

**ACO 9 (NQF #0275; AHRQ PQI #05)**  
**Ambulatory Sensitive Conditions**  
**Admissions: Chronic Obstructive Pulmonary Disease or Asthma in Older Adults**

**DESCRIPTION:**
All discharges of age 40 years and older with ICD-9-CM principal diagnosis code for COPD or Asthma in adults ages 40 years and older, per 1,000 ACO assigned beneficiaries.

**DENOMINATOR:**
Population of Medicare FFS beneficiaries assigned to an ACO aged 40 years and older.

**NUMERATOR:**
Risk adjusted discharges aged 40 years and older from an acute care hospital with a principal diagnosis of Chronic Obstructive Pulmonary Disease or Asthma

**RATIONALE:**
Hospital admissions for chronic obstructive pulmonary disease or asthma are a Prevention Quality Indicator of most interest to comprehensive health care delivery systems. COPD or Asthma can often be controlled in an outpatient setting. Evidence suggests that these hospital admissions could have been avoided through high quality outpatient care, or the condition would have been less severe if treated early and appropriately. Proper outpatient treatment and adherence to care may reduce the rate of occurrence for this event, and thus of hospital admissions.
REQUIRED: Structured Data, Sophisticated Algorithms, Real Time Reports and Behavior Change

#16: Adult Weight Screening and Follow-Up

Measure Description: Percentage of patients aged 18 years and older a calculated BMI documented in the medical record if the most recent BMI is outside the parameters, a follow-up plan is documented. Parameters: age 65 and older BMI > 30 or age 18-64 BMI > 25 or < 18.5.

Numerator: Patients with BMI calculated in the past six months and a follow-up plan documented if the BMI is outside of parameters.

Denominator: Patients 18 years and older.

Exclusions: Patients can be considered not eligible in the following situations:
- There is documentation in the medical record if the patient is over or under weight an being managed by another provider.
- If the patient has a terminal illness.
- If the patient refuses BMI measurement.
- If there is any other reason documented in the medical record by the provider explaining why BMI measurement was not appropriate.
- Patient is in an urgent or emergent medical situation where time is of the essence and BMI is not a priority.

ACO 17 (ACO-Prev-10) (NQF 0028): Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention

DESCRIPTION: Percentage of patients aged 18 years and older who were screened for tobacco use one or more times within 24 months AND who received cessation counseling intervention if identified as a tobacco user.
Do Your Workflows Manage to the Measures?

- #16: Adult Weight Screening and Follow-Up
- #21: Screening for High Blood Pressure
  - Documentation of required follow-up for abnormal findings must link to planned follow-up for the finding
- #18: Depression Screening
  - Documentation must include evidence of use of age-appropriate standardized screening tool
- #22 and #27 HbA1c Control
  - Lab measures often documented in more than one place; lab report is the priority source
- #32: CAD Drug Therapy for Lowering LDL Cholesterol
  - Must include a plan of care that includes Rx for statin, not just the Rx
Are You Leaving $$$ on the Table??

• To meet your quality goals, can you identify, reach and assist all patients who need:
  • A visit?
  • A test?
  • Care coordination?
  • Self-management support?
  • Behavior change?
New PCPCC Report:
Health IT is “Must Have” for Population Management

TEN RECOMMENDED HEALTH IT TOOLS TO ACHIEVE PHM:
1. Electronic Health Records
2. Patient Registries
3. Health Information Exchange
4. Risk Stratification
5. Automated Outreach
6. Referral Tracking
7. Patient Portals
8. Telehealth / Telemedicine
9. Remote Patient Monitoring
10. Advanced Population Analytics
“Bottom Up” Quality Model

- QI
- Patient Engagement
- Enabled Care Teams
- Data Integrity
Job 1: Data Integrity

- Provider attribution
- Consistent and complete data capture
- Creating structured fields for quality measures
- Design-in continuous data quality management
“At registration, the front desk should confirm the PCP for every patient.”
Provider Attribution Drives Valid Reporting

Apply algorithms based on visit data to improve provider attribution accuracy

Patients with Activity Last 24 Mos.

- Patients assigned to valid PCPs 75%
- Patients assigned to invalid PCPs 25%

Patients with Activity Last 24 Mos.

- Patients assigned to valid PCPs 97%
- Patients assigned to invalid PCPs 3%
Data Quality: Look for Patterns and Outliers

HBA1C

- **HBA1C Numeric Distribution**
  - Record Count vs. Value

- **HBA1C Unit Code Summary**
  - % Distribution of different unit codes

- **HBA1C Counts By Month**
  - Record Count vs. Month

- **HBA1C Value Summary**
  - % Distribution of different value categories
Sample Strategies to Improve Quality Measures

1. **Existing Data Capture**
   - Use consistent locations in EMR for structured and scanned data (e.g., lab results, test orders, patient-reported data)

2. **New Data Capture**
   - Create new structured fields rather than additional flow sheets for specific measures (e.g., fall risk assessment, Rx in care plan)

3. **Eliminate Free Text**
   - Direct teams to use structured fields to collect data formerly entered as free text (e.g., tobacco cessation counseling, follow-up for positive depression screening)

4. **Make Data Clean-Up Part of Standard Work**
   - Assign staff to regularly review provider attribution, invalid data entries, proper use of new workflows, etc. to enhance reliability
Enabling High-Performance Care Teams

• Start with population view
• Stratify patient population by risk and needs
• Assign care team members to defined cohorts
• Create lean workflows with HIT to drive high performance
Stratify Population for “Top of License” Workflows

Patient Stratification

- Well: 40-60% <10%
- At Risk: 20-25% 20-30%
- Chronic Conditions: 5-15% 20-30%
- Catastrophic: 40-50% 70-80%

Care Delivery

- Encourage healthy lifestyles: Full Automated
- Intervene on risks and keep from becoming chronic: Blended Automated with Health Coaches
- Prevent disease progression and avoid unnecessary complications: Blended Automated with Care Managers
- Manage benefits, control costs, provide dignity through end of life: Case Management

Multiple Chronic Conditions
Align Patient-Centered Care, PCMH and TQM

Attributes of an Integrated Practice Unit (IPU):
1. Organized around the patient
2. Provides the full cycle of care for a medical condition, including patient education, engagement and follow-up
   • Encompasses inpatient, outpatient, and rehabilitative care as well as supporting services (e.g. nutrition, social work)
3. Involves a dedicated team who devote a significant portion of their time to the medical condition
4. Providers are part of a common organizational unit
5. Co-located in dedicated facilities
6. Utilizing a single administrative and scheduling structure
7. A physician team captain and a care manager oversee each patient’s care process
8. The team meets formally and informally as a group and in subgroups on a regular basis
9. Measures processes and outcomes as a team, not individually
10. Accepts joint accountability for outcomes and costs

Source: Value-Based Health Care Delivery: Integrated Practice Units, Outcome and Cost Measurement, Professor Michael E. Porter, Harvard Business School, DHCS Health Care Seminar, June 4, 2010
## Practice Innovations that Produce “Joy”

<table>
<thead>
<tr>
<th>Problem</th>
<th>Innovation</th>
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<tbody>
<tr>
<td>Unplanned visits with overfull agendas</td>
<td>Previsit planning</td>
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<td>Inadequate support to meet the patient demand for care</td>
<td>Preappointment laboratory tests</td>
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<td>Sharing the care&lt;sup&gt;a&lt;/sup&gt;</td>
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<td>Expanded nurse or medical assistant rooming protocol</td>
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<td>Standing orders</td>
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<td>Extended responsibility for health coaching, care coordination, and integrated behavioral health to nonphysician members of the team</td>
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<td>Team responsibility for panel management</td>
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<tr>
<td>Great amounts of time spent documenting and complying with administrative and regulatory requirements</td>
<td>Scribing</td>
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<tr>
<td>Computerized technology that pushes more work to the physician</td>
<td>Assistant order entry</td>
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<td>Teams that function poorly and complicate rather than simplify the work</td>
<td>Standardized prescription renewal</td>
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<td>In-box management</td>
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<td>Verbal messaging</td>
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<td>Improving team communication through</td>
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<td>Co-location</td>
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<td>Huddles</td>
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<td>Regular team meetings</td>
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<td>Improving team functioning</td>
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<td></td>
<td>Systems planning</td>
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<td></td>
<td>Work flow mapping</td>
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</table>

<sup>a</sup> These roles require 2- or 3-to-1 clinical support per physician.

Optimize Care Team Roles with Automation

Patient Service Representative or Medical Assistant
- Schedule visits and tests indicated in care gap and Pre-Visit reports
- Send out pre-visit communications and conduct follow up using automated Campaigns

Care Manager
- Stratify patients by risk using Coordinate reports and filters
- Use Campaign functions to reach out to subgroups of patients with care gaps
- Reinforce importance of proper diabetes management through personal and automated patient education

Physician
- Review Patient-Centric Registry reports for attributed patients
- Assign high risk patients to Care Manager using reports and filters
- Address all diabetes care opportunities at every encounter, even for non-diabetes visits, using real-time patient data

CMO/Quality Committee
- Review performance on each clinical goal overall and by location and provider
- Meet with MDs and Care Teams at least monthly to review progress
Create Workflows with HIT Assists

1) All >9 A1c and no office visit are sent a text message to call care manager

2) All >9 and BMI >35 are sent an automated invitation to a group visit with a diabetes dietician

3) All between A1c 7 and 9 are sent an automated message to encourage visit website to take diabetes self-management course

4) All diabetics <7.0 are sent an email message emphasizing the importance of nutrition and exercise to maintain low A1c levels with a link to a mobile app to track their progress
Utilize HIT to Expand Care Team Reach

Campaigns List

<table>
<thead>
<tr>
<th>Name</th>
<th>Mode</th>
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</thead>
<tbody>
<tr>
<td>Diabetes Group Visit</td>
<td>Email</td>
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<tr>
<td>Missing HbA1c test, call care manager</td>
<td>Email</td>
</tr>
<tr>
<td>Depression Screening PHQ2</td>
<td>Text</td>
</tr>
<tr>
<td>Call your care manager</td>
<td>Phone</td>
</tr>
<tr>
<td>Medication reconciliation</td>
<td>Email</td>
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<tr>
<td>Diet and exercise education series</td>
<td>Email</td>
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<tr>
<td>Link to CDC site for education</td>
<td>Email</td>
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<tr>
<td>Self management options</td>
<td>Text</td>
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<tr>
<td>Breast Cancer Awareness Month</td>
<td>Text</td>
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<tr>
<td>HbA1c &lt; 7 Keep it up</td>
<td>Email</td>
</tr>
<tr>
<td>HbA1c &gt; 9, call us back</td>
<td>Email</td>
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<tr>
<td>High BP Lifestyle campaign</td>
<td>Email</td>
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<tr>
<td>Asthma Follow-up</td>
<td>Phone</td>
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<tr>
<td>Weight Management Coaching Program</td>
<td>Phone</td>
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Overview

Campaign Overview

<table>
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<tr>
<th>Campaign Name</th>
<th>Campaign Description</th>
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Population

<table>
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<tr>
<th># Patients Selected</th>
<th># Patients Selected with Email Address</th>
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<tbody>
<tr>
<td>87</td>
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Message

```
Dear [Patient Name],
We would like to invite you to participate in a group diabetes visit. These visits are really important as they allow you to share experiences and hear how others are handling the same challenges you face. During the visit we will have several discussions lead by various members of your Care Team.

In order to participate please respond to this email or call our office at (555) 555-5555.

Thanks,
Your Care Team.
```
Patient Engagement

- Know your patients as people, not care gaps
- Incorporate behavior change principles into all encounters
- Use HIT to engage all patients, not just those who present
- Be proactive and persistent
We WANT/NEED Him to Go Towards "Better Health"

• Our agenda for Oscar:
  • Medication adherence
  • Come to follow-up appointments
  • Improved self-monitoring
  • Participation in PT
  • Nutritious food choices and increased calories
  • Living Will
  • Participate in Shared Decision-Making
Tying Strategies to Engagement

Engage for Better Health

Inform Me
My Priorities
My Learning Style
My Barriers
My Strengths
My Support
My Risks
My Health
My Life Style
My Opportunities

Empower Me
My Agenda
My Goals
My Treatment Targets
My Progress
My Strategies
My Skills
My Team
My Resources

Support Me
Patient’s agenda
↑ importance/confidence
Adjust to “Readiness”
Validate Assumptions
↑ change skills
Relevant resources
Track progress
Offer feedback
Strategy refinement
Positive reinforcement
Engage All Patients in Multiple Ways

Outreach

Diabetic, No visit past 12 mo, No upcoming appointment

Automated Assessment

Diabetic, HTN, CAD Discharged from ED 17hrs ago

Campaigns

Med Risk Patients with HbA1c >8

http://www

High Risk Patients with HbA1c >9 & LDL >130

Schedule Group Office Visit

Enroll in an intervention program

Intervention Programs
An Outreach Strategy is a Must

A strategy for identifying patients lost to planned follow-up is critical to population health management.
Immediacy and Frequency Matter

HTN Pilot: Results at 60 days

![Bar chart showing Routine BP Measurement and BP Control <140/90 for Pilot Clinics 1 to 4 at baseline and T60.](image)
Quality Improvement

• Depend on real time data
• Make data available at all levels of the practice
• Always look below the waterline
• Share results regularly
How Are These Providers Doing?

### MGFM's Diabetes Summary Report

<table>
<thead>
<tr>
<th>Provider's Name</th>
<th># of Patients</th>
<th>BP &lt; 130/80</th>
<th>Retinal Exam</th>
<th>Foot Mono</th>
<th>Atc &lt; 7.0</th>
<th>Micro Albumin/CR</th>
<th>LDL &lt; 100</th>
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<tr>
<td>Larke</td>
<td>16</td>
<td>37.5%</td>
<td>62.5%</td>
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<tr>
<td>Boughty</td>
<td>26</td>
<td>69.2%</td>
<td>76.9%</td>
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### Sub-PO Evidence Based Care Report (EBCR)

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### Diabetes Summary Report

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<th>Quarterly Report</th>
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<th>BP &lt; 130/80</th>
<th>Retinal Exam</th>
<th>Foot Mono</th>
<th>Atc &lt; 7.0</th>
<th>Micro Albumin/CR</th>
<th>LDL &lt; 100</th>
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</table>
Uncontrolled Percentage Increasing

"How can this be if I am managing all of our patients with A1c results >9?"
Where Were 9+ HbA1C Patients Last Year?

- The majority (65%) were not 9+ the year before.
- 35% moved up from a lower group.
- 30% were not tested.
Track Performance to Target Improvement

- Monitor performance measures
- Compare provider and care team results
- Use drill-down capabilities to find outliers and take action
Automated Population Health Model

Doctors, Hospitals and Care Providers

Patient Population
“Bottom Up” Take Home Messages

1. Ensure Complete Data
   • Capture structured data at every patient encounter to match required measures

2. Tee-Up Patient Cohorts for Care Team Action
   • Enable clinical and non-clinical staff workflows for total PHM with the right patients at the right time

3. Engage All Patients, Not Just High Risk
   • Utilize automated patient engagement tools to reach one or many patients to target interventions by risk and severity

4. Make Reporting Real-Time and Accessible:
   • Put patient, provider and practice level performance data at the care team’s fingertips for continuous quality improvement
Questions?

Karen Handmaker
VP Population Health Strategies, Phytel
Karen.handmaker@phytel.com