Create a Population Management Platform in Context

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These presenters have nothing to disclose.
Learning Objectives

• Describe a general paradigm for population management.
• Identify successful implementation of population management interventions.
• List strategies for transforming population management interventions in a foreign context to ones that respects local constraints.
• Formulate plans for implementation of successful population management interventions in the participant’s local context.
In Pursuit of Value...The New Work

Advisory Board Patient Risk Paradigm

Care Coordination

Hi Risk 5%
Rising-Risk 20%
At-Risk 40%
Healthy Patients 35%

Patient Engagement

Care Plan Execution

Engagement & Wellness

Acute & Chronic Conditions

Care Plans

Medically Vulnerable & Clinically Complex

Care Plan Failures

Registry Outreach

Care Coordination
The New Work

Care Plan Execution & Registry Outreach

- Pre-Visit Planning
- Registry Outreach
- POC Decision-Support

Oversight of the Vulnerable Patient

- Risk Stratification
- Structured Oversight
- Develop Care Plan
- Execute Care Plan
AN INTRODUCTION TO TWO ORGANIZATIONS
Emory Healthcare Network

Emory Healthcare Network Facilities
- Emory University Hospital
- Emory University Hospital Midtown
- Emory Johns Creek Hospital
- Emory Saint Joseph’s Hospital
- Emory University Orthopaedic & Spine Hospital
- Emory Rehabilitation Hospital

Emory Healthcare Network Providers
- Employed MD's: 1570+
- Private Practice MD's: 400+
- Primary Care MD's: 250+

<table>
<thead>
<tr>
<th>Private Practice PCP</th>
<th>Employed PCP</th>
<th>Total EHN PCP</th>
</tr>
</thead>
<tbody>
<tr>
<td>117 PCPs</td>
<td>129 PCPs</td>
<td>246 PCPs</td>
</tr>
<tr>
<td>80 Primary Care Sites</td>
<td>43 Primary Care Sites</td>
<td>123 Primary Care Sites</td>
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</tbody>
</table>
# EHN Risk Populations

<table>
<thead>
<tr>
<th>Type of Arrangement</th>
<th>Commercial</th>
<th>Medicare Advantage</th>
<th>Employer ACO</th>
<th>Medicare</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Shared Savings with several payers</td>
<td>Shared Savings &amp; Capitation w/ most payers</td>
<td>Shared savings w/ 1 employer</td>
<td>MIPS attributed patients</td>
</tr>
<tr>
<td>Start date</td>
<td>2014</td>
<td>2014</td>
<td>2018</td>
<td>N/A</td>
</tr>
<tr>
<td>Includes</td>
<td>Employed adults and their adult spouses/ children</td>
<td>Older adults. Care management key for PHM.</td>
<td>Employed adults and their adult spouses</td>
<td>Older adults. Less defined structure for PHM.</td>
</tr>
<tr>
<td>Covered Lives</td>
<td>2017: 60,000 / 2018: 80,000</td>
<td>17,000</td>
<td>3,000 (est.)</td>
<td>TBD</td>
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</table>

- < 10% of Emory Healthcare’s business is via Value-based contracts
- Still primarily operating in Fee For Service paradigm
* Patient-Centered Medical Homes may or may not include formal NCQA certification, the use of this term is used more to clarify elements necessary to manage attributed member populations.
Partners Healthcare Risk Covered Lives

Partners has increased their risk lives by >200,000 patients over 5 years with the addition of PPO and Medicaid.

1. Commercial
   - Alternative Quality Contract (AQC)
   - Younger population, specialists critical to management

2. Medicaid
   - Neighborhood Health Plan & State ACO
   - Population with significant disability, mental health, and substance abuse challenges

3. Self Insured
   - Partners Plus
   - Commercial population, but savings accrue directly to Partners, and improves our own lives

4. Medicare
   - Accountable Care Organization
   - Elderly population, care management central to trend management

700,000 covered lives in various accountable care relationships

- Covered lives: ~350k
- Covered lives: ~150k
- Covered lives: ~100k
- Covered lives: ~100k
Brigham Health Risk Covered Lives

Total Unique Patients (BWH & BWFH) - 500,000

BWPO PCP Patients (BWH, BWFH, HBR) - 206,000

At Risk (ACO, Commercial) - 95,000

iCMP/High Risk Patients - 3,000

Note: Will expand by 16,000 or so with launch of Medicaid ACO
Partners Health Internal Performance Framework

Strategy       IPF Trend       Quality

CSME: Cost Standardized Medical Expense

source: Eric Weil, MGH slide deck
HIGH RISK CARE COORDINATION AT BRIGHAM HEALTH
Rationale for investment in high risk care management

- Medicare Demonstration Project: ROI $2.60 in savings for each $1.00 invested
- Intensive Care Management for complex patients has been shown to improve quality of care and provide cost savings
Who are the “high risk” patients?

- Complex Medical Conditions
- Behavioral health needs
- Concrete resource needs

Source: Rebecca Cunningham, MD
What are typical needs?

**Complex medical**
- Disease management
- Polypharmacy
- End-of-life planning

**Behavioral health**
- Outreach & engagement
- Psych/Social Work support
- Community support

**Concrete resources**
- Transportation
- DME
- Housing
Complex patients need a TEAM

Care Coordination

- Pharmacy Support
- Community Resources
- Primary Care
- Mental Health
RN Care Coordinator role

- Care planning & early symptom identification
- Probe patient understanding & goals
- Assess needs and supports as illness progresses

Outreach
Longitudinal relationship
Referrals & resources
Key lesson: tailor the team to patient needs
HIGH RISK CARE COORDINATION IN EHN
Central Care Coordination in the EHN: Structure and Risk Stratification

• Telephonic outreach to top 3.5% of Commercial Risk Contracts (~1,800)
• Not feasible to scale to all populations
• Work with patients attributed to Emory Employed PCPs
• Risk stratification and workflow system:
  • EMR, paid claims, billing

<table>
<thead>
<tr>
<th>Healthe Care Identification Algorithm Name:</th>
<th>Avoidable ED</th>
<th>Chronic Stable Condition</th>
<th>Unavoidable ED</th>
<th>Inpatient Complex</th>
<th>High Risk Complex Case</th>
<th>Post Acute Care</th>
<th>Behavioral Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Identification Criteria Overview</td>
<td>2 or more avoidable ED visits OR 1 or more avoidable ED visits AND 1 or more new onset condition</td>
<td>2 or more chronic conditions AND 1 or more new onset diagnosis</td>
<td>1 or more ED visits for a chronic condition exacerbation</td>
<td>1 or more inpatient/observation visits OR surgical procedure</td>
<td>3 or more chronic conditions OR 1 or more terminal conditions</td>
<td>Admitted or discharged to/from SNF/LTAC/Post-acute rehab</td>
<td>1 or more behavioral health diagnosis</td>
</tr>
<tr>
<td>Algorithm Alignment</td>
<td>Health Educator</td>
<td>Health Educator</td>
<td>Registered Nurse</td>
<td>Registered Nurse</td>
<td>Registered Nurse</td>
<td>Social Worker</td>
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Central Care Coordination in the EHN: Care Plans & Structured Oversight

- RNs only → Multidisciplinary team
- Meet patient needs with appropriate resources

<table>
<thead>
<tr>
<th>4 Registered Nurses</th>
<th>2 Care Coordinator Associates</th>
<th>1 Health Educator</th>
<th>1 Social Worker (LCSW)</th>
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</thead>
<tbody>
<tr>
<td>Complex/High Risk Focused Nursing Assessments</td>
<td>Follow-Up Appointments</td>
<td>Chronic Disease Management</td>
<td>Psychosocial Assessments</td>
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<tr>
<td>Medication Reconciliation</td>
<td>Reminder Calls</td>
<td>Health Education</td>
<td>Transportation Gaps</td>
</tr>
<tr>
<td>Prescription Renewals</td>
<td>Payor Data Retrieval</td>
<td>Lifestyle Modification</td>
<td>Behavioral Health Intervention</td>
</tr>
<tr>
<td>Targeted Payor Review Calls</td>
<td>Referral Tracking</td>
<td>Goal Setting</td>
<td>Community Resources</td>
</tr>
<tr>
<td>Transitional Care</td>
<td>Mailings</td>
<td>Gap Closure</td>
<td>Referral Management</td>
</tr>
<tr>
<td></td>
<td>Eemr Messaging</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Predict the Risk
- System Data Warehouse
- Mckesson Risk Manager Analytics
- Payor Claims Files

Risk Stratify the Population
- Comprehensive Chart Review
- Chronic Disease Assessment
- Patient Engagement Barriers

Proactive Outreach & Engagement
- Structured Outreach
- Motivational Interviewing
- SMART Goals
- Care-Planning
# Central Care Coordination in the EHN: Interventions and Focus

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<th>Behavioral Health</th>
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<tbody>
<tr>
<td>Health Educator</td>
<td>Health Educator</td>
<td>Registered Nurse</td>
<td>Registered Nurse</td>
<td>Registered Nurse</td>
<td>Social Worker</td>
<td>Social Worker</td>
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<tr>
<td><strong>Interventions</strong></td>
<td>Health Education</td>
<td>Chronic Disease Management</td>
<td>Comprehension Evaluation</td>
<td>Complex/High Risk Focused Nursing Assessments</td>
<td>Comprehension Evaluation to include screenings</td>
<td>Focused Post Hospital Discharge Care Plan Evaluation</td>
<td>Psychosocial Assessments</td>
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<tr>
<td>Gap Closure</td>
<td>Goal Setting</td>
<td>Medication Review (doc by hx.)</td>
<td>Discharge Plan Reinforcement/Education</td>
<td>Physical Barriers to Care</td>
<td>Safety Screenings</td>
<td>Behavioral Health Intervention</td>
<td></td>
</tr>
<tr>
<td>Goal Setting</td>
<td>Life Style Modification</td>
<td>Prescription Renewals</td>
<td>Chronic Disease Management</td>
<td>Goal Setting</td>
<td>Community Resources</td>
<td>Mental Health Community Resources</td>
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<tr>
<td>Life Style Modification</td>
<td>Gap Closure</td>
<td>Motivational Interviewing</td>
<td>Goal Setting</td>
<td>Medication Review (doc by hx.)</td>
<td>Transportation Gaps</td>
<td>Transportation Gaps</td>
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<tr>
<td>Disease Focus Evaluation</td>
<td>Disease Focus Evaluation</td>
<td>Goal Setting</td>
<td>Patient Center Care Plan Development</td>
<td>Patient Center Care Plan Development</td>
<td>Patient/Family Engagement</td>
<td>Referral Management</td>
<td></td>
</tr>
<tr>
<td><strong>Care Coordination Mgmt Focus</strong></td>
<td>Redirection to Primary Care/Urgent Care</td>
<td>Self Management/Primary care utilization</td>
<td>Chronic Disease Exacerbation Management</td>
<td>Decrease un-necessary utilization/Re-admission prevention</td>
<td>Chronic Disease Management/Reduce unintended cost</td>
<td>Maintain Safe Home Discharge/Re-admission prevention</td>
<td>Psychosocial support/early Identification of Mental Illness leading to increase utilization</td>
</tr>
</tbody>
</table>
Care Coordination in the EHN: Medicare Advantage Patients

- Deploy clinicians ("Extensivists") who assume responsibility for most ill and frail patients
- Care Centers in patients’ neighborhoods to support and care for chronically ill and frail
- Support includes disease management, case management
- Coordinate care in hospitals, long-term care facilities and with PCPs
- Offer support services including transportation, home care, remote monitoring
Embedded Care Coordination in Primary Care Practices

- 10 NCQA Level III Patient Centered Medical Homes
- Need additional resources to support PCMH work
- RN Care Coordinator for each PCMH Practice
  - 50% time: Annual wellness visits
  - 50% time: Care Coordination
    - Processes still developing
- Working with Patients NOT included in Risk Based Contracts. Avoid Redundancy.
- Risk Stratification more manual
  - No claims data
  - Annual Report to select patients
- Care plans for high risk pts
CARE COORDINATION ACROSS CONTEXTS
Care Coordination

Oversight of the Vulnerable Patient

Risk Stratification

Structured Oversight

Develop Care Plan

Execute Care Plan

RISK STRATIFICATION
- Clinical judgement
- EMR or hospital
- Insurance company

Care Plan Development
- ID reason high resource needs
- Develop strategy to address
- Ensure plans executed as intended

Care Plan Execution

Structured Oversight
- Schedule frequent check-ins
- Arrange frequent visits

Tips
- Scale to match your resource availability
- Frequent contact allows refinement
POPULATION HEALTH OUTREACH IN EHN
Population Health Outreach at EHN: Transformation Pace vs. Risk Contract Immediacy

Initial focus on Using Primary Care to close gaps in care
- Less than 1/3 of Primary Care Practices are PCMH
- PCMH v. Non-PCMH
- Employed v. Private
- Managed by Primary Care Practices with existing staff
- It’s an RVU world at EHN

Conclusion:
Need to augment practice work with Centralized support
EHN Population Health Outreach: A Comparison

PCMH PCP Practice
- Pre-visit Planning (PVP)
- Point of Care Gap Closure
- Registry Review & Outreach
- EMR based disease registry decision support
- Standard documentation to satisfy registries
- Practice based workflows
- Managing work with existing staff

Non-PCMH PCP Practice
- NO PVP
- Point of Care Gap Closure
- Limited Outreach
- Managing work with existing staff
- Practice based workflows
- Alignment of priority measures

Centralized
- NO PVP
- NO Point of Care Gap Closure
- Outreach & Outreach support
  - Care Coord team
  - Nurse triage team
  - Specialists
EHN Population Health Management: PCMH Practices

Pre-Visit Planning
- Run PVP Report 1-2 days prior
- Reminders and standing orders
- WHO: MA’s; then Huddle with provider

Registry Outreach
- Report from Registry tool
- Mail / portal Outreach
- Limited throughout year
- WHO: MAs / RNs

POC Decision-Support
- “Widget” in EMR
- Close Gap or give referral
- Mainly on Physicals
- WHO: MA & Provider
Population Health Outreach in the EHN: Centralized Approach

- Quarterly: Top Priority Measures
- Semi-Annual: Outreach to outliers
- Annual: End of year push for priority measures.
  - Data to Practices
  - Central Team closes gaps
  - Specialists close gaps
- Healthy Start Visits for Medicare Advantage
- Implementation of Tools:
  - Disease Registry Decision Support Tool (Clinical & Claims data)
- Resolution of Systemic issues → Diabetic Eye Exams
POPULATION HEALTH OUTREACH AT BRIGHAM HEALTH
Population Management: Balancing Risk and Outreach Effort

Intensity of Risk

Intensity of Touch

Practice Based Clinical Team

Practice Based Clinical Team

High Risk Care Management Team

Central Population Management Team

Practice Based Clinical Team

High Risk Care Management Team

Central Population Management Team

Central Population Management Team

High Risk Care Management Team

Central Population Management Team
Central Population Health Management Program Over time

• 2013 – launched with 1 RN Supervisor and 3 PHMs to do intervisit diabetes care to patients.
• Now programs covers:
  – Diabetes
  – Hypertension
  – Cardiovascular disease
  – Cancer screening
    • Cervical cancer screening
    • Colon cancer screening
    • Breast cancer screening
• New areas of coverage:
  – Pediatrics
    • Asthma
    • Pediatrics preventative care
  – Depression
BWH Primary Care  
Population Management Workflow

Central: PHMS
• Use EHR and EDW based population health registries
• PHMS work behind the scenes doing bulk orders, outreaching to patients, gathering data
• Preparing data for practices vetting

Practice Interphase
• Reviews prepared data with practices
• Action items generated and followup done by PHM and/or practice
• Outcomes data shared at least monthly (but available for pull at any time)
Aligning Compensation

Recent changes
• 2017 moved 12% of provider (either individual or practice) compensation to quality outcomes for 9 key metrics

Next Phase:
• Aligning compensation to panel management and quality
REGISTRY WORK ACROSS CONTEXTS
Registry Management

• Care Plan Execution & Registry Outreach

  Pre-Visit Planning

  Registry Outreach

  POC Decision-Support

|
|---------------------|---------------------|---------------------|---------------------|---------------------|
| **PRE-VISIT PLANNING** | • Review future apts regularly | • Identify care elements missing | • Assign tasks to team members |
| **POC DECISION SUPPORT** | • At check-in, rooming, etc. | • Ensure pre-visit work complete | • Place orders for gaps |
| **Care Plan Execution** | | | |
| **REGISTRY OUTREACH** | • Regular reports of gaps in care | • EHR, payer, etc. |
| **Tips** | • Scale to match your resources | • Utilize EHR capabilities | • Reach out to payers for gaps in care |
BEHAVIORAL HEALTH
IN EHN
EHN Behavioral Health

• 1 PCMH practice with embedded Behavioral Health specialist
• No other practices with dedicated embedded behavioral health
• Leverage Care Coordination team for high risk patients
• Access problems for Psychiatry
BEHAVIORAL HEALTH AT BRIGHAM HEALTH
Improving Mood Promoting Access to Collaborative Treatment (IMPACT) Model

- Developed 15+ years ago, modeled after diabetes educator program
- Model:
  - Behavioral health support specialist who is embedded in the primary care and works closely to track and support patients with depression.
  - 4 hours of a consultant psychiatrist to advice PCP and BHSS
  - Embedded into primary care clinic
- At 12 months, 45% of intervention patients had a 50% or greater reduction in depressive symptoms from baseline compared with 19% in usual care
- Intervention patients also experienced:
  - greater rates of depression, more satisfaction with depression care
  - lower depression severity,
  - less functional impairment, and
  - greater quality of life.
Expanding our Population Health Manager Role

- Depression = just another chronic disease
- Grew workforce to 1 PHM per ~10,000 patient lives
- PHM role on collaborative care team:
  - Provide outreach to patients to coordinate services and gauge medication adherence, manage data collection and format data for convenient analysis
  - Review registry and present data to providers
  - develop and implement action plan alongside practice psychiatrist and social worker during weekly case review
  - managing follow-ups as needed
Continuum of Care – A Collaborative Care Agreement

SCOPE OF PHM
MAKING THIS RELEVANT
Assignment

• Individually or in teams

• Consider an intervention that you want to implement at home
• Consider how you would change scale, scope, or both to fit your local context
• Describe the structure that you will create
• Complete the PDSA template for your first test of change

• Debrief in 15-20 minutes