Heart Health Now!
The North Carolina Cooperative for AHRQ’s EvidenceNOW
Advancing Heart Health in Primary Care

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Title: Practice & Practice facilitator level factors associated with enhanced team engagement; findings from the Heart Health Now study

Agenda

• Heart Health Now
• Analysis of Interest
HHN – CVD Primary Prevention

- 245 practices in NC
- ≤ 10 providers
- Practice Facilitation (PF) model

  Assist with implementing evidenced based processes - the “ABCS” of CVD

  ✓ ASA use by high-risk individuals
  ✓ BP control
  ✓ Cholesterol management
  ✓ Smoking cessation
Today’s discussion

• **Engagement** with PF’s requires that practices are open to partnering with facilitators.

• Little is known about *practice or facilitator level factors associated with greater engagement with practice facilitators.*

• Our objective: explore the factors associated with higher levels of engagement of facilitators with practice teams at mid-point of their 1-year intervention.

1 yr.

6 months
Figure 1. Conceptual Model: HHN Primary Care Practice Engagement with Practice Facilitators as Team Members

- **Practice Characteristics**
  - Size, location, commitment to improvement (CVD, PCMH, ACO)
  - Change Capacity (AR, CPCQ, number of practice changes, burnout, QI leadership (KDIS)

- **Practice facilitator/practice support organization**
  - Years of practice coaching
  - Prior experience of a practice with NC AHEC organization
  - Prior experience of an individual coach with a practice.
  - If PF worked with practice since beginning of study

**Outcome:** Mean “Team Engagement” KDIS score ≥ 2 at the midpoint of the 12 month intervention

**Instruments:**
- Organizational readiness (*PMS*) (use Ready or readiness1, not both)
- Adaptive Reserve (AR) (*PMS*)
- Burnout (B) (*PMS*)
- Change Process Capability Questionnaire (CPCQ) (^PCS)
- CVD Priority (CVD) (^PCS)
- Degree of Disruptions (DD) (^PCS)
- PCMH recognition/ACO participation (PCMH)(^PCS)
- Key Driver Implementation Scale (KDIS) (team engagement and QI leadership)

*PMS* = practice member survey thus ≥ 1 response/practice

^PCS = practice characteristic survey/CPCQ thus where there is 1 leadership response/practice
Outcome measure

Team Engagement scores are submitted MONTHLY by practice facilitators

- PF’s document practice progress with implementing key activities that drive change (KDIS measures).

Analysis outcome measure: “adequate” Team Engagement (TE ; 0-3 scale) = mean TE score of 2 or greater at six months

- Mean score using score at months 4, 5, and/or 6 months, where ≥ 2 scores available.
### KDIS score – ordinal scale

<table>
<thead>
<tr>
<th>Team Engagement</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - No activity</td>
<td>No engagement</td>
</tr>
<tr>
<td>1 - Occasional meetings</td>
<td>Team meets infrequently to discuss improvement; no practice-wide understanding of improvement work exists</td>
</tr>
<tr>
<td>2 - Regular meetings</td>
<td>Improvement team communicates regularly (through meetings, huddles, email, memos, etc.)</td>
</tr>
<tr>
<td>3 - Active engagement</td>
<td>Improvement team plans multiple tests simultaneously and communicates findings</td>
</tr>
</tbody>
</table>
Graph of enhanced TE over time
Data Sources

Practice Surveys

- Practice Characteristics
  - **1 respondent / practice** (leadership role)
  - Demographics, involvement in Accountable Care Organizations, cardiovascular disease care priority, # practice disruptions, others

- Practice Member
  - **Multiple responders** with different roles
  - Burnout, Adaptive Reserve, Readiness
Determining Practice Eligibility:

Figure 4: Selection of Analytical Cohort

- 245 HHN practices
- 58 Practices without Practice Characteristics or Practice Member Survey data
- 23 Practices lacking requisite KDIS data
- 28 Practices without practice level KDIS data

n = 136

Among 245 HHN practices, 58 were missing either the practice characteristics or practice member survey data. From this group of 187, 23 were eliminated for having incomplete KDIS data. Among this group, 28 were ineligible due to having KDIS data that represented groups of networked practices instead of individual practice sites. This occurred in cases where network administrators representing 3 practice organizations centralized the Qi work, thus we do not have individual level practice data on these practices.
Table 1. Practice Characteristics- N=136 HHN Practices

<table>
<thead>
<tr>
<th>Practice Characteristics Survey items, [# missing]</th>
<th>N or mean (%, SD), [range]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Practice Size (number of providers MD, DO, NP PA),[2]</td>
<td>4.9 (4.2)</td>
</tr>
<tr>
<td>Practice Ownership Type, [0]</td>
<td></td>
</tr>
<tr>
<td><strong>Clinic owner-owned Solo or Group Practice</strong></td>
<td>70 (52%)</td>
</tr>
<tr>
<td>FQHC or Look-alike/Rural Health Clinic</td>
<td>37 (27%)</td>
</tr>
<tr>
<td>Academic Health Center/Faculty Practice</td>
<td>9 (7%)</td>
</tr>
<tr>
<td>Hospital/Health System</td>
<td>20 (15%)</td>
</tr>
<tr>
<td>Payer Mix [13], %, (range)</td>
<td></td>
</tr>
<tr>
<td>Medicare</td>
<td>30.6%, [5-82%]</td>
</tr>
<tr>
<td>Medicaid</td>
<td>15.4%, [0-50%]</td>
</tr>
<tr>
<td>Dual (Medicare/Medicaid)</td>
<td>9.1%, [0-70%]</td>
</tr>
<tr>
<td>Commercial</td>
<td>32.5%, [0-79%]</td>
</tr>
<tr>
<td>No insurance</td>
<td>11.8%, [0-60]</td>
</tr>
<tr>
<td>Practice Location in a Medically Underserved Area (MUA), [0], YES</td>
<td>54 (40%)</td>
</tr>
<tr>
<td>Number of Major Practice Changes (0-7), [0]</td>
<td>1.1, [0-4]</td>
</tr>
<tr>
<td>Practice Leadership Score, scored 0-3,[0]</td>
<td>2.0 (0.7)</td>
</tr>
<tr>
<td>Involvement in an Accountable Care Organization (ACO), YES</td>
<td>61 (45%)</td>
</tr>
<tr>
<td>Mean Team Engagement Score of Months 4-6,[0]</td>
<td>1.6 (0.7)</td>
</tr>
</tbody>
</table>

aData provided as absolute numbers or means and standard deviations (SD) for continuous variables and proportions with chi squared test for categorical variables as appropriate. Ranges included for payer mix and number of patients seen per day by a full-time clinician.
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<th>Table 1. Practice Characteristics - n = 136 HHN Practices</th>
<th>N or mean (%, SD)</th>
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</thead>
<tbody>
<tr>
<td><strong>Practice Member Survey Items</strong></td>
<td></td>
</tr>
<tr>
<td>Adaptive Reserve Score (18 items, aggregate score 0-1),[0]</td>
<td>0.7 (0.1)</td>
</tr>
<tr>
<td>Practice Level of Burnout (single item, 0-4)</td>
<td>1.9 (0.6)</td>
</tr>
<tr>
<td>Practice Readiness (readiness1) single item</td>
<td>4.0 (0.5)</td>
</tr>
<tr>
<td><strong>Practice Facilitation Experience Survey Items</strong></td>
<td></td>
</tr>
<tr>
<td>Years of Experience as a Practice Facilitator, [1]</td>
<td>4.2 (3.7)</td>
</tr>
<tr>
<td>Practice facilitator worked with practice since the beginning of the project [1]</td>
<td>102 (75%)</td>
</tr>
<tr>
<td>Practice Experience with NC AHEC Practice Support Program, [1], Yes</td>
<td>38 (27.9%)</td>
</tr>
<tr>
<td>Practice-PFacilitator Experience Together Prior to HHN, [1],Yes</td>
<td>9 (6.7%)</td>
</tr>
</tbody>
</table>
Demographic summary

Among the 245 HHN practices:
• 136 met our inclusion criteria
  • 73 with a 6-month TE score of ≥ 2
  • 63 scored <2
• 70% were clinician owned, 27% were FQHC’s, 15% hospital or health system owned.
• 40 % percent located in a Medically Underserved Area (MUA)
• ~ 28% of practices had previously worked with the NC AHEC practice support program.
Methods

• Univariable logistic regression to identify variables associated with the odds of having team engagement scores ≥ 2 vs. < 2.

• Variables with a p ≤ .07 were included in multivariable logistic modeling.
Results – Univariate logistic modeling

- > # Practice changes (new EHR, new ownership, new leadership, etc.)
- > Practice KDIS leadership scores
- Location in a medically underserved area (MUA)
- If part of a hospital or health system vs. being privately owned (solo or group practice)
- If a PF worked with a practice since the beginning of the HHN project
- More uninsured, fewer dually eligible patients.
NOT associated

• Levels of burnout, adaptive reserve and readiness were not associated with TE scores.
Multivariable Logistic Regression – Best fit model

Statistically significant adjusted odds ratios of greater TE with:

- Higher practice QI leadership
- MUA location
- Being hospital or health system owned compared to being in solo/group practice

No facilitator characteristics that were measured were independently associated with greater TE
## Univariate and Multivariable Logistic Models, Odds Ratios for achieving a mean TE score of ≥ 2 at the study mid-point (~ 6 months)

<table>
<thead>
<tr>
<th></th>
<th>Univariate Logistic Model OR (95% CI), [p value]</th>
<th>Multivariable Logistic Model* OR (95% CI), [p value]</th>
</tr>
</thead>
<tbody>
<tr>
<td>For every one-point increase in leadership</td>
<td>9.42 (4.37-20.30), [0.000]</td>
<td>7.66 (3.72-18.42), [0.00]</td>
</tr>
<tr>
<td>For practices located in a Medically Underserved Area (MUA) vs. not in an MUA</td>
<td>2.43 (1.19-4.97), [0.06]</td>
<td>3.11 (0.94 – 11.33), [0.06]</td>
</tr>
<tr>
<td>For practice’s that are hospital or health system owned, compared to solo/privately owned.</td>
<td>7.20 (2.17-23.9), [0.001]</td>
<td>6.80 (2.06 – 26.76), [0.001]</td>
</tr>
</tbody>
</table>

*Model adjust for leadership, number of disruptive changes and practice location. Data presented as Odd ratios (OR) (95% CI) of TE ≥2, [p value]
Conclusions??

With limited human resources, does it make sense to consider this data when deploying a PF work force?

And/or is it something to consider analyzing during studies to trouble shoot/alter strategy and even type of engagement depending on progress?

Others?
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Thank You!