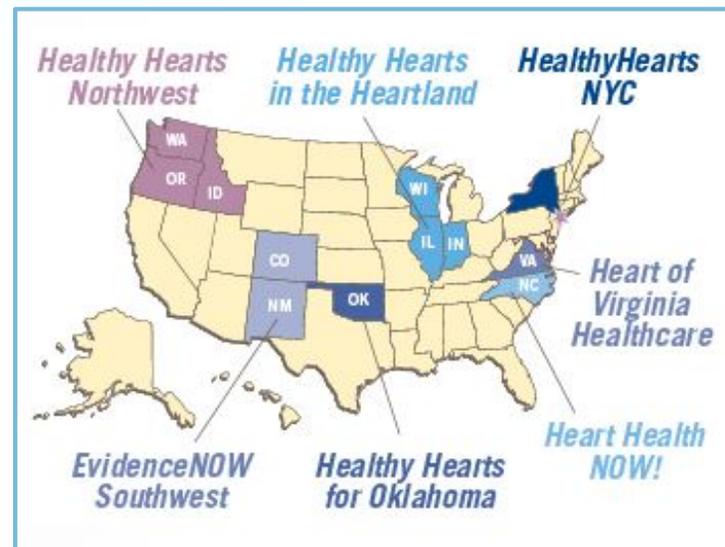# Heart Health Now!

The North Carolina Cooperative for AHRQ's

EvidenceNOW

Advancing Heart Health in Primary Care

Funded by the Agency for Healthcare Research and Quality (AHRQ) in the U.S. Department of Health & Human Services 1R18HS023912

UNC | THE CECIL G. SHEPS CENTER FOR HEALTH SERVICES RESEARCH

NCHQA — North Carolina Healthcare Quality Alliance

North Carolina AHEC

Community Care of North Carolina

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

- Halladay JR, Weiner BJ, Kim J, DeWalt DA, Pierson S, Fine J, Lefebrve A, Mackey M, Bergmire D, Cene C, Henderson KH, Cykert S
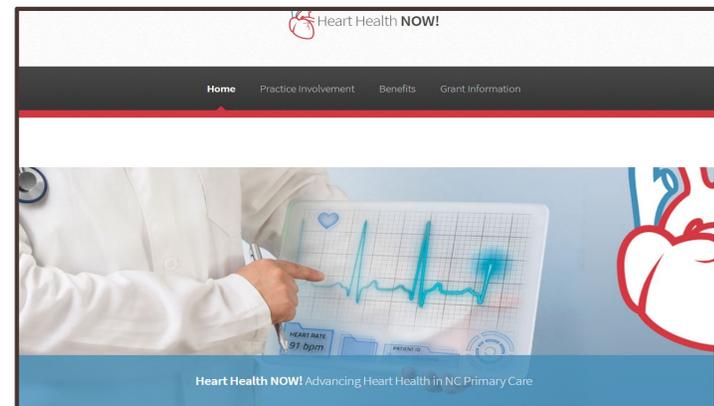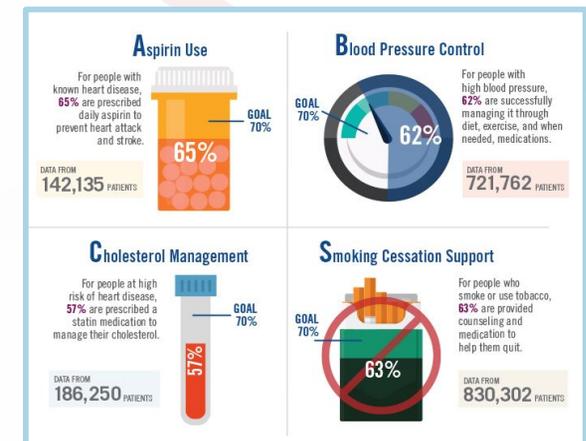
Agenda

- Heart Health Now

- Analysis of Interest

  - follow up from last year!

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

A**spirin Use**
For people with known heart disease, **65%** are prescribed daily aspirin to prevent heart attack and stroke.
GOAL 70%
65%
DATA FROM 142,135 PATIENTS

B**lood Pressure Control**
For people with high blood pressure, **62%** are successfully managing it through diet, exercise, and when needed, medications.
GOAL 70%
62%
DATA FROM 721,762 PATIENTS

C**holesterol Management**
For people at high risk of heart disease, **57%** are prescribed a statin medication to manage their cholesterol.
GOAL 70%
57%
DATA FROM 186,250 PATIENTS

S**moking Cessation Support**
For people who smoke or use tobacco, **63%** are provided counseling and medication to help them quit.
GOAL 70%
63%
DATA FROM 830,302 PATIENTS

# 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
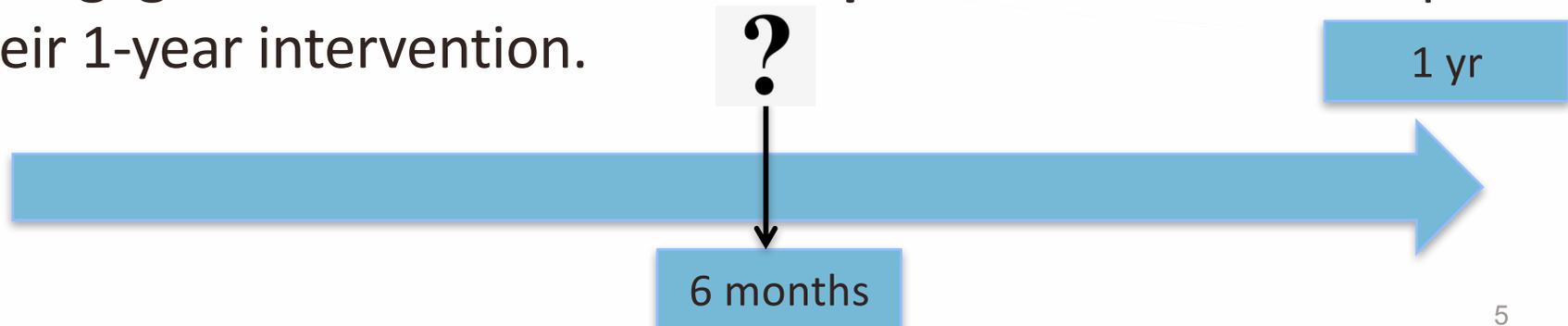
Conceptual Model
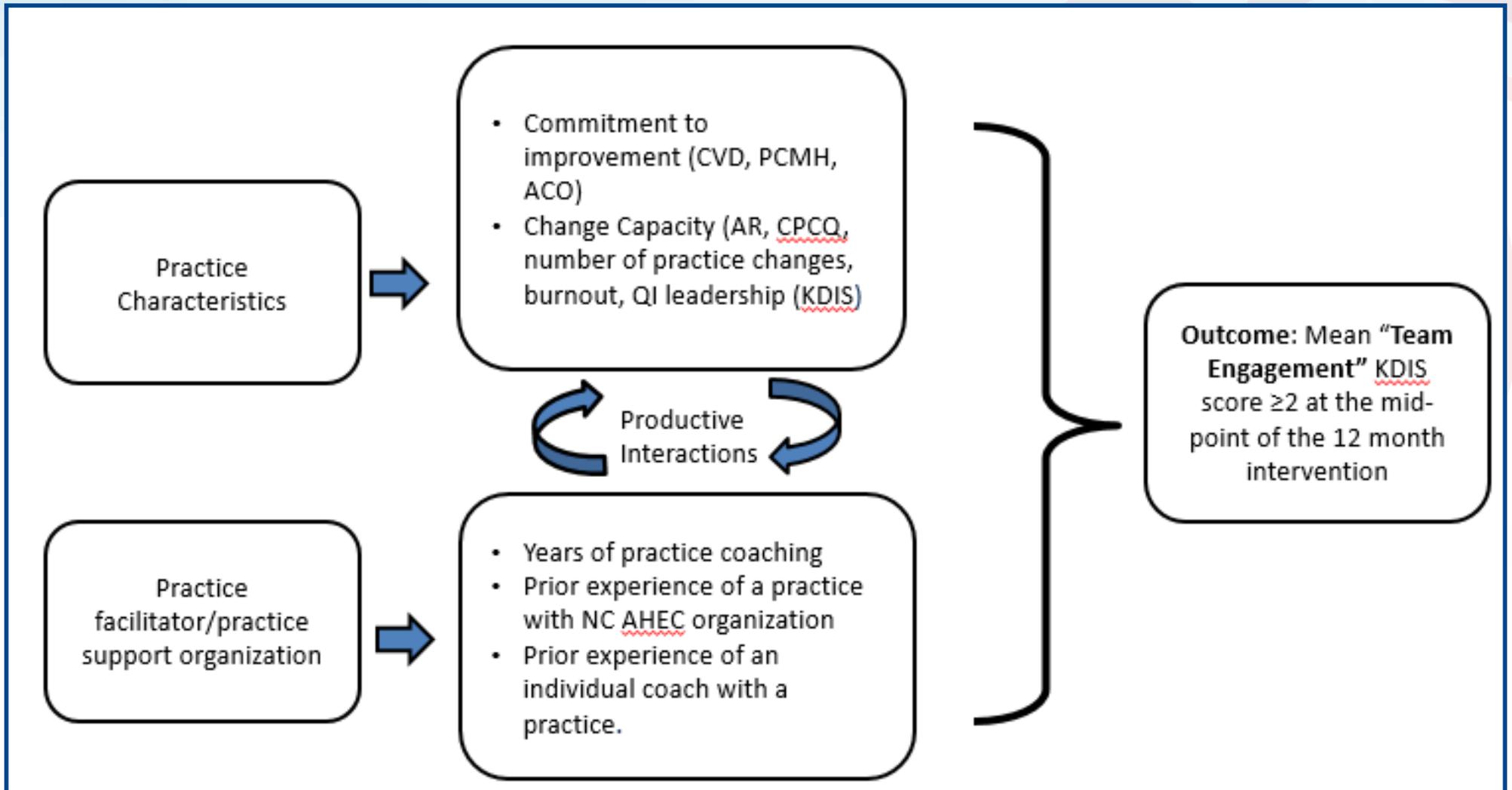
Outcome measure

- **Team Engagement** scores are submitted MONTHLY by practice facilitators

    - PF's document practice progress with implementing key activities that drive change.

- **Outcome measure:** "adequate" Team Engagement (TE) = mean TE score of 2 or greater at six months

   - Mean in the 4 - 6 mo. time interval where ≥ 2 scores available.

KDIS score – ordinal scale

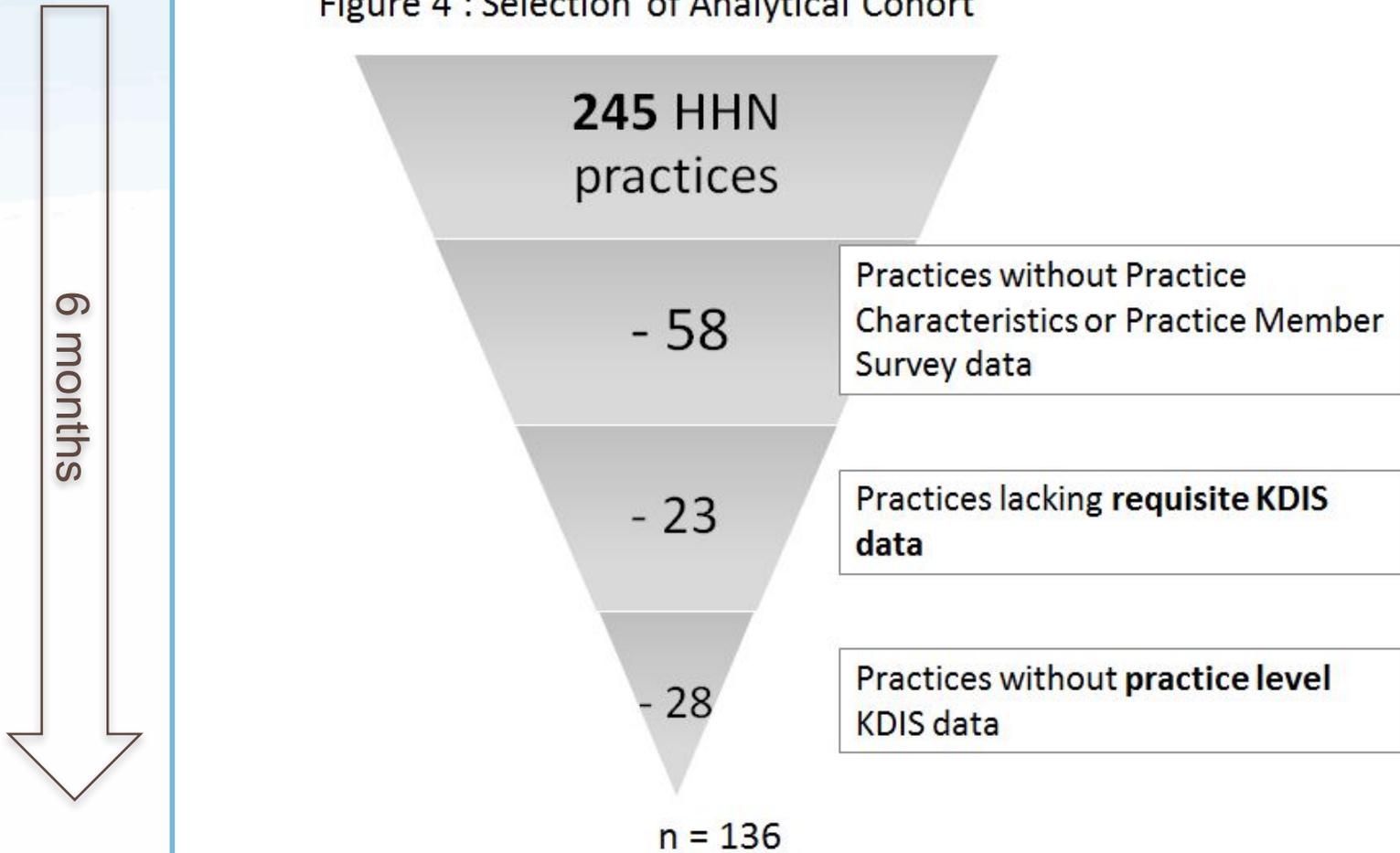| Team Engagement	
0 - No activity	No engagement
1 - Occasional meetings	Team meets infrequently to discuss improvement; no practice-wide understanding of improvement work exists
2 - Regular meetings	Improvement team communicates regularly (through meetings, huddles, email, memos, etc.)
3 - Active engagement	Improvement team plans multiple tests simultaneously and communicates findings

Graphic

2. TEAM ENGAGEMENT
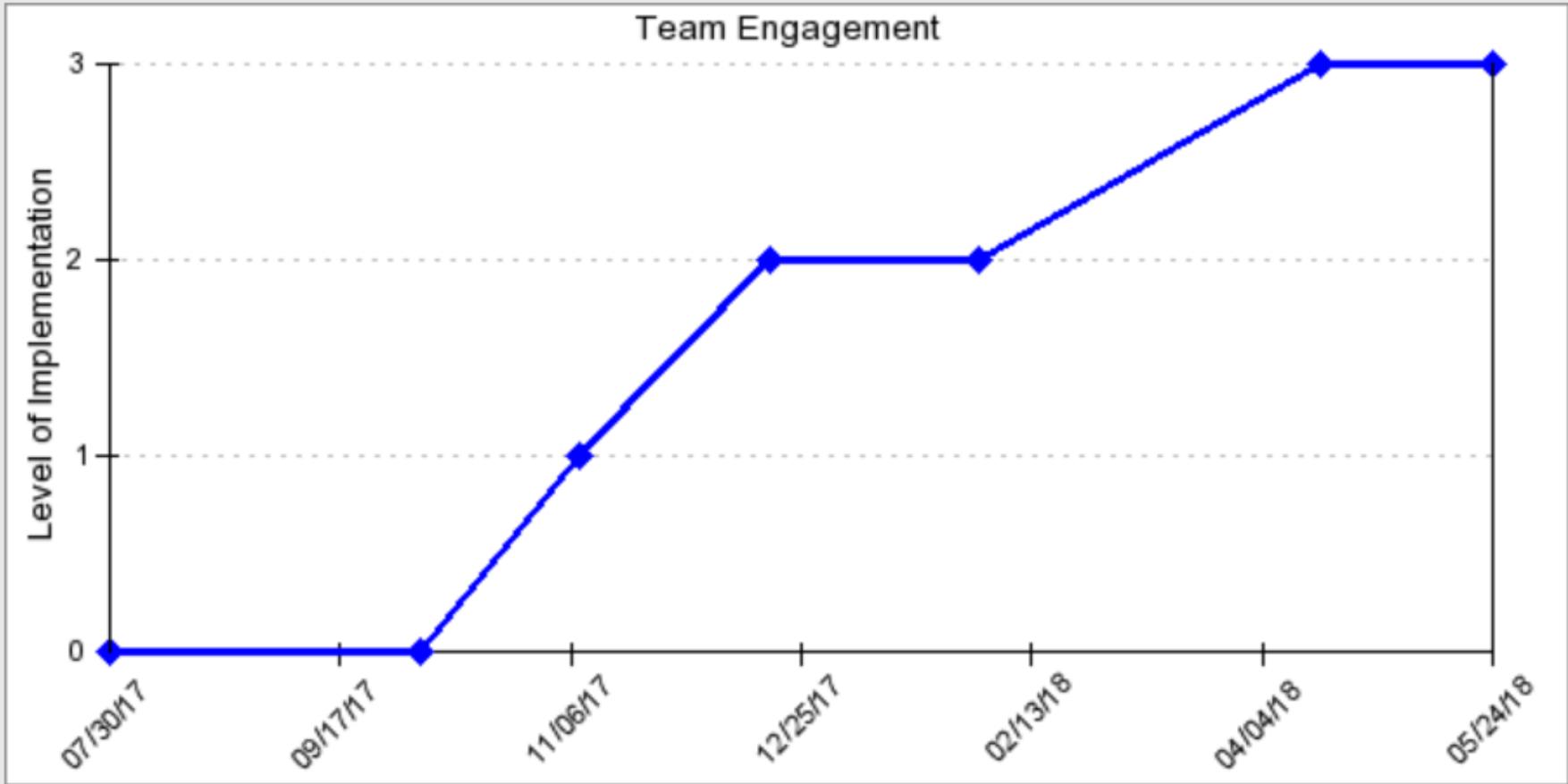
Data Sources

Practice Surveys

- Practice Characteristics

  - 1 respondent / practice (leadership role)

  - Demographics, involvement in Accountable Care Organizations, Prioritization of work in Cardiovascular Care, # disruptions

- Member survey:

  - Multiple responders possible – and with different roles

    - Burnout, Adaptive Reserve, Readiness

Determining Practice Eligibility:

Figure 4 : Selection of Analytical Cohort

6 months

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	N or mean (%, SD)
Practice Characteristics Survey items, [# missing]	
Practice Size (number of providers MD, DO, NP PA),[14]	6.3 (8.2)
Practice Ownership Type, [11]	
Clinician-owned Solo or Group Practice	68 (50 %)
FQHC or Look-alike/Rural Health Clinic	29 (21.3%)
Payer Mix [13], %, (range)	
Medicare	30.6% (5-82%)
Medicaid	15.4% (0-50%)
Commercial	32.5% (0-79%)
No insurance	11.8% (0-60%)
Practice Location in a Medically Underserved Area (MUA), [13], YES	42 (30.9%)
Number of Major Practice Changes (0-7), [0]	1.1 (0-4)
Practice Leadership Score (scored 0-3),[0]	2.0 (0.7)
Involvement in an Accountable Care Organization (ACO), YES	75 (55.1%)
Mean Team Engagement Score of Months 4-6,[0]	1.6 (0.7)
Practice Member Survey Items	
Adaptive Reserve Score (18 items, aggregate score 0-1),[0]	0.7 (0.1)
Practice Level of Burnout (single item, 0-4)	1.9 (0.6)
Practice Readiness (readiness1) single item	4.0 (0.5)
Practice Facilitation Experience Survey Items	
Years of Experience as a Practice Facilitator, [1]	4.2 (3.7)
Practice Experience with NC AHEC Practice Support Program, [1], Yes	38 (27.9%)
Practice-PFacilitator Experience Together Prior to HHN, [1],Yes	9 (6.7%)

^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.

Demographic summary

Among the 245 HHN practices:

- 136 met our inclusion criteria

    - 73 with a 6-month TE score of ≥ 2

    - 63 scored <2

- Half were clinician owned and 21% were FQHC's.

- The mean and median number of providers per practice was 6.3 (SD 8.2) and 4.0 respectively.

- 31% percent located in a Medically Underserved Area (MUA)

- Nearly 28% of practices had previously worked with the NC AHEC practice support program.

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Methods

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

- Variables with a p≤.05 were included in multivariable logistic modeling.

Results – Univariate logistic modeling

- \> # Practice changes

- \> Practice KDIS leadership scores,

- Location in a medically underserved area (MUA/MUP)

….Associated with a statistically significant increase in the odds of engagement with practice facilitation at six months

NOT associated

- Levels of burnout, adaptive reserve and readiness were not associated with TE scores.

Multivariable Logistic Regression

Statistically significant adjusted odds ratios of greater TE with:

- Higher practice QI leadership,

- MUA location

- Higher number of practice disruptions/changes.

No facilitator characteristics 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)

	Univariate Logistic Model OR (95% CI), [p value]	Multivariable Logistic Model* OR (95% CI), [p value]
For every one-point increase in leadership	9.42 (4.37-20.30), [0.000]	13.14 (4.87 -35.44), [0.000]
For every increase in the # of disruptive practice changes	1.57 (1.07- 2.29), [0.021]	1.64 (1.01-2.66), [0.044]
For practices located in a Medically Underserved Area (MUA) vs. not in an MUA	2.25 (1.04- 4.85), [0.039]	3.23 (1.01-10.3), [0.047]

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

Thank You!

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Practice Ownership Type, [11]	
Clinician-owned Solo or Group Practice	68 (50 %)
FQHC or Look-alike/Rural Health Clinic	29 (21.3%)
Academic health Center/Faculty Practice	9 (6.6%)
Other	2 (1,5%)
Hospital/Health System Owned	17 (12.5%)
Missing	11 (8.1%)
Payer Mix [13], %, (range)	
Medicare	30.6% (5-82%)
Medicaid	15.4% (0-50%)
Dual Medicare/Medicaid	9.1% (0-70%)
Commercial	32.5% (0-79%)
No insurance	11.8% (0-60%)
Other	1.5% (0-100%)
Patient-Centered Medical Home Recognition, [11]	
Yes	74 (54.4%)
Patients Seen per Day by Full Time Clinician, [12] (range)	21.3 (10-50)
Practice Location in a Medically Underserved Area (MUA), [13]	
Yes	42 (30.9%)
Number of Major Practice Changes (0-7), [0]	136 (0-4)
CPCQ SCORE (scored -28 to 28), [11]	10 (13.3)
CPCQ-CVD Priority (single item, scored 1-10), [1]	7.5 (1.7)
Practice Leadership Score (mean of months 4-6 scores, scored 0-3),[0]	2.0 (0.7)
Prior or Ongoing Involvement in an Accountable Care Organization (ACO)	
Yes	75 (55.1%)
[b]Mean Team Engagement Score of Months 4-6,[0]	1.6 (0.7)
Practice Member Survey Items	
Adaptive Reserve Score (18 items, aggregate score 0-1),[0]	0.7 (0.1)
Practice Level of Burnout (single item, 0-4)	1.9 (0.6)
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Years of Experience as a Practice Facilitator, [1]	4.2 (3.7)
Practice with Prior Experience with NC AHEC Practice Support Program, [1]	
Yes	38 (27.9%)
Practice-practice Facilitator Experience Working Together Prior to HHN, [1]	
Yes	9 (6.7%)

[a]Data 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.
[b]outcome measure

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Payer Mix [13], %, (range)	
Medicare	30.6% (5-82%)
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[a]Data 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.

Next steps

- Pivot now to evaluating associations/predictors of practice level variables on level of engagement with PF's (dependent variable)

  - Dependent variable – Team engagement score (0-3)

- Next year's talk/paper.

- END

KDIS 101 "Team Engagement"
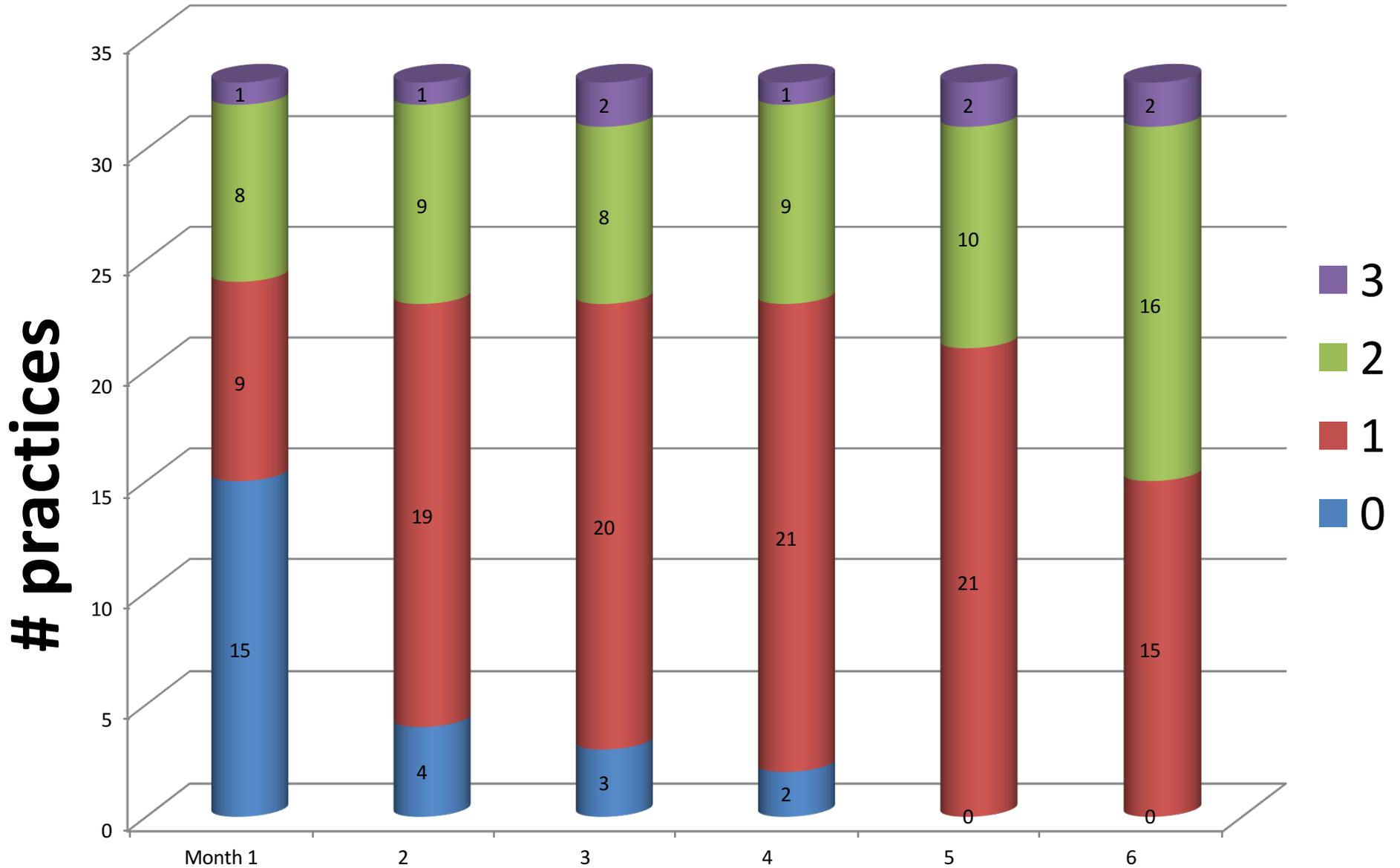
Key Drivers of Implementation

- Key Driver Implementation Scale

  - **Team Engagement** with their PF to work as a unit to drive change.

  - Practice Leadership – for QI/Change

  - (others) Use of data from patient panel to motivate change behavior, standardizing care processes, use of evidence based protocols, patient self management support,
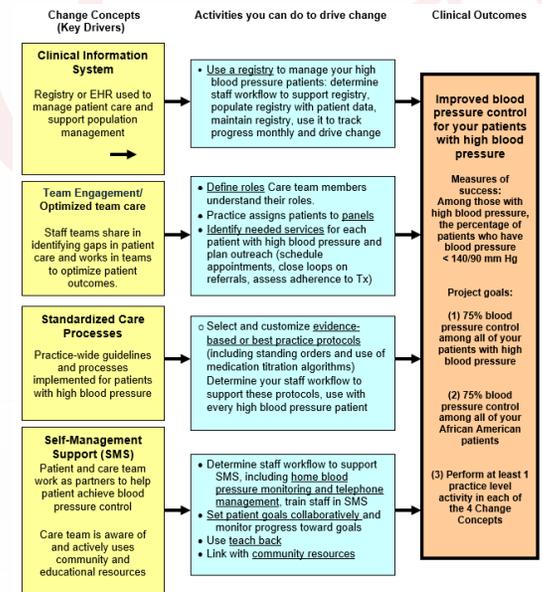
Table 2. Summary Statistics - Practices with Key Driver Implementation Scale Team Engagement Scores < 2 vs. ≥ 2

	TE < 2 (63 practices) N or mean (% or SE)	TE ≥ 2 (73 practices) N or mean (% or SE)	p-value chi-square[a] or t-test
Practice Characteristics Survey items			
Practice Size (number of providers MD, DO, NP PA)	5.5 (4.3)	7.1 (10.7)	0.28
Practice Ownership Type (n, %)			
Clinician-owned Solo or Group Practice	45 (36.0)	23 (18.4)	
FQHC or Look-alike/Rural Health Clinic	12 (9.6)	17 (13.6)	
Academic health center/faculty practice	0 (0.0)	9 (7.2)	
Other	1 (0.8)	1 (0.8)	
Hospital/Health System Owned	3 (2.4)	14 (11.2)	<.0001[a]
Payer Mix (n,%)			
Medicare	28.2 (15.1)	32.9 (18.8)	0.13
Medicaid	14.9 (10.9)	15.8 (11.1)	0.66
Dual Medicare/Medicaid	11.3 (11.9)	7.1 (7.7)	0.02
Commercial	35.3 (18.0)	29.8(17.0)	0.09
No insurance	9.4 (10.6)	14.1 (15.5)	0.05
Other	2.6 (13.4)	0.5 (1.97)	0.22
Patient-Centered Medical Home Recognition (n, %)			
Yes	36 (28.8)	38 (30.4)	
No	25 (20.0)	26 (20.8)	1.00
Patients Seen per Day by Full Time Clinician (n, %)	22.3 (6.4)	20.4 (6.0)	0.09
Practice location; Medically Underserved Area (MUA)			
Yes	15 (12.2)	27 (22.0)	
No	45 (36.6)	36 (29.3)	0.06
Number of Major Practice Changes (0-7), (n, %)	0.9 (0.9)	1.3 (1.1)	0.02
CPCQ SCORE (scored -28 to 28), (mean, SE)	9.3 (12.5)	10.5 (14.0)	0.63
CPCQ-CVD Priority (single item, scored 1-10), (mean, SE)	7.4 (1.9)	7.6 (1.6)	0.49
Practice Leadership (mean of months 4-6 scores), (mean, SE)	1.6 (0.6)	2.4 (0.6)	<.0001
Practice Prior or Ongoing Involvement in an Accountable Care Organization (ACO), (n, %)			
Yes	37 (29.6)	27 (21.6)	
No	24 (19.2)	37 (29.6)	0.06
Practice Member Survey Items			
Adaptive Reserve Score (18 items, score 0-1), (mean, SE)	0.7 (0.1)	0.7 (0.1)	0.82
Practice Level of Burnout (single item, 0-4), (mean, SE)	1.9 (0.4)	2.0 (0.7)	0.28
Practice Readiness (readiness1) single item (mean, SE)	4.0 (0.5)	4.0 (0.5)	0.65
Practice Facilitation Experience Survey Items			
Years of Experience as a Practice Facilitator (mean, SE)	4.03 (3.4)	4.34 (4.0)	0.62
Practice Prior Experience with the NC AHEC Practice Support Program (n, %)			
Yes	17 (12.6)	21 (15.6)	
No	45 (33.3)	52 (38.5)	1.00
Practice-practice Facilitator Experience with Working Together Prior to HHN (n, %)			
Yes	4 (3.0)	5 (3.7)	
No	58 (43.0)	68 (50.4)	1.00[a]

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