ORIGINAL RESEARCH

# The EvidenceNOW Practice Support Initiative: The Heart of Virginia Healthcare

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***Purpose:*** **HHS' Million Hearts campaign focused the delivery system on ABCS clinical quality measures (appropriate Aspirin use, Blood pressure control, Cholesterol control, and Smoking cessation counseling). AHRQ's Evidence Now project funded 7 collaboratives to test different ways to improve performance and outcomes on ABCS within small primary care practices. The Heart of Virginia Health care (HVH) collaborative designed 1 of the approaches in Evidence Now.**

***Methods:*** **Two hundred sixty-four eligible practices were recruited to participate and randomized to 3 cohorts in a stepped wedge design, and 173, employing 16 different EHRs, remained for the duration of the initiative. The practice support curriculum was delivered by trained practice coaches to enhance overall practice function and improve performance on the ABCS metrics. The intervention consisted of a kickoff meeting, 3 months of intensive support, 9 months of ongoing support, and access to online learning materials and expert faculty. The mean practice contact time with coaches was 428 minutes, but the standard deviation was 426 minutes.**

***Results:*** **Overall, the short HVH intervention had a small but statistically significant positive average effects on appropriate use of aspirin and other antithrombotics, small negative effects on blood pressure control, except for those practices which did not attend the kickoff, and small negative effects on smoking cessation counseling.**

***Conclusions:*** **The intervention phase was truncated due to difficulty in recruiting a sufficient number of practices. This undoubtedly contributed to the lack of substantial improvements in the ABCS. Other likely contributing factors were our inability to provide real time feedback on metrics and the frequency with which major practice disruptions occurred. Future efforts to improve primary care practice function should allow adequate time for both practice recruitment and external support. (J Am Board Fam Med 2022;35:979–989.)**

***Keywords:*** **Cardiovascular Diseases, Disease Management, Heart Disease Risk Factors, Primary Health Care, Quality Improvement, Virginia**

## Introduction

Health and Human Services' Million Hearts campaign focused the delivery system on ABCS clinical quality measures (related to appropriate Aspirin use, Blood pressure control, Cholesterol control, and Smoking cessation counseling).[1] The rationale for this campaign is that heart disease is the number 1 cause of death in the United States, whereas stroke is the number 5 cause.[2] Findings from population studies show that addressing these risk factors can yield substantial gains in life expectancy and reduce the burden of cardiovascular disease.[3,4] Although primary care practices deliver most chronic disease prevention and care,[5] their overall performance on risk factors for cardiovascular disease is suboptimal.[6–11]

AHRQ's Evidence Now project funded 7 collaboratives to test different ways to improve performance and outcomes on ABCS within small primary care practices.[12] This reflects AHRQ's longstanding emphasis on practice facilitation[13] as well as considerable evidence that primary care practices do improve when provided practice

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facilitation.[14] The Heart of Virginia Health care (HVH) project designed one of the approaches in EvidenceNOW.[15]

## Methods

### *Study Design*

The purpose of AHRQ's Evidence Now initiative was to test if the performance of small primary care practices on standard ABCS metrics could be improved without payment incentives through coaching and technical assistance. We specifically sought to address practice wellbeing before working on quality improvement. Our rationale for this approach is that physician burnout is increasing, with multiple consequences including poorer care quality.[16] Therefore, care of the patient requires care of the clinician.[17] How to achieve this and improve care quality is found in case studies of high functioning primary care practices that use team care models and simplified workflows.[18] General internist Christine Sinsky has created a simple model to implement this in primary care,[19] and the AMA has a website with dozens of modules to help practices simplify processes, create care teams, reduce stress, and improve care.[20]

The Heart of Virginia Health care (HVH) project conducted a stepped-wedge cluster randomized trial to execute "Restoring Primary Care in Virginia" (intervention) to improve small and medium-size primary care practices' quality of health care. "Restoring Primary Care in Virginia" was a short intensive intervention, using practice coaches for 3 months and ongoing support from coaches and academic medicine faculty for 9 months after that. The guiding principle was to address practice function and clinician and staff well-being as preamble to quality improvement work. Practices chose areas of focus from a faculty-prepared toolkit detailing a range of workflow redesign activities, emphasizing functional practice improvements and pathways to specific improvements in ABCS metrics.

### *Practice Selection*

Two hundred sixty-four primary care practices in Virginia with fewer than 10 clinicians were originally recruited to the project because AHRQ required all collaboratives to recruit at least 250 practices.[21] Our recruitment strategies included presentations at statewide meetings of family physicians and general internists, reaching out to community family physicians active in medical student education, and collaboration with health systems with large numbers of primary care practices. Some dropped out over time for various reasons and others

**Figure 1. Consort flow diagram. Abbreviations: ABCS, Aspirin, Blood Pressure, Cholesterol, and Smoking.**

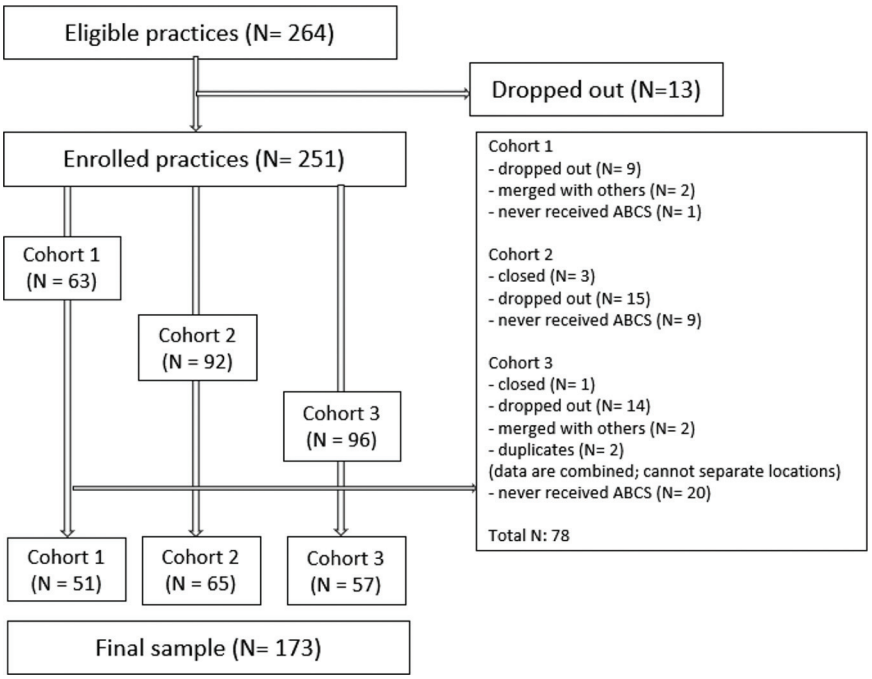

**Table 1. Distribution of Practices That Completed the Heart of Virginia Healthcare Project**

| Ownership | Cohort 1 Frequency (Percent) | Cohort 2 Frequency (Percent) | Cohort 3 Frequency (Percent) | Total |
|---|---|---|---|---|
| Independent | 9 (16.7) | 21 (32.8) | 22 (39.2) | 52 (30.0) |
| System | 40 (79.2) | 40 (60.7) | 18 (31.4) | 98 (56.6) |
| FQHC | 2 (4.2) | 4 (6.6) | 17 (29.4) | 23 (13.3) |
| Total | 51 (100.0) | 65 (100.0) | 57 (100.0) | 173 (100.0) |

Abbreviation: FQHC, Federally qualified health centers.

were unable to deliver or permit usable data to be extracted, so our final ABCS analysis file was obtained from 173. The CONSORT (Consolidated Standards for Reporting Trials) flow diagram (Figure 1) describes the filtering from 264 to 173, by stepped wedge cohort. The unit of analysis throughout was the practice-quarter. The final number of usable practice-quarter observations was 1033, 312 of which were baseline in the stepped-wedge framework.

Practices spanned independent (30%), federally qualified health centers (13%), and hospital system owned (57%). Table 1 shows the distribution across ownership type and intervention cohort.

### *Study Design*

All practices were randomized to staggered intervention cohorts in a stepped-wedge design, displayed in Figure 2. The stepped-wedge enables each cohort of practices to serve as a control group before the intervention begins for them. Our design randomly assigned enrolled practices to 1 of 3 cohorts at baseline (2015, quarter 4), so that each practice's data are sometimes control, sometimes intervention, and sometimes from the maintenance period. Intervention was the 3-month active contacts with practice coaches who would work with practices directly, in person or on the phone. Maintenance effectively continued until the end of the project in the first quarter of 2018 and was the period in which practices could reach to HVH project faculty on their own and access online resources designed to supplement the tool kit. The ABCS data were collected at baseline and during each subsequent measurement period.

### *Description of the Intervention*

Our intervention had 3 phases and several supporting elements. The first phase was a kickoff event in which practices randomized to a given cohort met to understand the goals and rationale for the project, the key elements of simplifying practice processes and creating team care models and improving reimbursement through more effective documentation. The second phase was a 3-month period during which practice coaches met with key practice personnel and ascertained what the practices wanted to work on with regard to redesign as well as on improving their ABCS measures. Our coaches were experienced practice facilitators from the Quality Improvement Organization that serves Virginia and Maryland and had earlier helped nearly 1000 primary care practices choose and implement EHRs. They received training on strategies to simplify practice workflows and conduct quality improvement activities. They had weekly meetings with project faculty to share experiences and create solutions to problems. A final 9-month phase provided the opportunity for continuing support from our coaches as

**Figure 2. Stepped-wedge design. Abbreviations: Q, calendar quarter; MP, Measurement Period; C, Control; I, Intervention phase; M, Maintenance phase.**

| MP | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|
| | 2015 Q4 | 2016 Q1 | 2016 Q2 | 2016 Q3 | 2016 Q4 | 2017 Q1 | 2017 Q2 | 2017 Q3 | 2017 Q4 | 2018 Q1 |
| Cohort 1 | C | I | I | I+M | I+M | I+M | I+M | I+M | I+M | I+M |
| Cohort 2 | C | C | I | I | I+M | I+M | I+M | I+M | I+M | I+M |
| Cohort 3 | C | C | C | I | I | I+M | I+M | I+M | I+M | I+M |

well as consultations with experienced physician faculty. Supporting elements included a comprehensive toolkit for practice redesign and quality improvement (included as an online Appendix), a private online chat room for posing questions or sharing practical learnings, and a compendium of relevant resource materials.

### *Clinical Data Extraction*

The HVH project designed a mixed research method to collect clinical data (ie, ABCS) and organizational data. The clinical data were extracted from practices' electronic health record systems (EHRs). The organizational data were gathered by surveying clinicians and staff, as described in the Survey section below.

There were 16 different EHRs in use in our final sample of small Virginia practices during the study period. The EHRs and the practices themselves had widely varying capacities to deliver ABCS data to the HVH project in a timely and useful fashion.[22] Therefore, the HVH project used 4 different approaches to extract ABCS data: (1) The HVH team visited practices in person to extract ABCS data from locally-based EHRs, typically by exporting deidentified continuity of care documents (CCDs), and computing the ABCS scores ourselves. (2) The HVH team was granted credentials to access practices' cloud-based EHRs and generated custom reports with ABCS metrics. (3) The HVH team provided metric specifications and guided practices to generate ABCS data themselves and send the data back to the HVH team; (4) The HVH team worked with third parties (eg, hospital system's IT departments) to obtain practices' ABCS data in report form.

### *Survey Design*

The HVH project conducted individual-level surveys to investigate clinicians and staff's perception of adaptive reserve (AR), that is, practice flexibility and ability to take on change. The HVH project also implemented practice-level surveys, called Change Process Capacity Questionnaire (CPCQ) to examine a lead clinician or practice manager's perception of practice capacity and characteristics. Both surveys were completed in 2016 and 2017. More detail about survey administration and response rates can be found in Cuellar et al (2018).[21]

### *Outcome Variables*

***Aspirin Use by High-risk Individuals (A).*** Aspirin use by high-risk individuals measures the percentage of patients aged 18 years and older with Ischemic Vascular Disease with documented use of aspirin or other antithrombotic (as defined by the National Committee for Quality Assurance (NCQA) measure #0068 and equivalently the Physician Quality Reporting System (PQRS) measure #204).[23]

***Blood Pressure Control (B).*** Blood Pressure control measures the percentage of patients aged 18 through 85 years who had a diagnosis of HTN and whose blood pressure was adequately controlled (<140/90) during the measurement year (ie, NCQA measure #0018 or equivalently PQRS measure #236).[24]

***Cholesterol Management (C).*** Cholesterol management measures the percentage of high-risk adult patients 21 and older who were previously diagnosed with, or currently have an active diagnosis of clinical atherosclerotic cardiovascular disease (ASCVD); Or adult patients 21 and older with a fasting or direct Low-Density Lipoprotein Cholesterol (LDL-C) level >= 190 mg/dL; Or patients aged 40 to 75 years with a diagnosis of diabetes with a fasting or direct LDL-C level of 70 to 189 mg/dL; who were prescribed or are already on statin medication therapy during the measurement period (ie, Centers for Medicare and Medicaid Services Group Practice Reporting Option (CMS GPRO) measure PREV-13).[25]

***Smoking Cessation (S).*** Smoking cessation measures the percentage of patients aged 18 years and older who were screened about tobacco use 1 or more times within 24 months AND who received cessation counseling intervention if identified as a tobacco user (ie, NCQA measure #0028, PQRS measure #226).[26]

### *HVH Intervention Variables*

***Intensive.*** Intensive is the name of a binary variable that takes on a unitary value when the HVH team worked with practice coaches to provide patient centered outcomes research education and to help implement major elements of the Sinsky model of primary care practice redesign.[18] Intensive periods lasted 3 months. The start and end times of intensive periods are illustrated in the stepped-wedge design of Figure 2. Once an intensive period starts, the overall intervention began until the end of the study period, implying

that a practice received the intervention should still be treated for the reminder of the study period. Thus we forced the intensive variable to remain "on" for the remainder of the study period when the intervention began, consistent with an 'intent to treat' approach. The coefficient on intensive represents the average effect of the intervention on a specific dependent variable, an ABCS measure, across all practices.

***Maintenance.*** Maintenance represents the time period during which the HVH team used the online platform, conference calls, and Skype visits with faculty to assist practices with monitoring and incorporating new patient-centered outcomes research measures (ABCS) and with workflow redesign questions. The time points of maintenance are also depicted in Figure 2. Once a maintenance period started, Maintenance stayed "on" through the entire study. The coefficient on maintenance represents the marginal impact on a dependent variable of the maintenance period activities.

### *Independent Variables*

***Kickoff.*** Kickoff measures whether the practice participated in the kickoff training event (yes = 1; no = 0). The topics of the event include PCOR education, the Sinsky team care model, enhanced coding for reimbursement, keys to a highly functioning team and avoiding provider burnout.

***Coach Time.*** Coach time, collected by the HVH coach team, measures how many minutes the HVH coach team worked with the practice, in total, counting in person and telephone minutes.

***Ownership.*** Ownership measures the practice's characteristic and was confirmed by phone. The practices were categorized as independent, owned by a hospital system, or a FQHC (Federally Qualified Health Center). The variable was converted to 3 dummy variables and the independent practice is the reference group.

### *Control Variables*

***CPCQ.*** The Change Process Capability Questionnaire (CPCQ) consists of 2 sets of questions introduced by AHRQ.[27] The first set has 18 questions measuring practices' approaches to quality improvement. The second set has 14 questions measuring practices' strategies that have been used to improve care quality. The 5-point Likert type scale ranges from *strongly disagree (*1) to *strongly agree* (5). The HVH project adopted the second set of the questions and converted the responses to -2 to 2. The 14 questions were summed to a single score (Cronbach's $\alpha = 0.93$). We interpret the CPCQ score for the practice as reflective of the practice's culture or overall attitude toward change.

***AR.*** The original Adaptive Reserve (AR) questionnaire consists of 23 questions, and the 5-point Likert type scale ranges from *strongly disagree* (1) to *strongly agree* (5).[28] The HVH project adopted 18 questions (excluded questions 4, 6, 9 11 and 18) from the original AR and converted the response to a value between 0 and 1. Because AR was collected from the individual-level survey, this article calculated the individual average score of the 18 responses and then calculated the practice average score of the individual average score (Cronbach's $\alpha = 0.95$).

***ACO.*** Accountable Care Organization (ACO) was collected by the practice-level survey. ACO measures whether the practice participates in an ACO (yes =1; no = 0).

***Medicare.*** Medicare, collected by the practice-level survey, measures the percentage of a practices' patients who had Medicare coverage.

***Medicaid.*** Medicaid, collected by the practice-level survey, measures the percentage of patients who had Medicaid coverage.

***Practice size.*** Practice size, collected by the practice-level survey, measures the total number of clinicians in the practice and was defined as 1 or solo practice, 2 to 5 clinicians, or greater than or equal to 6 clinicians. Solo practices are the reference group.

***Location.*** Location measures whether the practice is located in an urban or rural area (urban area =1; rural area = 0) based on definitions provided by the Office of Rural Health Policy.[29]

***Cohort.*** Cohorts 1, 2, and 3 were assigned by the stepped-wedge design. The cohort variable was converted to 3 dummy variables. Cohort 1 is the reference group.

***Measurement Period.*** measurement period (MP) is the study quarter and ranges from 1 to 10.

### ***Statistical Approach***

Random effects models are the preferred way to control for intracohort correlation possibilities within a stepped-wedge design.[30] Our analysis begins with parsimonious models to estimate the effects of Intervention and Maintenance on

ABCS, controlling for MP and Cohort. Then the analysis moves to more complex models to estimate the effects of Intervention, Maintenance and other independent variables of interest on ABCS, controlling for MP, Cohort, ACO, insurers, locations, practice size, CPCQ, AR, and location. We used linear regression and the dependent variable was the percentage of patients that meet the quality measure. Analyses were performed using Stata (Version 12, StataCorp).

## Results

Table 2 reports baseline descriptive statistics, using the preintervention observations from each participating practice. Performance on the 4 clinical variables of interest, ABCS, ranged from 60 to 79%, indicating the practice-level average percentage of patients getting appropriate care across all practices. Practices exhibited a wide range in ABCS values, from as low as zero to as high as 100%, and large standard deviations in baseline performance on all but blood pressure control. About half of the practices attended their respective cohort's kickoff event. Both CPCQ and AR surveys revealed wide variation across the sample as well. The total coach time (in minutes) with the practice coaches who delivered the QI intervention was 421 minutes on average but ranged from zero to over 2000. Approximately 8% of participating Virginia practices were FQHCs, 60% were from hospital systems, and almost 70% were in at least one ACO. Almost 30% of these PCP practices' patients were Medicare enrollees, and 17% were Medicaid. A majority of participating practices had between 2 and 5 clinicians.

**Table 2. Descriptive Statistics**

| Variable (n = 173) | Mean (%) | SD |
|---|---|---|
| Quality Indicators, Baseline Means | | |
| Aspirin Use (% of patients) | 66.6 | 26.6 |
| BP Control (% of patients) | 64.0 | 16.43 |
| Cholesterol Control (% of patients) | 57.1 | 22.67 |
| Smoking Counseling (% of patients) | 71.7 | 31 |
| CPCQ | 11.13 | 11.42 |
| Adaptive Reserve | 0.67 | 0.11 |
| Time with coaches, telephone and in-person time (in minutes) | 428 | 426 |
| Attended Intervention Kickoff Meeting | | |
| Cohort 1 | 19 | |
| Cohort 2 | 42 | |
| Cohort 3 | 40 | |
| Ownership | | |
| Independent Practice | 33 | |
| FQHC | 8 | |
| Health System | 60 | |
| Accountable Care Organization (ACO) member | 69 | |
| Medicare (% of patients in practice) | 30.3 | 20.5 |
| Medicaid (% of patients in practice) | 17.2 | 18.3 |
| Practice Size | | |
| Practice Size (1) | 7 | |
| Practice Size (2 to 5) | 62 | |
| Practice Size (>6) | 31 | |
| Urban Location | 70 | |

Abbreviations: BP, Blood Pressure; SD, standard deviation; CPCQ, Change Process Capability Questionnaire; FQHC, Federally Qualified Health Center.
Notes: The CPCQ ranges from −28 to 28. Adaptive Reserve ranges from 0 to 1.

Tables 3–5 report statistical models which control for practice characteristics (cohort, ownership, payer mix, size, urban/rural, etc.), as well as CPCQ and AR, and finally whether they attended the kickoff session. The first column tests for average effects. Column (2) in each table tests for differential impacts of the intervention on the outcome measures across ownership types by interacting the intensive and maintenance phase indicators with FQHC and system status indicators. If the average effect was identical across ownership types, then the FQHC and system interactions would be significant.

Table 3 column (1) reports the average effect of the both the intensive and maintenance phases on appropriate aspirin or other antithrombotic use was significantly positive (1.47 percentage point and 1.53 percentage points respectively, $P \leq .05$). Column (2) suggests that the intervention effect is more like 8.5% for independents and FQHCs (impact is identical for them) but −6.7% for system practices. This negative result may be tempered by observing the large positive coefficient on system ownership among the control variables, indicated that system practices on average scored 21 to 27% higher at baseline than independents did on aspirin use. Although system practice performance may have deteriorated postintervention, they still outperformed independent practices on average. Overall, our conclusion from Table 3 is that there was an immediate (intervention) and lingering (maintenance) positive average effect of the HVH intervention on aspirin performance in general,

**Table 3. Explaining Ischemic Vascular Disease (IVD) Patients' Use of Aspirin or Other Antithrombotics in Small Virginia Practices**

| | (1) Average Effects across Practice Types Aspirin Beta (95% CI) | (2) Testing for Practice Type Variation in Effects of HVH Intervention Aspirin Beta (95% CI) |
|---|---|---|
| Intensive | 1.54* (0.35, 2.74) | 5.65*** (2.76, 8.56) |
| Maintenance | 1.52*** (0.68, 2.36) | 0.32 (−1.40, 2.03) |
| Intensive * FQHC | | −5.638 (−12.57, 1.29) |
| Maintenance * FQHC | | 0.24 (−2.55, 3.03) |
| Intensive * System | | −6.74*** (−10.07, −3.40) |
| Maintenance * System | | 1.79 (−0.12, 3.70) |
| CPCQ | | −0.12 (−0.46, 0.21) |
| AR | | 0.32 (−34.71, 35.35) |
| Kickoff | 22.18*** (14.47, 29.88) | 22.02*** (14.43, 29.61) |
| Cohort 2 | 13.15** (4.05, 22.25) | 12.19* (2.91, 21.47) |
| Cohort 3 | 19.63*** | 19.04*** |
| $R^2$ | 0.34 | 0.35 |
| $N$ | 1,033 | 1,033 |

Abbreviations: CPCQ, Change process capability questionnaire; AR, Adaptive reserve; FQHC, Federally qualified health center; HVH, Heart of Virginia Healthcare; CI, confidence interval.
*$P < .05$; **$P < .01$; ***$P < .001$.
Notes: Estimates from a linear regression controlling for practice ownership type, participation in an Accountable Care Organization, payer mix, practice size, urban location, and measurement period. The CPCQ ranges from −28 to 28. The AR ranges from 0 to 1.

that it was strongest for independent practices, but that it was small compared with baseline practice variation.

Turning to blood pressure control, first we note from Table 2 that the standard deviation of BP performance is roughly half that of Aspirin though the means are almost identical. There is considerably more uniformity in attention to BP control among Virginia small primary care practices. Table 4, column (1) reports that the average impact of the HVH intervention was to lower BP control in the maintenance phase by approximately 1%. Column 2 makes clear that that average effect was driven by the FQHCs whose performance dropped compared with independents. Again, baseline FQHC performance on BP control was better than other practice types (by 42%), so the slight dip post-HVH is outweighed by superior performance throughout. Our inference from these results is that the impact of the HVH intervention did not persist and any shorter-term impacts were among FQHC practices.

Testing for the impact of the HVH intervention on cholesterol control was complicated by the fact that the guidelines for cholesterol management were being revised while practices were being recruited and the intervention was being implemented. We chose a version of the measure that at least was in use at the time, the C control measure that was included in the GPRO reporting set, but it was not at the time of our study programmed into EHRs as standard meaningful use metrics. Therefore, even the most EHR-savvy practices could not track their progress on this metric in real time. As a result, we were not surprised to see observe zero estimated average effects of HVH on this metric either in the intensive or the maintenance phases (results available on request).

Estimated effects of HVH on smoking cessation counseling (Table 5) were slightly negative (approximately 1%) in the maintenance period on average, and no differential FQHC or system effect was observed.

We also note that practices in Cohort 3 performed 20 to 22 points lower than average, approximately a 25% differential on this metric, suggesting that practices in this cohort had much room for

**Table 4. Explaining Hypertension Control in Small Virginia Practices**

| | (1) Average Effects across Practice Types BP Control Beta (95% CI) | (2) Testing for Practice Type Variation in Effects of HVH Intervention BP Control Beta (95% CI) |
|---|---|---|
| Intensive | 0.65 (−0.46, 1.75) | 0.79 (−1.39, 2.97) |
| Maintenance | −0.75* (−1.41, −0.09) | −0.79 (−2.23, 0.65) |
| Intensive * FQHC | | 0.61 (−2.32, 3.54) |
| Maintenance * FQHC | | −1.94* (−3.47, −0.41) |
| Intensive * System | | −0.47 (−3.52, 2.58) |
| Maintenance * System | | 0.53 (−1.04, 2.09) |
| CPCQ | | −0.09 (−0.25, 0.07) |
| AR | | −8.19 (−24.87, 8.49) |
| Kickoff | 5.76** (1.73, 9.80) | 5.49** (1.50, 9.47) |
| Cohort 2 | 0.54 (−3.82, 4.90) | 0.17 (−4.42, 4.76) |
| Cohort 3 | 6.15* (1.10, 11.21) | 6.04* (0.96, 11.12) |
| $R^2$ | 0.45 | 0.44 |
| $N$ | 1,033 | 1,033 |

Abbreviations: CPCQ, Change process capability questionnaire; AR, Adaptive reserve; FQHC, Federally qualified health center; HVH, Heart of Virginia Healthcare; CI, confidence interval; BP, blood pressure.
*$P < .05$; **$P < .01$; ***$P < .001$.
Notes: Estimates from a linear regression controlling for practice ownership type, participation in an Accountable Care Organization, payer mix, practice size, urban location, and measurement period. The CPCQ ranges from −28 to 28. The AR ranges from 0 to 1.

improvement. However, we did not find any differential impact of the intervention on the separate cohorts (results not shown).

## Discussion

Overall, the short HVH intervention had small positive average effects on appropriate use of aspirin and other antithrombotics, small negative effects on blood pressure control, and small negative effects on smoking cessation counseling. These small effects were dwarfed by variation in performance across primary care practices in Virginia. Our conclusion is that the intensive phase of the intervention was probably too short to engender lasting change in process and results. Another factor limiting the impact of the intervention was that technical data extraction difficulties and hospital IT system delays prevented the HVH team from being able to report ABCS performance and movement to participating practices in real time during the intervention and even maintenance periods in many cases. Another limitation was that competing priorities, including some for which practices had financial incentives which the Evidence Now project was not able to offer, likely affected the effectiveness of the intervention efforts. Additional contributing factors were delays in recruiting the target number of practices, which then resulted in a truncated intervention period, and the multiple major disruptions (for example, changes in staff, ownership, or EMR) that degraded practice engagement with the HVH initiative. Our inability to recruit large numbers of independent practices meant that most of our recruited practices were system owned, and there is some evidence that such practices may not perform as well on important quality measures compared with independent practices.[31,32] Multiple major disruptions were widespread in at least 1 other Evidence Now cooperative,[33] and suggests that practice support initiatives must be designed to be able to respond and work to re-engage after a disruption. Therefore, our intervention fidelity, although not formally measured, was probably significantly compromised by these multiple factors. Finally, we found that our physician experts and our learning community were minimally used, and another cooperative reported that they were key to cardiovascular measure improvement.[34] The other EvidenceNOW collaboratives had mixed results,

**Table 5. Explaining Smoking Cessation Counseling in Small Virginia Practices**

| | (1) Average Effects across Practice Types Smoking Counsel Beta (95% CI) | (2) Testing for Practice Type Variation in Effects of HVH Intervention Smoking Counsel Beta (95% CI) |
|---|---|---|
| Intensive | −0.69 (−1.80, 0.42) | −1.93 (−4.02, 0.15) |
| Maintenance | −0.98** (−1.56, −0.39) | −0.92 (−1.86, 0.03) |
| Intensive * FQHC | | −1.49 (−4.28, 1.29) |
| Maintenance * FQHC | | −0.19 (−1.09, 0.72) |
| Intensive * System | | 3.26 (−0.90, 7.42) |
| Maintenance * System | | 0.25 (−0.95, 1.44) |
| CPCQ | | 0.20 (−0.15, 0.55) |
| AR | | −9.16 (−43.54, 25.23) |
| Kickoff | −1.91 (−9.82, 5.99) | −1.99 (−9.89, 5.90) |
| Cohort 2 | 0.62 (−7.32, 8.55) | 1.95 (−6.01, 9.90) |
| Cohort 3 | −21.58** (−34.97, −8.19) | −20.19** (−34.32, −6.05) |
| $R^2$ | 0.28 | 0.28 |
| *N* | 1,033 | 1,033 |

Abbreviations: CPCQ, Change process capability questionnaire; AR, Adaptive reserve; FQHC, Federally qualified health center; HVH, Heart of Virginia Healthcare; CI, confidence interval.
*$P < .05$; **$P < .01$; ***$P < .001$.
Notes: Estimates from a linear regression controlling for practice ownership type, participation in an Accountable Care Organization, payer mix, practice size, urban location, and measurement period. The CPCQ ranges from −28 to 28. The AR ranges from 0 to 1.

with some showing improvements on one[35] and none[34] of the measures, although others showed 3 to 5% improvements on multiple measures.[36–38]

## Conclusion

The intervention period of the HVH project was too short, given the complexities of QI from a good average starting point and given competing priorities of small practices trying hard to survive in today's rapidly evolving environment of meaningful use, value-based payment models, and the implementation of the Medicare Access and CHIP Reauthorization Act (MACRA).

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*To see this article online, please go to: http://jabfm.org/content/35/5/979.full.*

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**Appendix**


# Heart of Virginia Healthcare Cooperative

## Practice Strategy Toolkit

### Working Draft

**November 10, 2015**

## Preface

This document presents a working draft *Practice Strategy Toolkit* for the Heart of Virginia Healthcare Cooperative. Our hope is that this toolkit will help our coaches help our practices achieve the Heart of Virginia Healthcare vision to restore the joy in primary practice through excellent patient care within a supportive practice environment. Please note:

1. The tools in this document are intended for *practice personnel*. Practice Coaches may want to use an expanded version with added space for notes, etc.

2. The tools are combined into one document for purposes of review by the HVH Support Team. The tools may be distributed to practices one at a time depending based on need.

3. A primary value in producing these tools is *simplicity*. We want the tools to be robust enough to support a productive conversation between a Coach and a practice leader or team, but not overwhelming in detail. For those who need additional detail, the tools will be supplemented by extensive references and content that will be available through the online *HVH Learning Community*.

4. The tools are grounded in best practice recommendations from a wide range of sources that are too numerous to document within every tool. A summary listing of these sources is provided at the bottom of the **HVH Support Model** tool. We will also document the primary sources on in the HVH Learning Community and of course we are happy to discuss.

5. The tools are organized into two sections. The tools in *Section 1.0 ABCS of Heart Health* can be used with clinical practice team members, individually or as a group. The tools in *Section 2.0 Supportive Practice Environment* may be more appropriate for practice leaders in some settings. Each Section begins with a practice needs assessment tool (Tools 1.0 and 2.0, respectively).

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## Table of Contents

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## The ABCS of Heart Health

The Heart of Virginia Healthcare Cooperative begins with a focus on the ABCS of heart health. The case for focusing on the ABCS is summarized in a CDC Grands Rounds publication from 2012 as excerpted below. (CDC Grand Rounds: The Million Hearts Initiative, December 21, 2012 / 61(50);1017-1021. See original publication for detailed references).

**The Magnitude of the Problem**

Cardiovascular disease, including heart disease and stroke, is the leading cause of death and disability in the United States. Every year, approximately 2 million persons in the United States have a heart attack or stroke and, as a result of these conditions, approximately 800,000 die from cardiovascular disease. For those persons who do survive a heart attack or stroke, many are faced with serious illness, disability, and decreased quality of life. The ongoing complications that result from cardiovascular disease greatly contribute to the economic burden on the health-care system and to society as a whole. In 2010, the cost in health-care expenditures and lost productivity in the United States from cardiovascular disease amounted to nearly $444 billion, and these costs are increasing every year. This is especially alarming because the primary risk factors for cardiovascular disease (i.e., high blood pressure, high cholesterol, smoking, type 2 diabetes, inactivity, and obesity) are largely preventable and have effective, low-cost treatments. If these risk factors were well-controlled through behavioral modification and/or treatment, the risk for death from heart attack and stroke could be reduced by more than half.

**The Million Hearts Initiative**

Launched in September 2011 by the U.S. Department of Health and Human Services (HHS), Million Hearts is a national initiative that aims to prevent 1 million heart attacks and strokes by 2017. This public-private partnership, co-led by CDC and the Centers for Medicare and Medicaid Services (CMS), will integrate proven and effective prevention activities to reduce cardiovascular disease. A key strategy of Million Hearts is to engage a broad set of stakeholders involved with health and health care, including clinicians, pharmacists, insurers, health-care systems, retailers, consumer groups, and others. Better alignment and coordination of existing and new prevention and treatment efforts will accelerate translation into practice, resulting in decreased burden to society and greater population health improvements. The two primary goals of Million Hearts are:

- To reduce the need for treatment by empowering persons in the United States to make healthy choices (e.g., avoid tobacco, reduce sodium intake, and reduce artificial trans fat intake) and
- To improve care for persons who need it through focus on the "ABCS" (i.e., appropriate aspirin use for those at risk, blood pressure control, cholesterol management, and smoking cessation).

Million Hearts is being implemented through parallel efforts aimed at clinical settings and communities. Community efforts will keep the population healthy and reduce the number of persons who need treatment in the first place. Million Hearts will focus community efforts on decreasing tobacco use and exposure to secondhand smoke, reducing sodium intake, and eliminating consumption of artificial trans fats. Clinically based prevention efforts will improve quality of care, access to care, and improve outcomes through focus on the ABCS. These efforts will include drawing the attention of health-care professionals and the systems in which they work to the ABCS, increasing and improving the use of health information technology in clinical practice, and using clinical innovations to increase the use of effective ABCS care practices.

**The Clinical Challenge**

Although high achievement in the ABCS has been shown to prevent more cardiovascular disease–related deaths than other clinical preventive services, overall performance in the ABCS by persons at risk and their health-care professionals generally is low (*3,5*). For example, less than half of persons (47%) with ischemic vascular disease are prescribed aspirin or other antiplatelet medication, less than half of persons (47%) with hypertension have their blood pressure under control, only one third of persons (33%) with high cholesterol are effectively managed, and approximately one fourth of persons (23%) who smoke get tobacco cessation counseling or medications. Consequently, the estimated number of persons who smoke or have uncontrolled hypertension or cholesterol totals approximately 100 million. Improving performance on the ABCS is the means by which the majority of lives can be saved and how the greatest health value can come out of current health-care investments.

## The HVH Support Model

The vision of HVH is to help Virginia primary care practices restore the joy in primary care by delivering excellent care within a supportive practice environment. The *HVH Practice Strategies* are a defined set of recommended strategies for achieving this vision. Strategies in Section 1.0 are designed to improve the ABCS of heart health, and strategies in Section 2.0 are designed to foster a supportive practice environment. HVH practice supports will include a combination of activities as outlined in the columns.

| Strategies | Practice Facilitation | Expert Consultation | Collaborative Learning Events | Online Support Center | Data Feedback |
|---|---|---|---|---|---|
| **1.0 The ABCS of Heart Health** | | | | | |
| 1.1 Engage the Care Team | ✓ | ✓ | ✓ | ✓ | |
| 1.2 Identify Patients | ✓ | ✓ | ✓ | ✓ | |
| 1.3 Define and Measure Quality | ✓ | ✓ | ✓ | ✓ | ✓ |
| 1,.4 Adopt Clinical Guidelines | ✓ | ✓ | ✓ | ✓ | |
| 1.5 Encourage Access to Care | ✓ | ✓ | ✓ | ✓ | |
| 1.6 Develop Care Plans | ✓ | ✓ | ✓ | ✓ | |
| 1.7 Optimize Visits | ✓ | ✓ | ✓ | ✓ | |
| 1.8 Manage Medications | ✓ | ✓ | ✓ | ✓ | |
| 1.9 Support Self-Management | ✓ | ✓ | ✓ | ✓ | |
| 1.10 Coordinate Care | ✓ | ✓ | ✓ | ✓ | |
| **2.0 Supportive Practice Environment** | | | | | |
| 2.1 Optimize Teamwork | ✓ | ✓ | ✓ | ✓ | |
| 2.2 Optimize Workflow | ✓ | ✓ | ✓ | ✓ | |
| 2.3 Optimize Clinical Data | ✓ | ✓ | ✓ | ✓ | |
| 2.4 Optimize the Financial Picture | ✓ | ✓ | ✓ | ✓ | |
| 2.5 Support Organizational Learning | ✓ | ✓ | ✓ | ✓ | |

**Primary Sources**

A partial listing of resources used to inform the *HVH Practice Strategies* includes the following. Additional specific references are available through the online *HVH Learning Community*.

- Agency for Healthcare Research and Quality (AHRQ)
- American Academy of Family Physicians
- American Board of Internal Medicine
- American Medical Association
- The Centers for Disease Control (CDC)
- Improvingchroniccare.org (MacColl Institute for Health Care Innovation)
- Improvingprimarycare.org (MacColl Institute for Health Care Innovation)
- Institute of Medicine
- Million Hearts
- NCQA Patient Centered Medical Home Standards
- National Guidelines Clearinghouse
- National Quality Measures Clearinghouse
- Research and recommendations for high performing primary care practices by Thomas Bodenheimer, MD, and Drs. Christine and Thomas Sinsky
- Research and recommendations for optimizing electronic health information by the Office of the National Coordinate for Health Information Technology
- The US Preventive Services Task Force

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## Tool 1.0 Practice Team Checklist: Improving the ABCS of Heart Health

This tool is intended to help your practice define a set of objectives or focus areas for improving the ABCS of heart health. The tool presents a list of strategies that can help a practice deliver high quality care with respect to the ABCS. Please scan the list and indicate which strategies you already have in place to some degree. In the 'might need work' column, identify the ones that you might want to focus on creating or improving. Your Practice Coach is available to discuss your list and help you identify some specific improvement objectives. The 'see tool' reference shows you which tool provides additional action steps for implementing the particular strategy.

| Strategy | *In place* | *Might need work* | *See Tool* |
|---|---|---|---|
| 1. We use a team care approach for managing patients who need ABCS therapies | | | 1.1 |
| 2. We help our team members learn about CVD risks, patient centered outcomes research, quality improvement strategies, and community need to address CVD | | | 1.1 |
| 3. We can readily identify our patients who need improvement on the ABCS | | | 1.2 |
| 4. We have defined quality goals for the ABCS | | | 1,3 |
| 5. We routinely measure our quality performance on the ABCS | | | 1.3 |
| 6. We know the percent of patients who are at goal for the ABCS | | | 1.3 |
| 7. We are satisfied overall with our quality performance on the ABCS | | | 1.3 |
| 8. We use clinical guidelines specific to the ABCS | | | 1.4 |
| 9. We are satisfied overall with our patient engagement in managing the ABCS | | | 1.5 |
| 10. We use written care plans to address the ABCS | | | 1.6 |
| 11. We use planned visits to optimize care for selected patients | | | 1.7 |
| 12. We have effective clinical decision supports for managing the ABCS | | | 1.7 |
| 13. We have effective medication management protocols for managing the ABCS | | | 1.8 |
| 14. We have effective patient education and self-management supports for managing the ABCS | | | 1.9 |
| 15. We have effective referral and care coordination relationships for managing the ABCS | | | 1.10 |

**Discussion Notes:**

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## Tool 1.1 Engage the Care Team

*Research and experience show that team-based care can produce positive results in prevention and management of CVD. This tool provides a list of recommended strategies for optimizing team care. Please review the list of strategies and discuss possible next steps with your Practice Coach*

**Strategies**

| *Please indicate which strategies are already in place within your practice setting, and which may need work (even if already in place to some degree).* | ***In place*** | ***Might need work*** |
|---|---|---|
| 1. Establish practice teams | | |
| 2. Support team learning about CVD risks, the ABCS, team care strategies, quality improvement, and community needs for CVD prevention and management | | |
| 3. Develop patient lists for each team. | | |
| 4. Define roles for clinical and nonclinical team members | | |
| 5. Train and assign members of the care team to coordinate care for individual patients | | |
| 6. Train and assign members of the care team to support patients/families/caregivers in self-management, self-efficacy and behavior change | | |
| 7. Hold team huddles to address daily opportunities, challenges, and priorities | | |
| 8. Hold scheduled team meetings to address practice functioning | | |
| 9. Involve care team staff in the practice's performance evaluation and quality improvement activities | | |
| 10. Involve patients/families/caregivers in quality improvement activities or on the practice's advisory council | | |

**Next Steps**

*What would you like to work on next?*

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## Tool 1.2 Identify Patients for Care Management

*Identifying patients for focused care management is a fundamental step in prevention and management of CVD. This tool provides a list of recommended strategies for identifying at-risk patients. Please review the list of strategies and discuss possible next steps with your Practice Coach.*

| **Strategies** | | |
|---|---|---|
| *Please indicate which strategies are already in place within your practice setting, and which may need work (even if they are already in place to some degree).* | ***In place*** | ***Might need work*** |
| 1. Define risk criteria for identifying patients in need of ABCS supports | | |
| 2. Specify ABCS risk criteria in the clinical information system | | |
| 3. Embed ABCS risk criteria in provider decision support tools | | |
| 4. Design queries to identify patient subgroups meeting risk criteria in clinical information system | | |
| 5. Assign patients to an electronic registry | | |
| 6. Track patients with specific conditions and care needs | | |

**Next Steps**

*What would you like to work on next?*

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## Tool 1.3 Define and Measure Quality

*This tool is designed to help you focus your efforts to define and measure quality for the ABCS of heart health. Please review the list of strategies and discuss possible next steps with your Practice Coach.*

**Strategies**

| *Please indicate where quality goals are already in place within your practice setting, and which may need work (even if quality goals are already in place to some degree).* | ***In place*** | ***Might need work*** |
|---|---|---|
| 1. Convene the quality team | | |
| 2. Define quality measures for A, B, C, S | | |
| 3. Test and refine quality measures for A, B, C, S | | |
| 4. Produce quality measures for A, B, C, S | | |
| 5. Define quality goals for A, B, C, S | | |
| 6. Monitor quality performance for A, B, C, S | | |
| 7. Provide feedback to care teams on A, B, C, S | | |

**Next Steps**

*What would you like to work on next?*

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## Tool 1.4 Adopt Clinical Guidelines

*This tool is designed to help you focus your efforts to define and measure quality goals for the ABCS of heart health. Please review the list of strategies and discuss possible next steps with your Practice Coach.*

**Strategies**

| *Please indicate where quality goals are already in place within your practice setting, and which may need work (even if quality goals are already in place to some degree).* | ***In place*** | ***Might need work*** |
|---|---|---|
| 1. Convene the care team | | |
| 2. Select clinical guidelines for A, B, C, S | | |
| 3. Test and refine clinical guidelines for A, B, C, S | | |
| 4. Embed clinical guidelines in clinical information systems for A, B, C, S | | |
| 5. Inform patients and families about guidelines | | |
| 6. Monitor guideline adherence and impact | | |
| 7. Refine guidelines to achieve quality goals | | |

**Next Steps**

*What would you like to work on next?*

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## Tool 1.5 Encourage Access to Care

*This tool provides a set of recommended strategies to help patients access services through planned visits and other strategies. Please review the list of strategies and discuss possible next steps with your Practice Coach.*

**Strategies**

| *Please indicate which strategies are already in place within your practice setting, and which may need work (even if they are already in place to some degree).* | ***In place*** | ***Might need work*** |
|---|---|---|
| 1. Help patients/families select a personal clinician and documenting the selection in practice records | | |
| 2. Use planned visits for routine care | | |
| 3. Provide same day visits for urgent care | | |
| 4. Provide instructions for obtaining care and clinical advice after office hours | | |
| 5. Provide timely clinical advice by telephone | | |
| 6. Provide timely clinical advice using a secure, interactive electronic system | | |
| 7. Document clinical advice in patient records | | |
| 8. Provide online access to health information for patients | | |
| 9. Send visit reminders to patients | | |
| 10. Assess and address the special cultural and language needs of patients | | |
| 11. Assure continuity of care over time | | |

**Next Steps**

*What would you like to work on next?*

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## Tool 1.6 Develop Care Plans

*This tool provides a set of recommended strategies for engaging patients as partners in the developing of care plans. Please review the list of strategies and discuss possible next steps with your Practice Coach.*

**Strategies**

| *Please indicate which strategies are already in place within your practice setting, and which may need work (even if they are already in place to some degree).* | ***In place*** | ***Might need work*** |
|---|---|---|
| 1. Engage patients as partners in team care planning | | |
| 2. Incorporate patient preferences and functional/lifestyle goals | | |
| 3. Consider patient capabilities and supports | | |
| 4. Define time bound treatment goals | | |
| 5. Assess and address potential barriers to meeting goals | | |
| 6. Include a patient medication management component | | |
| 7. Include a patient self-management component | | |
| 8. Provide a written care plan for the patient/family/caregiver | | |

**Next Steps**

*What would you like to work on next?*

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## Tool 1.7 Optimize Patient Visits

*This tool provides a set of recommended strategies for optimizing patient visits in terms of both content and flow. Please review the list of strategies and discuss possible next steps with your Practice Coach.*

**Strategies**

| *Please indicate which strategies are already in place within your practice setting, and which may need work (even if they are already in place to some degree).* | ***In place*** | ***Might need work*** |
|---|---|---|
| 1. Use planned visits for selected patients with CVD risks | | |
| 2. Send patient reminders before the visit, including reminders to bring all medications | | |
| 3. Use standing orders as appropriate | | |
| 4. Use pre-visit labs or point of care testing as appropriate | | |
| 5. Define educational objectives prior to the visit | | |
| 6. Assign responsibility for patient education, coaching, and care coordination to non-physician staff if possible | | |
| 7. Assign responsibility for post-visit follow-up to promote understanding and adherence | | |
| 8. Assure accurate documentation of clinical information necessary for quality monitoring | | |

**Next Steps**

*What would you like to work on next?*

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## Tool 1.8 Manage Medications

*This tool provides a set of recommended strategies for optimizing medication management. Please review the list of strategies and discuss possible next steps with your Practice Coach.*

**Strategies**

| *Please indicate which strategies are already in place within your practice setting, and which strategies may need work (even if quality goals are already in place to some degree). Areas that need work can be identified for further development.* | ***In place*** | ***Might need work*** |
|---|---|---|
| 1. Remind patients to bring all medications to each visit | | |
| 2. Review and reconcile medications for patients | | |
| 3. Assess understanding of medications | | |
| 4. Document over-the-counter medications | | |
| 5. Use electronic prescribing | | |
| 6. Enter electronic medication orders in the medical record | | |
| 7. Perform patient-specific checks for drug-drug- and drug-allergy interactions | | |
| 8. Synchronize and perform refills of chronic medications during office visits | | |
| 9. Alert prescribers to generic alternatives | | |
| 10. Educate patients about generic alternatives | | |
| 11. Optimize clinical information systems for prescription management | | |

**Next Steps**

*What would you like to work on next?*

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## Tool 1.9 Support Self-Management

*This tool provides a set of recommended strategies for supporting patient self-management. Please review the list of strategies and discuss possible next steps with your Practice Coach.*

**Strategies**

| *Please indicate which strategies are already in place within your practice setting, and which may need work (even if they are already in place to some degree).* | ***In place*** | ***Might need work*** |
|---|---|---|
| 1. Assess patient self-management capabilities and needs | | |
| 2. Address concerns of patients and families | | |
| 3. Provide patient self-management education | | |
| 4. Help patients navigate their way to information, services, supports, and tools they need | | |
| 5. Provide or facilitate access to behavior change interventions and supports where needed | | |
| 6. Provide or facilitate access to comprehensive case management support where needed | | |
| 7. Link patients to community-based resources for self-management support where needed | | |
| 8. Track patient progress in self-management support | | |

**Next Steps**

*What would you like to work on next?*

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## Tool 1.10 Coordinate Care

*This tool provides a set of recommended strategies for care coordination. Please review the list of strategies and discuss possible next steps with your Practice Coach. Please review the list of strategies and discuss possible next steps with your Practice Coach.*

| **Strategies** | | |
|---|---|---|
| *Please indicate which strategies are already in place within your practice setting, and which may need work (even if they are already in place to some degree).* | ***In place*** | ***Might need work*** |
| *Test Tracking and Follow Up* | | |
| 1. Track lab and radiology tests until results are available | | |
| 2. Flag abnormal lab and imaging results, bringing them to the attention of the clinician | | |
| 3. Notify patients/families of normal and abnormal lab and imaging test results | | |
| *Referral Tracking and Follow Up* | | |
| 4. Create formal and informal agreements with a subset of specialists based on our patient needs | | |
| 5. Provide complete patient information for the consultant or specialist | | |
| 6. Exchange of key clinical information with the consultant or specialist | | |
| 7. Track referrals until the consultant or specialist's report is available | | |
| 8. Document co-management arrangements in the patient's medical records | | |
| 9. Ask patients/families about self-referrals and requesting reports from clinicians | | |
| *Care Transitions* | | |
| 10. Proactively identify patients with unplanned hospital admissions and ED visits | | |
| 11. Share clinical information with admitting hospitals and emergency departments | | |
| 12. Consistently obtain patient discharge summaries from the hospital and other facilities | | |
| 13. Proactively contact patients/families for appropriate follow-up care after admission or ED visit | | |
| 14. Exchange patient information with a hospital during hospitalization | | |
| *Community Linkages* | | |
| 15. Create partnerships with community service providers | | |
| 16. Track referrals to community services | | |

**Next Steps**

*What would you like to work on next?*

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## Tool 2.0 Practice Leader Checklist: Fostering a Supportive Practice Environment

*This tool provides a set of recommended strategies for care coordination. Please review the list of strategies and discuss possible next steps with your Practice Coach. Please review the list of strategies and discuss possible next steps with your Practice Coach.*

| Strategy / Capability | *In place* | *Might need work* | *See Tool* |
|---|---|---|---|
| 1. We use a care team approach within the practice | | | 2.1 |
| 2. Our care teams are strategically designed to optimize use of physician time | | | 2.1 |
| 3. We are satisfied with the overall functioning of our care teams | | | 2.1 |
| 4. Our workflows are strategically designed to optimize use of physician time | | | 2.2 |
| 5. We periodically engage the team to review and optimize our workflows | | | 2.2 |
| 6. We are satisfied with the overall functioning of our workflows | | | 2.2 |
| 7. We are satisfied with the overall function of our clinical information systems | | | 2.3 |
| 8. We are focused on optimizing our clinical information systems to support population health management and emerging modes of reimbursement | | | 2.3 |
| 9. We periodically review our coding to assure that it is accurate for clinical decision support and billing | | | 2.4 |
| 10. We periodically review the amount of time our physicians spend on non-reimbursable inter-service tasks and work to optimize the time allocation | | | 2.4 |
| 11. We periodically review our unit-level costs vs budgets to identify opportunities for savings | | | 2.4 |
| 12. We have a defined strategy for organizational learning for the new health requirements of population health management and value-based payment | | | 2.5 |

**Discussion Notes:**

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## Tool 2.1 Optimize Teamwork

*This tool provides a set of recommended strategies for optimizing teamwork in primary care practices. Please review the list of strategies and discuss possible next steps with your Practice Coach.*

**Strategies**

| *Please indicate which strategies are already in place within your practice setting, and which may need work (even if they are already in place to some degree).* | ***In place*** | ***Might need work*** |
|---|---|---|
| 1. Adopt a care team approach to help optimize physician focus and time | | |
| 2. Clearly define roles for each team member | | |
| 3. Extend responsibility for health coaching and care coordination to non-physician members of the team | | |
| 4. Create team member job descriptions, employ regular evaluations, ensure cross-training, and promote staff development | | |
| 5. Improve team communication through co-location | | |
| 6. Improve team communication through use of quick team huddles | | |
| 7. Improve team communication through productive staff meetings | | |
| 8. Use specific strategies to energize teams, build team cohesion, and foster effective team functioning | | |

**Next Steps**

*What would you like to work on next?*

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## Tool 2.2 Optimize Workflow

*This tool provides a set of recommended strategies for optimizing workflow in primary care practices. Please review the list of strategies and discuss possible next steps with your Practice Coach.*

**Strategies**

| *Please indicate which strategies are already in place within your practice setting, and which may need work (even if they are already in place to some degree).* | ***In place*** | ***Might need work*** |
|---|---|---|
| 1. Use planned visits for selected patient populations | | |
| 2. Use standing orders as appropriate | | |
| 3. Use pre-visit labs or point of care testing | | |
| 4. Define planned educational objectives prior to visits | | |
| 5. Use defined strategies for minimizing no-show rates for appointments | | |
| 6. Use one or more strategies to streamline documentation such as scribing, non-physician order entry, and standardized prescription renewal | | |
| 7. Have the MA or nurse to document the reason for visits, vitals, etc. | | |
| 8. Provide visual and sound separation between waiting area and clinical area | | |
| 9. Have the nurse / MA do vitals, initial history, and medication reconciliation in the privacy of an examining room | | |
| 10. Optimize lines of sight so that the nurse / MA has visual and verbal contact with the flow of patients and rooms. | | |
| 11. Manage in-boxes by batching all non-urgent messages for review once or twice per day | | |
| 12. Substitute verbal for written electronic messaging where appropriate | | |
| 13. Periodically engage the team in workflow mapping to solve specific challenges | | |

**Next Steps**

*What would you like to work on next?*

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## Tool 2.3 Optimize Clinical Information

*In the emerging health care system it is imperative for primary care practices to demonstrate value through population health management. Accurate clinical documentation is essential for identifying at-risk patients, defining quality goals, managing care, monitoring utilization, measuring quality performance, and maximizing practice revenues. This tool provides a set of recommended strategies for optimizing clinical documentation.* ***Please review the list of strategies and discuss possible next steps with your Practice Coach.***

**Strategies**

| *Please indicate which strategies are already in place within your practice setting, and which may need work (even if they are already in place to some degree).* | ***In place*** | ***Might need work*** |
|---|---|---|
| 1. Identify physician champions | | |
| 2. Engage the EHR vendor | | |
| 3. Clarify the goals for improving data quality | | |
| 4. Assign a data coordinator for the practice | | |
| 5. Identify priority measures and related data elements | | |
| 6. Phase in new measures one at a time | | |
| 7. Test and confirm ability to extract data for priority quality measures | | |
| 8. Test and confirm the accuracy of data and quality measures | | |
| 9. Review current workflows and document necessary changes to solve data quality issues | | |
| 10. Work with the vendor to map measure specifications to specific fields and codes. | | |
| 11. Create standardized reporting templates in the EHR. | | |
| 12. Create a measurement manual with definitions of key measures. | | |
| 13. Provide ongoing training and coaching to staff. | | |
| 14. Anticipate common errors. | | |
| 15. Identify and educate staff about discovered errors. | | |
| 16. Implement data integrity checks and protocols to ensure documentation compliance. | | |
| 17. Establish ongoing data quality monitoring processes. | | |
| 18. Provide rapid feedback to providers. | | |
| 19. Check measures against external benchmarks and internal trends. | | |
| 20. Document and implement ongoing processes and procedures to address data quality | | |

**Next Steps**

*What would you like to work on next?*

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## Tool 2.4 Optimize the Financial Picture

*Optimizing the financial picture is a specialized function of practice management professionals. This tool provides a selected subset of strategies used by high performance primary care practices. Please review the list of strategies and discuss possible next steps with your Practice Coach.*

| **Strategies** | | |
|---|---|---|
| *Please indicate which strategies are already in place within your practice setting, and which may need work (even if they are already in place to some degree).* | ***In place*** | ***Might need work*** |
| 1. Invest in provider and staff learning about E&M coding | | |
| 2. Optimize revenues with effective E&M coding | | |
| 3. Analyze evaluation and management coding distributions by provider and review them on a regular basis | | |
| 4. Analyze and review the costs of each functional unit of the practice compared to budget at least semi-annually | | |
| 5. Know the measures of performance required by payer contracts, review performance on a regular basis | | |
| 6. Measure and manage the amount of time physicians spend on non-reimbursable tasks | | |
| 7. Evaluate the cost of work of other specialties that falls to primary care physicians, and consider ways to minimize this cost | | |

**Next Steps**

*What would you like to work on next?*

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## Tool 2.5 Support Organizational Learning

In 2012 the Institute of Medicine identified a need to develop a "…continuously learning health system, one that aligns science and informatics, patient-clinician partnerships, incentives, and a culture of continuous improvement to produce the best care at lower cost." The need for continuous learning extends from the system level to the practice level, including practice teams engaged in improving the ABCS of heart health. *Please review the list of strategies and discuss possible next steps with your Practice Coach.*

**Strategies**

| *Please indicate which strategies are already in place within your practice setting, and which may need work (even if they are already in place to some degree).* | ***In place*** | ***Might need work*** |
|---|---|---|
| 1. Engage all team members in planning and execution of QI initiatives | | |
| 2. Purposely strive to create a patient-centered culture in which all team members feel comfortable identifying quality deficits and opportunities for quality improvement related to the ABCS | | |
| 3. Provide team feedback on quality of care measures | | |
| 4. Support team learning about patient-centered outcomes research as it relates to key patient populations in the practice | | |
| 5. Support team learning about community health needs, and consider implications for practice strategies for quality improvement, scope of services, community partnerships, and community reputation | | |

**Next Steps**

*What would you like to work on next?*