

## **Stepped approach to preventive services outreach in primary care**

### 1. Project Lead/Key Contact (name, email & phone number):

Shana Ratner, MD

Clinical Assistant Professor of Medicine

Associate Medical Director for Quality Improvement for the UNC Internal Medicine Clinic

Division of General Internal Medicine and Epidemiology

Email: [shana\\_ratner@med.unc.edu](mailto:shana_ratner@med.unc.edu)

Phone: 919-966-2004

### 2. Project Summary/Abstract and Relevance (250 words):

Many patients do not adhere to evidence-based screening guidelines and vaccination recommendations that can improve outcomes and decrease costs<sup>1,2</sup>. Current patient reminder and outreach efforts have not been standardized in the UNC system; each individual clinic expends significant effort designing processes for these predictable tasks. Stepped support with automated reminders from the EHR and case management when necessary has been shown to increase adherence to colorectal cancer screening<sup>3</sup>. This project seeks to develop a structured change package to improve rates of colorectal cancer screening (CRC screening), breast cancer screening, cervical cancer screening, pneumococcal vaccination, and influenza vaccination. The change package will be developed and tested in the Internal Medicine Clinic (IMC) then quickly spread to clinics participating in the Primary Care Improvement Collaborative (PCIC). This intervention includes three components to improve adherence with preventive care recommendations: Component 1) visit-based prompting in the Electronic Health Record (EHR), Component 2) written mailings to unscreened patients, Component 3) phone case management

for patients who remain unscreened despite Component 1 and 2. This change package is built upon systems that have already worked in Internal Medicine but moves a step further adding case management for unscreened patients. The project seeks to develop standard work for predictable preventive tasks that will be generalizable to other sites in the UNC system and to other preventive care services. This work will be done in concert with the Epic population management build team, and the IMC will serve as a laboratory for testing visit-based prompts and population management functions. A well-coordinated, planned effort will improve quality and value for UNC patients.

3. What are you trying to accomplish? What is the gap in quality you are trying to address?

Our overall aim is to design, test, and spread best practices for delivering preventive care in the primary care setting. Many patients have care gaps in colorectal cancer screening, mammography, cervical cancer screening, and vaccination. The following screening rates for the IMC and PCIC for three of these measures show that a substantial percent of patients are still not receiving recommended care.

Preventive Service	Eligible IMC Patients	Eligible PCIC Patients
Colorectal cancer Screening	70%	64%
Breast cancer screening	67%	65%
Pneumococcal vaccination	72%	59%

We plan to design a change package that includes the following components: 1) visit-based prompts in the Electronic Health Record (EHR), 2) provider approved, but centrally distributed

outreach mailings, and 3) case management employing motivational interviewing and offering assistance to overcoming barriers to care.

**Current gap in quality: lack of structured approach to optimizing delivery of key preventive services**

In the current state, preventive care across UNC Network practices differs based on the limited population management infrastructure of each practice.

Some clinics employ visit-based prompts for a few preventive care tasks, and the PCIC clinics utilize individual staff members working daily to create prompts for the providers. No clinics are using prompts for all five of these prevention services. Even clinics that have robust visit-based prompts (e.g. IMC) will be shifting entirely to Best Practice Advisories (BPAs) with the implementation of Epic. In the past, visit-based prompts were not supported in the medical record. Individual clinics designed complicated outside registries, databases, and scanning systems to support visit-based prompts. Under the fee-for-service reimbursement structure, most clinics have focused on care at the time of the visit. In the current state, the BPAs are untested. In the future state, all PCIC practices will employ well-tested visit based prompts (BPAs) to deliver high value prevention services. Moving forward into an era of value based reimbursement, health care systems will need to move beyond visit based care and introduce interventions based on a philosophy of population management

Although the IMC has implemented reminder letters for patients due for CRC screening, and Family Medicine has sent outreach letters for mammography, no clinic has a formalized structure for outreach mailings for all five of these prevention services. Consequently, healthier patients

who rarely visit the doctor are not receiving reminders for important prevention services. In patients who come in frequently because of complicated medical problems, prevention often takes a lower priority and can be overlooked. Sending outreach mailings in Internal Medicine led to a substantial absolute increase in the clinic's CRC screening rate of 4% over 1 year. In the future, clinics will have a clear plan for letter outreach of unscreened patients. Letters will be edited by and approved by patients serving on an advisory board producing a more patient-centered intervention. The letters will go to patients on a list approved by the provider (to prevent harm by delivering inappropriate services), but the actual work will be performed and tracked by Care Assistants (CAs).

In the current state, patients who do not get recommended preventive services based on visit-based prompting or limited outreach mailings have no further assistance. Internal Medicine and Family Medicine have CAs for Diabetics but not for preventive services. A recent chart review of 150 IMC patients who received CRC screening outreach letters showed that providers had repeatedly referred 9% of the patients for screening in the past year. Significant barriers to screening were noted—such as problems with transportation and cost. In the future state, clinics will have access to CAs who are trained in patient tracking and motivational interviewing. These CAs will no longer need to manually make visit planners or run outside registries, instead will be able to focus their time on case management of the more challenging situations. The CAs will work with the patients who have the most barriers to care to remind, motivate, and break down those barriers. For instance, they could arrange for a patient to get a mammogram at a free health fair if cost were the barrier.

**Current gap in quality: variability of provider documentation**

Documentation in the EHR in data extractable fields of outside colonoscopies, mammograms, cervical cancer screenings, and immunizations increases the accuracy of reported screening and immunization rates, but many providers do not appreciate the relevance of this task and do not take time to update the record. This variability correlates well with screening rates. Providers documenting outside procedures have higher screening rates. The CAs can undertake the administrative role of obtaining medical records and documenting outside studies in a standardized way. In the future state, screening and immunization rates will depend less on the behavior of individual providers and how they document services performed outside of UNC.

#### **Current strength in quality: effectiveness of the PCIC**

Internal Medicine and Family Medicine have been effectively disseminating best practices to the PCIC. In the future state, the PCIC will have well established uniform protocols for these predictable conditions, so that the group can move forward with innovation in other areas. If successful, this change package could be broadened to other services as well such as Lung Cancer Screening, Tdap vaccination, HIV screening, and Hepatitis C screening. It is a package that has the potential increase the improvement capacity of the institution on a much larger scale.

#### 4. What is the specific patient population your project will impact? (1 page):

This project will focus on patients who receive their primary care at UNC in one of the practices participating in the PCIC. The PCIC is made up of UNC IMC, UNC Family Medicine, Carolina Advanced Health, and three of the UNC Physicians Network Practices that are undergoing transformation to become Patient-Centered Medical Homes.

#### **UNC Internal Medicine Clinic Pilot**

The UNC IMC will serve as the pilot site for this project. The IMC serves 12,327 active patients (defined as 1 or more visits in the last 18 months) with 44,000 visits per year. Providers are attendings, residents, and advanced practice providers. The patients of UNC IMC are 37% commercially insured, 37% Medicare, 7% Medicaid, 7% dually eligible for Medicare and Medicaid, and 19% uninsured.

### **PCIC Spread**

The PCIC is made up of 6 practices that care for approximately 44,000 unique patients in central North Carolina.

### **Improvement for all patients in the collaborative**

While many government and insurance incentives are payer or disease specific, our goal is to provide the best evidence-based care to all patients regardless of payer or disease state. This project will impact adult patients of all ages since influenza vaccines and cervical cancer screening benefit younger and older patients, and mammography, colorectal cancer screening, and pneumococcal vaccinations impact older patients.

### **Primary-care based project**

If these interventions are successful, we will spread these best practices to the Improving Value in Healthcare Collaborative (IVICC) which involves the Cardiology Clinic and the Geriatric Clinic. Both of these clinics face similar challenges in population health management as we transition to value-based care. They will be able to these adapt processes to meet their own needs.

5. Improvement strategy: what are the ideas for change and how will you test and implement those ideas? (1 page)

The IMC team will use Lean Six Sigma methodology to implement these changes. This is primarily a project of spread. The recent Green Belt training projects done by the IMC and Family Medicine utilized DMAIC methodology and developed outreach strategies that improved screening rates. We are planning to spread what was learned to three other preventive services (cervical cancer screening, pneumococcal vaccination, and influenza vaccination) and to all of the PCIC practices. The first 6 months will be spent developing the package and the second 6 months spreading to the PCIC. We will use A3 methodology as well to organize the project.

Key aspects of project will include designing standard work documents and standardized outreach processes including mailings and scripts for phone case management. By using process mapping and standard work, we hope to find the gaps between what we have been doing with our current registries and our planned future Epic based-state. Ms. Whitney who is leading the population management Epic build team will work closely with us to make Epic support the needs that we discover.

### **Component 1: Visit-Based Prompts**

We have already developed, tested, and implemented the majority of these visit-based prompts at the IMC. In our current environment, 90% of prompts are addressed. The process will change however, and we will rely on BPAs in Epic. We will test the BPAS to ensure that they are effective visit-based reminders. We will measure number and percent of prompts started, and number and percent completed. We will survey providers about ease of use, clarity, and prompt

prioritization. We expect to find problems in the prompting system and will work closely with Ms. Whitney to get these fixed.

### **Component 2: Mailings for outreach to unscreened patients**

We will test mailings to unscreened patients. The PCIC and UNC Practice Quality and Innovation have been developing gap reports that are being validated by members of the PCIC. These can be given to providers to check and eliminate the names who are not appropriate for screening. Provider review will help prevent patients who are too sick to screen from receiving inappropriate outreach. The letters can be sent out with the providers' names on them but can be distributed centrally. We plan to test impact and effort of various schedules of letter outreach. We would seek patient input (voice of the customer data) about preferred frequency and content of reminders. Letters will be sent at the age at which screening initiation is recommended (e.g. age 50 for CRC screening). Additional outreach letters would be sent to patients who are not up to date with recommendations. We will make standard work documents that include the contents, distribution process, and schedule of outreach. We will work with the Epic population management group to ensure that the system will support documentation and tracking of mailings.

### **Component 3: Case management by Prevention CA**

Some patients will not respond to mailings. We will test phone case management initiated by a Prevention CA. We currently have experience with phone outreach by CAs for diabetes and depression management, giving us a foundation from which to work. We will seek patient input (voice of the customer data) about scripts and frequency of contact. We will make standard work

documents to standardize scripts and timing. We will work with the Epic team to ensure that the system will support documentation and tracking of this important outreach.

6. Measurement strategy: Provide measure name, measure type, measure calculation, exclusions, data source, benchmark, target, frequency of measurement, sampling strategy, and analysis plan. Complete "Measurement Table" (required – use [template](#) provided) and narrative as needed. (table plus 1 page)-

### **Outcome Measures**

Our primary outcome will be percent of patients eligible who adhere with each of the following preventive services: colorectal cancer screening, breast cancer screening, cervical cancer screening, pneumococcal vaccination, and influenza vaccination. For screening services, the denominator will be the population recommended for screening by the US Preventive Services Taskforce<sup>4</sup>. Vaccination rates for pneumococcal vaccine and influenza vaccine will be measured in populations recommended by the Advisory Committee on Immunization Practices (ACIP)<sup>5</sup>. We will track the number of the preventive services completed. The eligible patients will be all active patients, defined as patients with 1 or more clinic visits in the past 18 months. Our data source will be the electronic health record (Epic). For each of the services, we will measure those completed at UNC as well as those performed outside the institution and documented manually in the healthcare maintenance or the immunization section. We will look at all outcome measures on a monthly basis. We plan to collect outcome data on all eligible patients during the study period rather than sampling for these primary outcomes.

**Exclusions**

We will exclude patients who have a clear contraindication to the screening test. See table. These will be abstracted from billing codes, ICD9 and ICD10 codes for these services. We will not exclude patients from the primary outcomes who are “too sick to screen” (have medical co-morbidities that limit their life expectancy enough to make screening harms outweigh benefits), therefore our goal will never be to screen 100% of patients. For immunizations, we will exclude patients with an EHR documented allergy to the vaccine.

**Process Measures**

We will also track process measures for scheduled but uncompleted services. This will include colonoscopies scheduled (but not completed), stool cards given, and mammograms scheduled (but not completed). Referrals to gynecology for cervical cancer screening will be abstracted by chart review.

**Process Measures: Visit-based Prompts**

We will test the new visit-based prompts. We will survey providers regarding the clarity, and usability of these BPAs. We will track the percent of each BPA that is started and the percent of the BPAs that are completed. We will report BPA utilization by practice and provider.

**Process Measures: Outreach Mailings**

We will utilize our Patient Advisory Council to ensure that mailings are patient-centered and readable. We will track readability scores of the letter outreach to target a 5<sup>th</sup> grade reading

level. When mailings are sent, we will track the number of mailings and whether they were sent by mail or through the patient portal MyChart.

### **Process Measures: Case management**

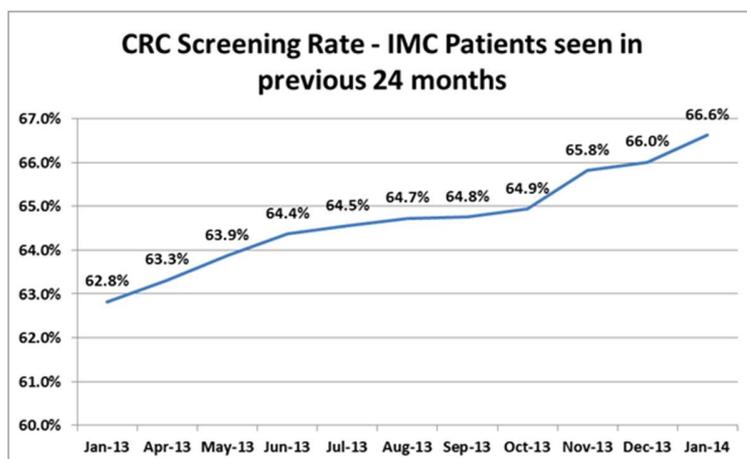
For phone case management, we will utilize the Patient Advisory Council to ensure that scripts are clear. When the phone outreach takes place, we will measure the time spent per call, number of phone calls, and the number of failed phone call attempts per patient.

### **Feasibility Measures**

We will compare the number and percent of patients who required one component (BPA or mailing), two components (BPA and outreach mailing), and three components (BPA, outreach mailing, and case management). We will quantify time spent by the CA on these components. This will help to quantify the workload required and will help with cost predictions for other practices.

#### 7. How will data be used to drive improvement throughout the project? (1 page)

We will build and utilize run charts and control charts for each of the outcome and major process measures. See an example of the CRC screening run charts that we developed through our Green Belt Project. We will track the timing of mailings and calls on the run charts to assess efficacy of the interventions.



When we are evaluating BPAs, data will inform which BPAs are working and which are not.

Voice of the customer data will be collected using provider surveys. When changes are made, we can assess effect by looking at outcomes of number and percent of BPAs started and completed.

For mailings and case management processes, we will use small tests of change and PDSA cycles to refine the approach. Input from our patient advisory committee will help us modify the outreach mailings and scripts to patient-centered and clear.

In order to assess how frequently we should reach out to patients, we will collect Voice of the Customer data from our Patient Advisory Council and will measure a leading indicator such as number of patients screened during the last month. If the frequency of screening starts to wane, further intervention will be needed.

If detailed chart reviews are needed to understand certain aspects of the process, we currently have a resident driven QI infrastructure that we can utilize.

8. What resources and/or tools will you employ to assist with implementation of the improvements? (1 page)

We will draft a charter of our project to make clear the purpose and importance. The charter will assign clear roles, time line, and scope. We will use A3 methodology to organize the project.

There are multiple queries that we will be able to run in Epic. However, we likely will need to track several process measures in an outside database. Ms. McGuirt has extensive experience with this and will be an integral resource during the project. She will use Minitab and Quality Companion to help with statistics and project management, respectively.

When we need outside QI advice, we will have Ms. Purdy, our clinic's Black Belt advisor from UNC Practice Quality and Innovation to address institutional barriers.

Ms. Whitney with the Epic population management build team will be a significant resource for us. She will use what we learn in our pilot to inform the population management build. There is significant need on her part to have these new Epic processes tested in clinics.

We will train the CA in spreadsheet management, making run charts, and project management skills. In preparation for phone outreach, the CA will need training in motivational interviewing. We will use internally developed resources that we utilized to teach faculty and staff how to do motivational interviewing to train this new hire.

9. Improvement team: List names, roles and QI experience (if any) of each team member, describe how the improvement team will function and how the team's work impacts other teams/units and/or is impacted by other teams/units. (1 page)

## **IMC Team**

Shana Ratner, MD will serve as the Team Leader for this project. She has participated in multiple quality improvement initiatives such as developing the Hospital Follow Up Clinic in IMC and a successful Lean Six Sigma Green Belt project to improve Colorectal Cancer Screening. She serves as Associate Medical Director for the IMC in charge of Quality Improvement. She has completed yellow belt training, is a certified Green Belt, a Purple Belt-In Training, and is scheduled for Blue Belt training in spring 2014. She is also serving as an Epic Subject Matter Expert and Superuser.

Brooke McGuirt, MBA is the Quality Coordinator for the IMC. She has extensive experience in quality improvement leading at least 3 resident and staff projects per month. She was integral to a successful CRC screening Green Belt project. She has also effectively been helping spread best practices to the PCIC. She will assist the CA with database management, development and maintenance of run charts, and project management. Her extensive knowledge of the IMC procedures help in designing new processes. She has completed Yellow Belt Training, is a certified Green Belt, a Purple Belt-In Training, and a Black Belt in-Training. She is also an Epic Superuser.

The Prevention CA will be hired to perform the administrative tasks of managing the population. He or she will also perform case management calls to patients who remain unscreened. We will hire someone who has proven teamwork skills. We will expect that this person will complete Yellow Belt Training.

Dr. Ratner, Ms. McGuirt and the CA will make up the core team. They will meet at least weekly and communicate via phone and email daily. Dr. Ratner and Ms. McGuirt already meet regularly (at least once a week) and have a proven record of achieving rapid and data-informed improvement on multiple different projects. Dr. Ratner will act as a supervisor to the day-to-day tasks of the CA and ensure that PDSAs are performed on all new processes.

Thomas Miller, MD is the Medical Director of the IMC and Section Chief for Ambulatory Education and Practice. He has extensive experience with quality improvement. He is a Blue Belt In-Training and an Epic Superuser. He meets regularly with Dr. Ratner to assist with improvement projects and approve new processes in the clinic.

### **PCIC Team**

Ashley Purdy and Annie Whitney, MS, PMP will serve as ancillary members of the team. Ms. Purdy is a Quality Coach at UNC Practice Quality and Innovation. She is a Certified Black Belt, has extensive experience with QI in the ambulatory setting, is a member of the PCIC and is the IMC's Epic Lead Super User. Dr. Ratner and Ms. McGuirt have a weekly conference call with Ms. Purdy to strategize about improvement efforts. Ms. Whitney is a project manager with UNC Practice Quality and Innovation, is part of the Epic@UNC Population Management build team and is a core member of the PCIC. We will communicate regularly with Annie Whitney to provide feedback regarding BPAs and population management tools. Working with them in the PCIC, we already have a record of successful collaboration.

Dr. Ratner and Ms. McGuirt would communicate regularly by email and formally to the PCIC during the regularly scheduled monthly meetings. During the first 6 months of the project, they

would share the tools they were building to gain support from the PCIC members. During the spread phase, they would meet more frequently with the PCIC clinics to help disseminate ideas. They would do site visits and facilitate education at the other sites. All leaders from PCIC are in the process of becoming Blue Belt Trained

The PCIC will serve as the Project Sponsor. Dr. Sam Weir has attached a letter of support as the Chair of the PCIC. The group has been meeting monthly for more than 1 year, and Ms. McGuirt and Dr. Ratner have been core members of this group since the beginning. Clinics are developing and testing best practices for key measures and spreading them to the other sites. The IMC has already spread their processes for depression screening and colorectal cancer screening outreach. The other clinics have demonstrated high levels of interest in utilizing well tested change packages.

10. Improvement facilitators and barriers: Describe the QI leadership, cultural QI orientation, capability for improvement and motivation to change within the unit/department. (1 page)

The practice is led by Michael Pignone MD MPH (Chief of the Division of General Internal Medicine) and Dr. Tom Miller (Medical Director and Section Chief for Ambulatory Education and Practice). Dr. Ratner serves as Associate Medical Director and Physician Champion of Quality Improvement. Dr. Ratner currently has 50% of her time reserved for quality improvement work. This practice has is known for developing, implementing, and evaluating population based approaches to cancer screening and chronic disease management. The NCQA recognizes the clinic as a Level 3 Patient Centered Medical Home and for excellence it Diabetes care. The clinic has over 15 years of experience in quality improvement and success with spread of improvement projects. The IMC is now creating a Patient Advisory Council to add more

patient-level perspective to the QI infrastructure. Since quality improvement was introduced into the resident curriculum 5 years ago, the clinic has successfully managed 50 – 100 resident led QI projects, adding to the culture of continuous improvement.

As an institutional leader and laboratory for innovation and translation of evidence into population approaches, the IMC has the infrastructure and capability for rapid change and improvement.

The IMC has been using visit-based prompting for over 15 years. Its providers have a history of achieving high levels of consensus in developing clinical standards of care. Ms. McGuirt, our quality coordinator, produces accurate data, and successfully guides multiple projects simultaneously. She also has experience transition QI into standard work and policy. Clinic staff also have extensive experience with QI projects. The Clinic Manager, Nurse Manager, almost all of the current staff, and providers have completed yellow belt training.

One anticipated barrier will be close timing of the project with Epic Implementation (Go Live in April 2014). Epic will require significant process redesign for clinic which may demand more time from management and quality improvement infrastructure. Since this project will be integrated with several key Epic changes, we hope that this potential barrier will instead serve as a driving force to require improvement.

11. Sustainability plan: Describe the plan for sustaining the improvement and conducting ongoing improvement after the end of the grant (1 page)

The sustainability plan for this project anticipates a shift in healthcare reimbursement from fee-for-service to value-based care. This project is aligned with the institutional goals to improve

colorectal cancer screening, mammography, and pneumococcal vaccination<sup>6</sup>. A new contract with Blue Cross Blue Shield of NC provides incentives to UNC Physicians Network to improve screening rates and immunizations rates. Improving these important and nationally agreed upon quality metrics will also bring incentive payments from Medicare via the Physician Quality Reporting System (PQRS). Work to meet these quality metrics will take place in our primary care clinics. Incentive payments derived from these contracts must support QI efforts, especially when they are aligned with value based care. We anticipate that the health care system will recognize this need and develop an incentive system that will support population management efforts. These funds would be used for ongoing support of the CA working in the IMC and to promote spread to other sites.

The healthcare system is devoting resources toward manual systems that prompt predictable preventive services during the visit. The BPAs will standardize and simplify this process across the institution. This will free up manpower that can be utilized to perform higher level population management tasks. For instance an administrative associate in Internal Medicine spends 25% of her time validating and scanning visit planners. In the PCIC practices, care managers are manually making visit planners each day to ensure that quality goals are met. Physicians are documenting outside studies and vaccinations in healthcare maintenance, detracting from physician productivity and satisfaction. Moving these tasks to CAs will standardize this work and offload physicians. With the movement to Epic, check-out duties in our clinics will be reduced significantly. Physicians will be directly entering orders and charges. We project that FTEs needed at the front desk will decrease by 25%, and duties can be reassigned to population management. We expect that smaller clinics in the network may be able to split the use of 1



Phone case management				x	x	x	x	x	x	x	x	x
Quantify effort and workload for CA						x						
Prepare to spread						x						
Train PCIC providers and care managers							x					
PCIC providers review gap reports							x					
PCIC letters sent							x	x				
Track flu vaccine outreach								x				
Phone case management for PCIC									x	x	x	x
Present to IHQI												x

## 12. References

1. McGlynn EA, Asch SM, Adams J, Keesey J, Hicks J, DeCristofaro A, Kerr EA. The quality of health care delivered to adults in the United States. *N Eng J Med* 2003; 348:2635-2645.
2. Improving Quality and the Patient Experience: The state of healthcare quality 2013. NCQA. <http://www.ncqa.org/Portals/0/Newsroom/SOHC/2013/SOHC-web%20version%20report.pdf> (Accessed 1/30/14)
3. Green BB, Wang C, Anderson ML et al. An automated intervention with stepped increases in support to increase uptake of colorectal cancer screening: A randomized trial. *Ann Intern Med*. 2013. 148(5\_Part\_1):301-311.

4. United States Preventive Services Taskforce Recommendations.  
<http://www.uspreventiveservicestaskforce.org/adultrec.htm> (Accessed 1/30/14)
5. Advisory Committee for Immunization Practices Guidelines  
<http://www.cdc.gov/vaccines/hcp/acip-recs/index.html> (accessed 1/30/14)
6. UNC Hospitals and UNC Faculty Physicians FY 2014 Organizational Goals.  
<http://intranet.unchealthcare.org/goals> (Accessed 1/29/14)

13. Budget and Justification (See “Budget Documentation and Allowable Expenses” below)

Funds Requested (see attached form)

**Project Personnel** – Salary and benefits \$46,200.

Prevention Care Assistant (100% effort). This new hire would be the central organizer of these five preventive care services in the Internal Medicine Clinic. (S)he will assist in developing outreach mailings and phone scripts. (S)he will assist in surveying providers about BPAs and letters. This person would bring gap reports to providers to allow them to check the lists. The centralized mailings would be done by this Care Assistant. (S)he will track the outcomes of the mailings and phone calls. When patients remained unscreened, the Care Assistant will call them and work to break down barriers. The Care Assistant will work with PCPs to get preventive services completed. We will expect the Care Assistant to do frequent PDSAs to improve upon this work. (S)he will assist in training future Care Assistants who would spread the work to the other PCIC practices.

**Patient Outreach Materials and Incidental Expenses** - \$2,000

There will be need for promotional materials in the form of pamphlets and posters that will be used to engage patients in this program. Funds will be used to cover the cost of printing. Money will also be used to supply food for meetings of the Patient Advisory Council.

**Site Visit - \$1,800**

We will plan a site visit by Dr. Ratner or Ms. McGuirt to Kaiser Permanente who are using a visit based-prompting system within Epic and have regular reminder systems for preventive care. By looking to a system that is already doing population management and visit-based reminders well, we hope to bypass an element of trial and error.

**Total Requested - \$50,000**

**In Kind Contributions from the Division of General Medicine**

Dr. Shana Ratner is a Clinical Assistant Professor in the Division of General Internal Medicine – 10% effort. Currently 50% of her time is devoted to Clinical QI. Her salary support for this project will be paid in kind by the Division of General Internal Medicine.

Brooke McGuirt, MBA is the Quality Coordinator for the UNC Internal Medicine Clinic – 20% effort. Her salary support will be paid in kind by the Division of General Internal Medicine.

The cost of mailings and postage will be paid in kind by the Division of General Internal Medicine as part of the normal operating expenses. Office space and phone will be provided by the Division.

14. Letter of Support: The project sponsor must provide a letter of support describing his/her commitment to ensuring that the project team will have sufficient time allocated: 1) for initial and subsequent training in improvement techniques; 2) to perform the improvement project itself; and 3) to evaluate the outcomes of the project, including a final report and presentation to the IHQI. In addition, the letter of support should describe the project sponsor's commitment to supporting change within the unit and working to facilitate changes outside the unit as needed.



January 29, 2014

Dear Review Committee Members:

On behalf of the Primary Care Improvement Collaborative (PCIC) I am delighted to provide this statement of strong support and act as the organizational sponsor for the proposal “Stepped approach to preventive services outreach in primary care,” led by Dr. Shana Ratner.

We are collaborating in the Primary Care Improvement Collaborative (PCIC) to facilitate shared learning and accountability. We believe that working as a collaborative helps us accelerate improvement, exceed organizational performance targets, and spread best practices to primary care practices throughout our system.

Many patients do not adhere to evidence-based screening guidelines and vaccination recommendations that can improve outcomes and decrease costs. Current patient reminder and outreach efforts have not been standardized in the UNC system; each individual clinic expends significant effort designing processes for these predictable tasks. This project seeks to develop a structured change package to improve rates of colorectal cancer screening, breast cancer screening, cervical cancer screening, pneumococcal vaccination, and influenza vaccination. The change package will be developed and tested in the Internal Medicine Clinic (IMC) then quickly spread to clinics participating in the PCIC. This intervention includes three components to improve adherence with preventive care recommendations: Component 1) visit-based prompting in the Electronic Health Record (EHR), Component 2) written mailings to unscreened patients, Component 3) phone case management for patients who remain unscreened despite Component 1 and 2. This change package is built upon systems that have already worked in Internal Medicine but moves a step further adding case management for unscreened patients. The project seeks to develop standard work for predictable preventive tasks that would be generalizable to other sites in the UNC system as well as other preventive services. This work will be done in concert with the Epic population management build team, and the IMC will serve as a laboratory for testing visit-based prompts and population management functions. A well-coordinated planned effort will improve quality and value for UNC patients.

There is an institutional imperative to improve the consistency of completing basic preventive services to improve health outcomes and decrease costs. With the implementation of Epic, the

timing is right to test, achieve, and formalize best practices in patient outreach. All clinics in the PCIC are currently actively involved in improving these measures. A network level approach will save time and money for all clinics involved.

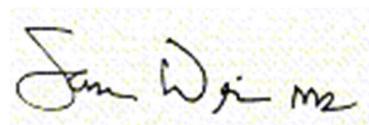
We are also in full support of the proposal to conduct the initial development and testing of the change package in the IMC at UNC. This is a large practice with approximately 44,000 visits per year for about 12,000 active adult patients. The patient population is geographically, racially, ethnically, and socioeconomically diverse. The clinic has a long history of innovation including developing new models of care, quality improvement, and research. They have served as an institutional leader in quality improvement, quickly adapting to needed changes, and have served as a “laboratory” for innovation. They also have had proven successes spreading best practices to other clinics, especially through the PCIC.

As the IMC develops and implements the preventive care change package, the PCIC will also be developing network level strategies for scaling the change package to other practices. The PCIC clinics are currently expending significant effort on making visit-based reminders by hand and maintaining external databases. In part, the sustainability plan will depend on redeployment of this manpower to higher-level case management of unscreened patients.

The primary goal of the PCIC is to develop, standardize, and document new processes and best practices and spread them to participating clinics. While relatively simple, the interventions advanced in this proposal have the potential to improve care for patients in all the practices within the collaborative.

Please do not hesitate to contact me if there are any questions or concerns.

Sincerely,

A handwritten signature in black ink that reads "Sam Weir MD". The signature is written in a cursive, slightly slanted style.

Sam Weir, MD  
Chair Primary Care Improvement Collaborative  
Director of Continuous Improvement  
Department of Family Medicine

Program Director/Principal Investigator (Last, First, Middle): Ratner, Shana, Patrice

<b>DETAILED BUDGET FOR INITIAL BUDGET PERIOD DIRECT COSTS ONLY</b>	FROM July 2014	THROUGH June 2015
--	-------------------	----------------------

List PERSONNEL (*Applicant organization only*)  
 Use Cal, Acad, or Summer to Enter Months Devoted to Project  
 Enter Dollar Amounts Requested (*omit cents*) for Salary Requested and Fringe Benefits

NAME	ROLE ON PROJECT	Cal. Mnth	Acad. Mnth	Summer Mnth	INST.BASE SALARY	SALARY REQUESTED	FRINGE BENEFITS	TOTAL
N/A	PD/PI							
Prevention Care Assistant	Centralized outreach	12			38,500	38,500	7,700	46,200
<b>SUBTOTALS</b>						38,500	7,700	46,200
CONSULTANT COSTS								
None								
0								
EQUIPMENT ( <i>Itemize</i> )								
None								
0								
SUPPLIES ( <i>Itemize by category</i> )								
Patient outreach educational materials (posters, flyers, pamphlets)								
1,000								
TRAVEL								
Site visit to Kaiser Permanente to learn more about BPA use and patient outreach								
1,800								
INPATIENT CARE COSTS								
None								
0								
OUTPATIENT CARE COSTS								
None								
0								
ALTERATIONS AND RENOVATIONS ( <i>Itemize by category</i> )								
None								
0								
OTHER EXPENSES ( <i>Itemize by category</i> )								
Incentives and food for Patient Advisory Council								
1,000								

CONSORTIUM/CONTRACTUAL COSTS	DIRECT COSTS	0
<b>SUBTOTAL DIRECT COSTS FOR INITIAL BUDGET PERIOD</b> <i>(Item 7a, Face Page)</i>		<b>\$ 50,000</b>
CONSORTIUM/CONTRACTUAL COSTS	FACILITIES AND ADMINISTRATIVE COSTS	0
<b>TOTAL DIRECT COSTS FOR INITIAL BUDGET PERIOD</b>		<b>\$ 50,000</b>

PHS 398 (Rev. 08/12 Approved Through  
8/31/2015)  
OMB No. 0925-0001

Page 1

Form Page 4

UNC Institute for Healthcare Quality Improvement Seed Grant Program  
 Measures for [Stepped approach to preventative services outreach in primary care] Project

Measure Name	Measure Type	Nationally Endorsed?	Measure Calculation	Measure Exclusion	Data Source	Measure Benchmark	Measure Target	Collection Frequency
<b>EXAMPLE:</b> Diabetes: Hemoglobin A1c Poor Control	Outcome	Yes	Numerator: Patients 18–75 years of age with diabetes whose most recent HbA1c level (performed within last 12 months) is >9.0%  Denominator: Patients 18–75 years of age with diabetes seen within last 12 months	Patients with a diagnosis of gestational diabetes within last 12 months	Electronic Health Records	5%	5%	Monthly
<b>Outcome Measures</b>								
Colorectal Cancer Screening	Outcome	Yes	Numerator: Patients meeting one of the following criteria: –Fecal occult blood test (FOBT) during the previous 12 months. –Flexible sigmoidoscopy during the previous 5 years –Colonoscopy during the previous 10 years  Denominator: Patients age 50–75	Total colectomy	Electronic Health Records	70%	IMC 75% PCIC 67%	Monthly
Breast Cancer Screening	Outcome	Yes	Numerator: One or more mammograms during the previous 24 months  Denominator: Women age 50–74	Women who have had a bilateral mastectomy or two unilateral mastectomies	Electronic Health Record	67%	IMC 72% PCIC 65%	Monthly

UNC Institute for Healthcare Quality Improvement Seed Grant Program  
Measures for [Stepped approach to preventative services outreach in primary care] Project

Measure Name	Measure Type	Nationally Endorsed?	Measure Calculation	Measure Exclusion	Data Source	Measure Benchmark	Measure Target	Collection Frequency
Cervical Cancer Screening	Outcome	Yes	Numerator: Women with a cervix age 21-65 with a pap smear in the last 3 years or pap smear with normal HPV in the last 5 years  Denominator: Women age 21-65 with a cervix	Hysterectomy for benign reasons	Electronic Health Record	49%	IMC 59% POIC TBD	Monthly
Pneumococcal Vaccination	Outcome	Yes	Numerator: Patients who have ever received a pneumococcal vaccine  Denominator: Patients <65 years old with an active or charge-entered diagnosis of diabetes, COPD, or asthma OR Patients ≥65 years old	Allergy to vaccine or component	Electronic Health Record	72%	IMC 75% POIC 66%	Monthly
Influenza Vaccination	Outcome	Yes	Numerator: Patient who receive the flu vaccine during flu season of the respective year (September-March)  Denominator: All Active IMC patients	Allergy to vaccine or component	Electronic Health Record	35%	IMC 40% POIC TBD	Monthly
% HCM Documentation CRC Screening	Outcome		Numerator: Number of patients documented in Health Care Maintenance (HCM) only, i.e. there is no documentation from billing.  Denominator: Patients who had at least one or more screenings for colorectal cancer during or prior to the reporting period.		Electronic Health Record	15.49%	IMC 16.5%	Monthly

UNC Institute for Healthcare Quality Improvement Seed Grant Program  
 Measures for [Stepped approach to preventative services outreach in primary care] Project

Measure Name	Measure Type	Nationally Endorsed?	Measure Calculation	Measure Exclusion	Data Source	Measure Benchmark	Measure Target	Collection Frequency
% HCM Documentation Mammograms	Outcome		Numerator: Number of patients documented in Health Care Maintenance (HCM) only, i.e. there is no documentation from billing.  Denominator: Female patients seen in the last 18 months, age 50 – 74, who had a mammogram in the last 24 months. Includes those documented in HCM		Electronic Health Record	7.29%	IMC 8.5%	Monthly
<b>Process Measures</b>								
Colonoscopies scheduled	Process		# of colonoscopies scheduled but not completed		Electronic Health Record			Monthly
Stool cards given	Process		# of stool cards given to patients		Electronic Health Record or External Database			Monthly
Mammograms scheduled	Process		# of mammograms scheduled but not completed		Electronic Health Record			Monthly
Referrals to gynecology	Process		# of referrals to gynecology for cervical cancer screening abstracted from charts		Electronic Health Record			Monthly
Visit-based Prompts Started	Process		Numerator: # of BPA prompts started Denominator: # of BPA prompts prompted		Electronic Health Record	50%	90%	Monthly

UNC Institute for Healthcare Quality Improvement Seed Grant Program  
 Measures for [Stepped approach to preventative services outreach in primary care] Project

Measure Name	Measure Type	Nationally Endorsed?	Measure Calculation	Measure Exclusion	Data Source	Measure Benchmark	Measure Target	Collection Frequency
Visit-based Prompts Completed	Process	No	Numerator: # of BPA prompts completed Denominator: # of BPA prompts prompted		Electronic Health Record	TBD	TBD	Monthly
Readability/ Clarity of Outreach Materials	Process	Yes	Readability score of outreach materials		External Database	NA	5 <sup>th</sup> grade reading	Monthly
# of Letters Sent	Process	No	Count of number of letters sent for each preventative measures		Either Electronic Health Record or External Database			Monthly
Letters sent via mail	Process	No	Numerator: # of letters sent via mail Denominator: Total # of outreach letters sent		Either Electronic Health Record or External Database			Monthly
Letters sent via patient portal (MyChart)	Process	No	Numerator: # of letters sent via patient portal (MyChart) Denominator: Total # of outreach letters sent		Either Electronic Health Record or External Database			Monthly
Time spent per call	Process	No	Number of minutes spent per call		External Database			Monthly
# of phone calls	Process	No	Number of phone calls completed per day		External Database			Monthly

UNC Institute for Healthcare Quality Improvement Seed Grant Program  
**Measures for [Stepped approach to preventative services outreach in primary care] Project**

Measure Name	Measure Type	Nationally Endorsed?	Measure Calculation	Measure Exclusion	Data Source	Measure Benchmark	Measure Target	Collection Frequency
# of failed phone call attempts	Process	No	Number of phone calls failed per day		External Database			Monthly
<b>Feasibility Measures</b>								
Patients requiring one outreach component (BPA or mailing)	Feasibility	No	# of patients requiring either a BPA or mailing		Electronic Health Record & External Database			Monthly
Patients requiring two outreach components (BPA and outreach mailing)	Feasibility	No	# of patients requiring a BPA and outreach mailing		Electronic Health Record & External Database			Monthly
Patients requiring three outreach components (BPA, mailing, and case management)	Feasibility	No	# of patients requiring a BPA, mailing, and case management		Electronic Health Record & External Database			Monthly
Care Assistant Time Spent	Feasibility	No	# of hours spent on BPA Tracking # of hours spent on mailings # of hours spent on case management outreach		External Database			Monthly