Proposal Title: Using Innovative Technology to Make What Matters to Patients the Foundation for an Efficient and Effective Primary Care Practice

Project Narrative

2.1 Brief Project Description. White River Family Practice (WRFP) proposes to use simple, actionable patient-reported measures to guide patient care, improve patients' health and experience of care, and reduce avoidable high-cost hospital and emergency department use. To address questions from OneCare Vermont's (OneCare's) review of our first-round submission, we have revised this proposal with more detailed descriptions of the proposed partnership; the budget and quarterly deliverables; and the evidence base for the efficacy, sustainability, and scalability of the innovation, including a letter of support from Dr. Lynn Ho, an early adopter of the innovation.

2.2 Background and Significance. To improve quality of care, patient satisfaction, and population health and also reduce the per capita cost of health care, clinical staff need specific, real-time guidance on how to address health concerns that matter to patients. This need is particularly acute when managing care for those patients in quadrants two through four of OneCare's Care Model.

Currently, the dominant strategy applied to control the escalating cost of chronic disease management is based on computer-generated risk models constructed from insurance claims and medical record data. However, considerable evidence has exposed the substantial limitations of these models, as summarized in two meta-analyses[1,2] and the following representative findings.

- "Spending reductions were not clearly concentrated among high-risk patients: Reductions for those patients accounted for only 38 percent of the total reduction among ACOs [accountable care organizations] entering the MSSP [Medicare Shared Savings Program] in 2012, and reductions among 2013 MSSP entrants were almost entirely concentrated among lower-risk patients."[3]
- "Participation in the CDMP [chronic disease management program] was associated with an increase in avoidable hospital admissions compared to matched controls."[4]
- "From 2010 to 2014, the [care management] program did not reduce hospitalizations or generate Medicare savings to offset program fees."[5]

The current models fail because they cannot make accurate predictions of individual patients' future health service needs. One cost analysis of seven risk assessment tools found that "on an individual basis, risk stratification has over-selected patients for inclusion in high-risk programs," whereas "some lower-risk patients may present opportunities for greater potential savings."[6] While many patients in the small group considered at-risk will not use costly care, a care management approach that targets these few will inevitably neglect the majority not so designated, including numerous false negatives destined to use costly services.[7]

From a clinician's perspective, the lists of at-risk patients we receive from the current models reflect only those patients' past health status, not their current status or likely future, providing neither the underlying basis for the risk designation nor specific, real-time guidance on how to respond effectively. Clinicians must decide whether to trust the opaque assessment and administer intensive care that may or may not be warranted, or disregard the assessment and administer care at a level commensurate with the clinician's own observations. In this context, different clinicians make different choices, resulting in inconsistent care delivery across patient populations and exacerbating inequalities in health. Cumulatively, these limitations contribute to the current approach's failure to reduce costs and/or improve population health.

As an alternative, WRFP proposes to implement, test, and revise an innovative care management approach based on a new, easy-to-use, patient-reported assessment system, the What Matters Index (WMI), detailed in Sections 2.4 and 2.6.[7,8] A national committee of frontline medical providers recently recommended extensive testing of the WMI in a report to the United States Secretary of Health and Human Services,[9] and WRFP

believes that this approach is a stronger and more ethical foundation upon which to advance value-based health care delivery than the current strategy of offering more care to an inaccurately designated few.

A five-physician practice with more than 7000 patients from Vermont's Windsor County and the broader Upper Connecticut River Valley region, and with long-standing partnerships with Dartmouth-Hitchcock Medical Center (DHMC) and the Windsor Health Services Area (WHSA), WRFP is particularly well-positioned to test the proposed approach. The practice was certified as a Level III Patient-Centered Medical Home (PCMH) in 2012 and has maintained PCMH certification since. In 2014, WRFP received a HIMSS Ambulatory Davies Award for excellence in applying the practice's electronic health record to improve patient care, and in the same year, WRFP used a State Innovation Model grant to reorganize as a clinical microsystem focused on offering and providing national-guideline-recommended care to all patients at any encounter with the practice. WRFP has shown that the resulting improvements in clinical efficiency and standardization of care can be leveraged to improve health in targeted patient populations.[10,11] WRFP therefore proposes to apply the WMI in this clinical setting to engage patients in the management of essential needs, as described herein.

2.3 Specific Project Goals. WRFP aims to:
  (1) Improve care coordination for high-risk patients to reduce avoidable use of costly care and the OneCare ACO Total Cost of Care for WRFP patients;
  (2) Apply the practice's efficient and standardized care delivery approach to target patients with high WMI scores, indicative of low health confidence and/or multiple chronic conditions, for more effective care;
  (3) Improve patient experience of care and quality of life and address inequalities in health by engaging all patients to determine what matters to them and manage care accordingly;
  (4) Explore the use of freely available internet technologies to integrate care across organizational boundaries by connecting patients who report low health confidence, often associated with adverse social determinants of health, to community resources;
  (5) Transmit project findings to non-funded Project Partners DHMC, WHSA, and the Dartmouth-Northern New England Primary Care Cooperative Practice-Based Research Network (DCOOP), and provide training to regional practices on the efficient use of the proposed method.

2.4 Description of Innovation. The WMI is the sum of patient responses to five measures—degree of health confidence, defined as patients' confidence that they understand and can manage their health issues; level of physical pain; frequency of emotional problems; number of medications; and whether or not the patient senses that the medications are causing illness. Clinicians can immediately interpret and act on each measure, and their sum, the WMI, is a suitable representation of a patient's quality of life that has been shown to predict costly care as effectively as current risk assessment models, as detailed in Section 2.6.[7]

With a previous grant, WRFP demonstrated that targeting a subset of at-risk patients with intensive interventions was associated with halving their hospital admissions and emergency department encounters, based on facility use data from DHMC. Because the five WMI measures are founded on clinical evidence for likely impact on patient health, satisfaction, and use of costly care,[7,8] WRFP anticipates that coordinating care around the WMI will improve patient health and further reduce hospital and emergency department use by enhancing risk assessment accuracy across our patient population and guiding care accordingly.

2.5 Anticipated Outcomes and Measures of Impact.

Goal	Expected Outcome/Impact	Measure (Data Source)
(1) Reduced Costs	• Reduced incidence of hospitalization and emergency department use	• Hospital use, emergency department use, readmissions within fewer than 31 days, average days between readmissions (DHMC)
	• Reduced ACO Total Cost of Care	• ACO Total Cost of Care for WRFP patients before and after intervention (OneCare)

(2) Improved Patient Health	• Reduced WMI scores among WRFP patients	• WMI surveys every six months for patients with initial WMI ≥ 2 and annually for patients with initial WMI < 2 (WRFP)
(3) Improved Patient Experience of Care	• Feedback to practice on patients' satisfaction with care	• Patient responses to Quick Health Check-Up question: "Do you receive the care you want and need when you want and need it?"[12] (WRFP)
(4) Integrated Care	• Increased patient usage of community services	• Survey of patient "clicks" on community resource links generated by the Full Health Check-Up in comparison with patient engagement through OneCare's Care Navigator (WRFP, OneCare)
(5) High-Value Dissemination	• Documented value of WMI-based screening and care management	• Documented time costs and impacts on patient health, satisfaction, and use of costly care • Summary of best practices to generate a simplified implementation package for scalability • Reports to Project Partners, including presentation at DCOOP's annual meeting

Data Analytics Consultant Mark Nunlist, MD, MS, will analyze data based on the WMI, WRFP, and DHMC sources. WRFP will use tools available in OneCare's Care Navigator to establish a patient engagement reference value for Project Goal (4) and will require analytic support from OneCare only to assess changes in the ACO Total Cost of Care in relation to Project Goal (1).

2.6 Detailed Project Description: Approach, Methods, and Evidence Base. WRFP will integrate the WMI in the clinical setting as a prospective risk assessment that provides clinicians with actionable information to improve patients' experience of care and population health while reducing costs. A broad evidence base supports the correlations among the five WMI measures and patient health, satisfaction, and use of costly care.

First, low health confidence has been shown to represent insufficient self-management capacity.[13] Therefore, this initial WMI measure can be considered in comparison to the Patient Activation Measure (PAM), a popular 13-item commercial product that uses self-management capacity as the basis for assessing, segmenting, supporting, and tracking patients for predictive modeling and population health management. A recent study of PAM use in a large health system found that "the lower the activation level [in a given year], the higher the utilization and cost of hospital services in each of the following three years."[14] Thus, poor engagement in self-care has shown a strong correlation with increased use of costly health services.

While the WMI and PAM both capture patients' self-management capacity, the WMI has several advantages over the PAM for use in clinical settings. In contrast to the PAM, the WMI is freely available, summarizes patients' self-management capabilities with the single health confidence item, and includes four other highly relevant measures that can guide clinicians' activities to improve patient health and satisfaction at the point of care. The WMI's second and third items—emotional problems and pain—are frequently assessed as vital signs in clinical settings and have been shown to respond to simple behavioral interventions.[15] The fourth item—polypharmacy—is widely known to account for a large percentage of preventable hospital and emergency department use,[16] and the final item—the patient's perception of medication side effects—not only precipitates avoidable uses of costly care but also reduces adherence even in the absence of adverse interactions.[17]

A prospective study of the WMI's predictive capability in a population of 8619 Medicaid patients with chronic conditions found a strong association between WMI magnitude and increased use of hospital or emergency services during the subsequent year:

"The odds ratios (with 95% confidence intervals) for subsequent hospitalization of patients with WMI sums of 1, 2, and ≥3 were 1.3 (1.1–1.6), 2.0 (1.6–2.4), and 3.4 (2.9–4.0); for emergency room use, the corresponding ratios were 1.3 (1.1–1.4), 1.9 (1.6–2.1), and 2.9 (2.6–3.3) … Logistic regression models considering age, gender, number of chronic conditions, and poverty indicated that, among these variables, the WMI was the one most highly associated with subsequent emergency or hospital use (p < 0.001)."[7]
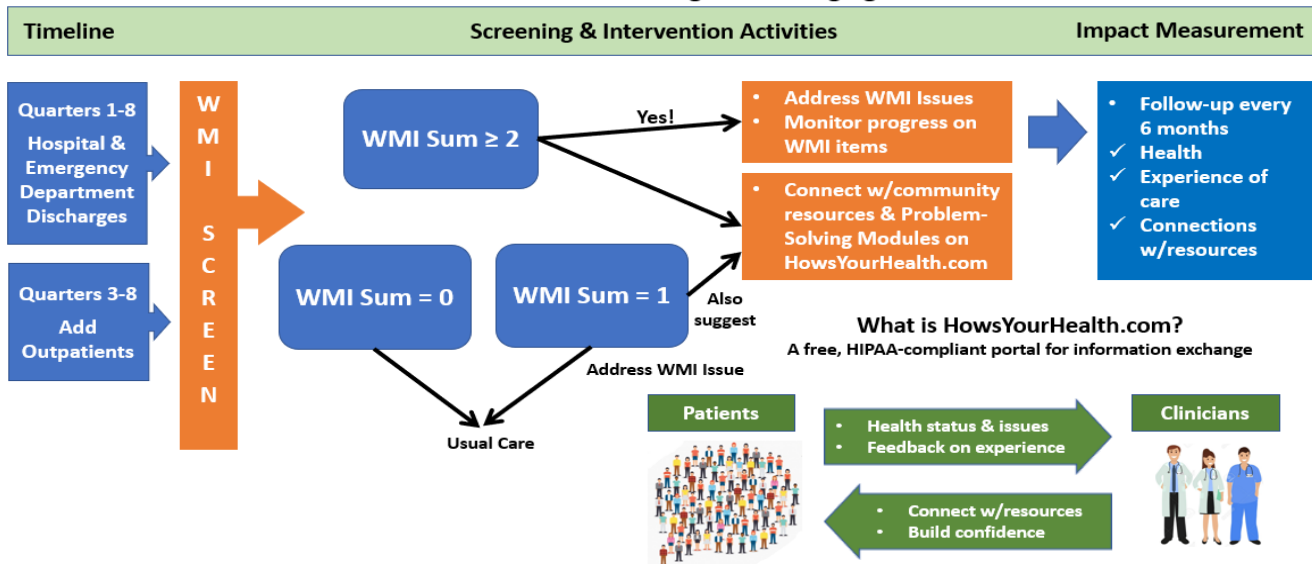
The same study found similar results in a population of 4428 Medicaid patients without chronic conditions and in a population of 1061 mostly older patients from nine private practices. The study also showed that the WMI-based risk assessment predicted hospital and emergency service use at least as well as the computer-generated risk models (CRMs) from the Centers for Medicaid and Medicare Services and 3M[TM] Clinical Risk Groups.

Furthermore, while all of the models' sensitivities and positive predictive values for costly care were essentially the same, the study showed that

"… needs identified by the WMI are distributed among all patients and are not confined to the higher-risk patients designated by the CRMs. For example, the proprietary CRM designated 984 and 1586 patients reporting a WMI score ≥ 3 as being in the higher and lower risk groups for hospital use, respectively. Thus, using CRMs to target resources ignores a large proportion of patients at risk for requiring future costly care. Moreover, CRMs are indifferent to potentially remediable risk factors that are easily identifiable from patient self-reports."[7]

From this evidence and our own clinical experience, WRFP believes that WMI-based care management is a stronger and more ethical foundation upon which to advance value-based health care delivery than the current computer-generated risk assessments. Therefore, with OneCare's support, WRFP will implement the WMI approach as summarized in the flowchart below.

Overview of WRFP's Intervention for Assessing and Managing What Matters to Patients

Starting with WRFP patients discharged from DHMC's hospital or emergency department and progressing in phases to all adult WRFP patients as detailed in Section 2.8, WRFP nurses and medical assistants under the guidance of Care Coordinator, Lisa Paquette, RN, will collect WMI data by leading patients through the Quick Health Check-Up, freely available at www.HowsYourHealth.org (HYH). For outpatients who have not completed the Health Check-Up prior to their office visits, WRFP staff will use the iPads supported by this grant to collect WMI data at the time of the visit. For all patients who have completed the Health Check-Up, WRFP staff will then use the real-time WMI scores generated by HYH to identify any actionable issues affecting discharge, transitional care management, and/or outpatient encounters.

If a patient's WMI is greater than or equal to two, indicating a more than two-fold increase in their risk for costly care,[7] WRFP's medical personnel will work with the patient at the time of the encounter to address the
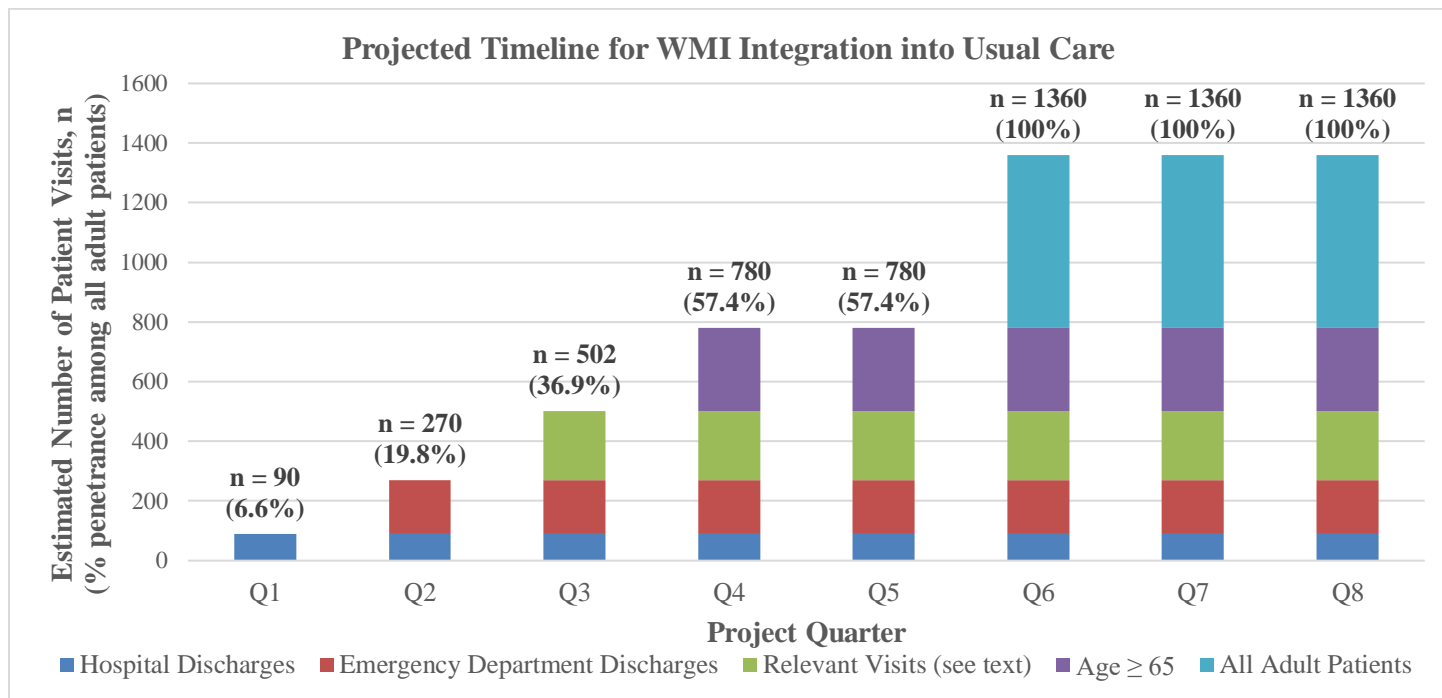
issues of greatest concern and/or schedule a future visit or telephone call to plan and execute follow-up action. WRFP staff will also invite these patients to complete a comprehensive health assessment available at HYH, a HIPAA-compliant secure registry that stores the patient responses as searchable data for authorized users; provides patients with health information and links to community resources; and has been shown in controlled trials to significantly improve patient ratings of care quality, access to social support, and capacity to manage emotional issues and perform daily activities.[18,19] To assess progress toward addressing the needs of these patients, WRFP staff will conduct follow-up WMI screenings at six months after the intervention, in comparison to annual WMI follow-ups for adult patients with WMIs less than two.

WRFP's Project Lead will lead process adaptations in response to emerging challenges to attaining targeted WMI Quick Health Check-Up completion rates and managing care for patients with WMI ≥ 2. The Project Lead, with input and assistance from Project Personnel, will regularly assess progress toward WMI integration into care management, initially on a weekly basis and thereafter as appropriate. To facilitate these assessments as well as the adoption of the proposed approach by other practices, Project Personnel will maintain time journals for activities related to the proposal so that cost-benefit analyses account for all invested time.

In the final quarters of the grant period, the Project Personnel will transition from implementation, documentation, and data analysis to supporting the dissemination of the innovation and training for uptake at other practices. The findings of the monitoring activities described above will enable WRFP's Project Lead to deliver data-informed training sessions on the project methods and results as part of DCOOP's annual meeting of primary care clinicians, and in similar sessions at DHMC, WHSA, and other interested organizations.

2.7 Project's Alignment with IHI Triple Aim. Improving the patient experience of care, including quality and satisfaction; improving the health of populations; and reducing the per capita cost of health care are the primary goals of WRFP's project proposal, as detailed in Section 2.3.

2.8 Project Timeline: Activities, Duration, and Deliverables. The following chart illustrates WRFP's planned progression of WMI care management, via the activities described in Section 2.5, from patient subpopulations to all adult patients over this project's two-year duration. The numbers of patient visits are estimated from the average numbers of patients in each category seen at WRFP over the past year. WRFP's 1631 pediatric patient visits over the last year are excluded from the chart because pediatric visits are beyond the scope of this project.

Projected Timeline for WMI Integration into Usual Care

In the chart above, "Relevant Visits" refers to outpatients with asthma and diabetes. WRFP identified this encounter category for the purpose of PCMH certification, and the practice's scheduling structure allots more time for encounters with these patients. WRFP has selected this population for the first outpatient phase of WMI implementation because the added time allows greater flexibility to introduce new approaches. The practice will then extend the strategy to all patients ages 65 and over, and finally to all adult patients, with anticipated start dates in Q4 and Q6, respectively. This phased approach has allowed a substantial reduction of the Project Budget from that of our first-round proposal, as detailed in the Budget Justification.

Each quarter, WRFP will provide OneCare with a report on the penetrance of WMI-based care management in relation to rates of hospital and emergency department use as measures of progress toward Project Goals (1), (2), and (3), regarding the effects of WMI-based care coordination on costs, health, and patient satisfaction. Starting in Q3, these quarterly reports will begin to include the results of follow-ups with patients whose initial WMI scores were greater than or equal to 2, with progressively more follow-up data as the phase-in proceeds. During the project's final six months, WRFP's quarterly reports to OneCare will include evaluations of progress toward all Project Goals, including Goals (4) and (5), regarding the integration of care across organizational boundaries and dissemination of best practices.

2.9 Potential Barriers, Risks, and Plans for Mitigation. WRFP has selected the WMI care management strategy for testing and implementation because in addition to its demonstrated predictive power[7] and in contrast to current risk assessment approaches, the proposed method has no direct costs and does not require sophisticated technology or specialized employee training. Therefore, and based on WRFP's past experience with process innovation and consultations with early WMI adopter Lynn Ho, MD, WRFP considers the primary barrier to success to be the extent to which data analysis, process testing, and reporting can overwhelm the practice's physician partners and staff and inhibit our ability to fulfill our duties to our patients. To overcome this potential barrier, the project budget is concentrated on personnel activities that will support impact analyses, process modifications, and dissemination.

2.10 Project Partners and Roles. WRFP currently works closely with this proposal's non-funded Co-Applicant Project Partner DHMC, where more than 95% of WRFP patients receive hospital and emergency department care. In collaboration with this Partner, WRFP has developed a secure monthly data transmission of WRFP patients' hospital and emergency department encounters, and WRFP will use these data transmissions as a critical component of the WMI-based care delivery performance assessments. WRFP will also disseminate project methods and results to DHMC, as well as non-funded Co-Applicant Project Partner WHSA, an ACO Network organization of which WRFP is a member. The Project Lead is also a member of DCOOP, a non-funded, non-Network Project Partner, and will present project methods and results to upcoming meetings.

2.11 Scalability and Sustainability with Justification. In response to OneCare's concern regarding this project's scalability and sustainability in our first-round proposal, WRFP consulted with Lynn Ho, MD, a solo practitioner with several years' experience with the WMI and HYH tools, detailed in her attached letter of support. In 2014, Dr. Ho's micro-practice increased use of the WMI to 63% penetrance in preventive exams, up from 6% penetrance in 2013; the practice then reached greater than 80% penetrance in subsequent years. Operating with minimal administrative support, Dr. Ho found "the WMI/HYH tools to be rapid to implement and simple to sustain with a high degree of uptake and acceptance by patients." Dr. Ho's experience matches WRFP's expectations of the scalability and sustainability of WMI-based care management: WMI data is easily collected, at no direct cost and without sophisticated technology or specialized employee training.

The practice's current staff levels will thus sustain WMI collection and action from the end of the grant period forward. Moreover, the supplemental FTE levels supported by this grant will build expertise in valuable human resources for broader dissemination of best practices across the ACO, substantial reductions in the Total Cost of Care, and a significant advance toward value-based health care delivery.

References

1. Stokes J, et al. Effectiveness of case management for 'at-risk' patients in primary care: a systematic review and meta-analysis. *PLOS One* 2015; 10(7): e0132340.

2. Damey S, Flanagan S, Combes G. Does integrated care reduce hospital activity for patients with chronic diseases? an umbrella review of systematic reviews. *BMJ Open* 2016; 6: e011952.

3. McWilliams M, et al. Medicare ACO program savings not tied to preventable hospitalizations or concentrated among high-risk patients. *Health Aff* 2017; 36(12): 2085–2093.

4. Billot L, et al. Impact evaluation of a system-wide chronic disease management program on health service utilisation: a propensity-matched cohort study. *PLOS Med* 2016; 13(6): e1002035.

5. Peterson GG, et al. Testing the replicability of a successful care management program: results from a randomized trial and likely explanations for why impacts did not replicate. *Health Serv Res* 2016; 51(6): 2115–2139.

6. Levine SH, et al. (2011, December 7). Predicting the financial risks of seriously ill patients. Retrieved from https://www.chcf.org/publication/predicting-the-financial-risks-of-seriously-ill-patients/

7. Wasson JH, et al. Validation of the What Matters Index: a brief, patient-reported index that guides care for chronic conditions and can substitute for computer-generated risk models. *PLOS One* 2018; 13(2): e0192475.

8. Wasson JH, et al. Development of a care guidance index based on what matters to patients. *Qual Life Res* 2018; 27(1), 51–58.

9. Ideal Medical Practices. (2018, June). An innovative model for primary care office payment. Retrieved from https://aspe.hhs.gov/system/files/pdf/255906/AddlInfoofAnalysisAntonucci.pdf

10. Nunlist MM, et al. Using health confidence to improve patient outcomes. *Fam Pract Manag* 2016; 23(6): 21–24.

11. White River Family Practice. (2018, December). White River Family Practice quality improvement. Retrieved from http://whiteriverfamilypractice.com/performance.html#asthma

12. Ho L, et al. The right tool for the right job: the value of alternative patient experience measures. 2013. *J Ambulatory Care Manage* 2013; 36(3), 241–244

13. Wasson JH, Coleman EA. Health Confidence: A simple, essential measure for patient engagement and better practice. *Fam Prac Manag* 2014; (Sept-Oct): 8–12.

14. Hibbard JH, et al. Adding a measure of patient self-management capability to risk assessment can improve prediction of high costs. *Health Aff* 2016; 35(3): 489–494.

15. Ahles TA, et al. A controlled trial of methods for managing pain in primary care patients with or without co-occurring psychosocial problems. *Ann Fam Med* 2006; 4(3): 341–350.

16. Budnitz DS, et al. Emergency hospitalizations for adverse drug events in older Americans. *N Engl J Med* 2011; 365: 2002–2012.

17. Wasson JH. A patient-reported spectrum of adverse health care experiences: harms, unnecessary care, medication illness, and low health confidence. *J Ambul Care Manag* 2013; 36(3): 245–2503.

18. Nelson EC, et.al. Patient reported outcome measures in practice. *BMJ* 2015; 350: g7818.

19. Wasson JH, et al. A randomized trial of the use of patient self-assessment data to improve community practices. *Eff Clin Pract* 1999; 2: 1–10.

OneCareVermont

Project Title

Using Innovative Technology to Make What Matters to Patients the Foundation for an Efficient and Effective Primary Care Practice

Instructions

For each of the categories in the budget table below, please provide a brief description of the planned expense and the total amount requested. Feel free to add rows for clarity as needed. In the accompanying budget justification please provide the detailed basis for each request (e.g. salary, FTE/hours requested, fringe). Full Time Equivalents (FTE) should be calculated on a 2080 hour/year basis for consistency.

Budget

Budget Category	Brief Description of Planned Expense		Dollar Amount Requested for Duration of Project (2 years)
Personnel (salary & fringe)			
Name	*Title & Role Supporting Innovation Project*	*FTE*	
Project Leadership: Jill Blumberg, MD, WRFP Physician Project Lead	**Process Testing:** • Lead orientation and implementation for providers and staff • Monitor project impact as WMI implementation proceeds • Direct process changes in response to emerging challenges	0.15	**$18,000**
	Dissemination: • Disseminate methods and results to Project Partners and regional practices		**$6,000**
Project Leadership: Joanne Arey, WRFP Office Manager and Leadership Assistant	**Process Testing:** • Manage project funds accounting • Assist with training and oversight of Project Personnel	0.1	**$6,750**
	Dissemination: • Assist with dissemination		**$2,250**
Project Personnel: Medical Assistants and Nursing Staff under the supervision of Care Coordinator, Lisa Paquette, RN	**Process Testing:** • Note challenges to WMI data collection, including barriers to access • Maintain time journals for project-related activities • Record patient and personnel observations • Report emerging challenges to the Project Lead	0.5	**$26,250**
	Dissemination: • Assist with dissemination		**$8,750**

Consultant: Mark Nunlist, MD, MS, Data Analytics Consultant	**Data Analysis:** • Assist Project Leadership with measuring progress toward Project Goals • Coordinate analyses of WRFP's EHR, the HYH registry, OneCare's Care Navigator, and DHMC's hospital and emergency department admissions data • Compile reports of analyses to assist with quarterly reporting and dissemination **NOTE**: All Data Analysis activities and costs are required only for program evaluation and reporting purposes and are not necessary to provide WMI-based usual care.	0.25	**$40,000**
Consultant: Dave Park, MD, WRFP Physician Partner & Technology Consultant	**Technology Customization:** • Adapt WMI and HYH technologies to integrate with WRFP's EHR • Customize HYH to include links to community organizations	100 hours total, concentrated in Q1	**$5000**
Consultant: John Wasson, MD, Data Analytics Consultant	**Data Analysis:** • Work with WRFP and Mark Nunlist, MD, MS, to adapt the HYH technologies and advise on specialized analyses through HYH if necessary to document progress toward the Project Goals	N/A	$0
Consultant: James M. Jasie, DHMC, non-funded Project Partner	**Data Analysis:** • Work with WRFP and Mark Nunlist, MD, MS, to supply secure database of WRFP patients' hospital encounters for ongoing data analysis	0.01	$0
Equipment	**Equipment:** iPad Air tablets for in-office patient completion of WMI Quick Health Check-up on HYH (6 @ ~ $660 each, including protective covers and service plan)		**$3,960**
Supplies	WRFP assumes responsibility for supplies associated with this project, excluding the iPad items in Equipment, above		$0
Travel	Included in costs of dissemination to Project Partners and regional practices.		$0
Other Direct Costs	All direct costs accounted for above.		$0
Indirect Costs	WRFP assumes responsibility for all indirect costs, including facilities, utilities, data security, personnel benefits, etc.		$0
Total Budget Requested			**$116,960**

Proposal Title: Using Innovative Technology to Make What Matters to Patients the Foundation for an Efficient and Effective Primary Care Practice
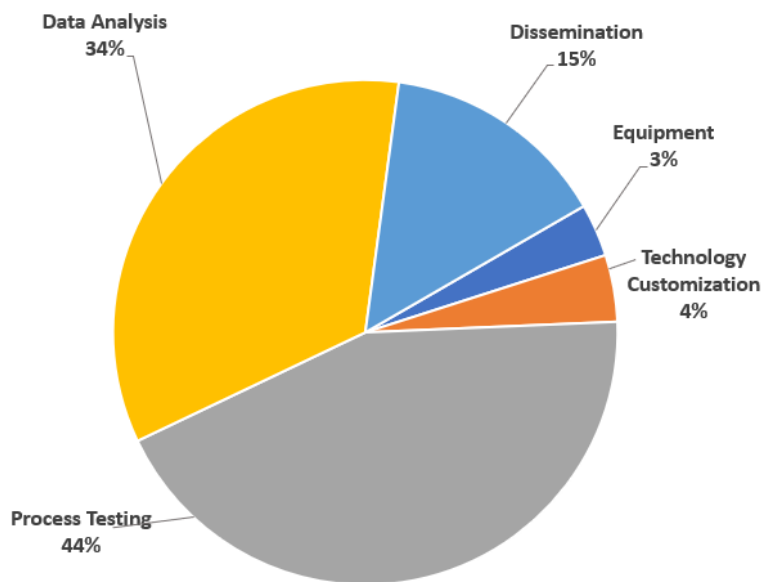
Budget Justification

White River Family Practice (WRFP) herein requests $116,960 over two years to implement, test, analyze, revise, and disseminate a care management approach, the What Matters Index (WMI), that has shown significant potential to improve patient health and satisfaction while also reducing costs. The current Project Budget is a substantial reduction from that of our first-round proposal. We have achieved this reduction by eliminating the FTE previously requested to support a Mental Health Representative from the Clara Martin Center, and by phasing in patient subpopulations over the grant period as detailed in the Project Narrative targeting full penetrance by Q6 instead of the accelerated Q3 target proposed in round one. This phased implementation allowed us to reduce the initial FTE request for Project Personnel by more than 60%.

The chart below illustrates the budgetary allocations to the various activities described in the Project Narrative for improving patient health and reducing costs. The Quarterly Funds Distribution Plan shows higher disbursements in the first and last quarters of the project to reflect the initial investment in Equipment and Technology Customization and the greater personnel resources required for final reporting and Dissemination.

BUDGET ALLOCATION BY ACTIVITY

ACTIVITY	PERSONNEL	BUDGET	
Technology Customization	Technology Consultant	$5,000	
	SUBTOTAL:	$5,000	(4%)
Process Testing	Project Lead	$18,000	
	Leadership Assistant	$6,750	
	Project Personnel	$26,250	
	SUBTOTAL:	$51,000	(44%)
Data Analysis	Data Analytics Consultant	$40,000	
	SUBTOTAL:	$40,000	(34%)
Dissemination	Project Lead	$6,000	
	Leadership Assistant	$2,250	
	Project Personnel	$8,750	
	SUBTOTAL:	$17,000	(15%)
Equipment		$3,960	
	SUBTOTAL:	$3,960	(3%)

The chart shows that the vast majority of the project's costs support activities that are not related to usual care, and are therefore extraneous to considering the sustainability and scalability of WMI-based care management. In fact, only 7% of the total project budget is dedicated to categories that would need to be fulfilled for uptake by other providers: Equipment ($3960) and Technology Customization ($5000). Moreover, WRFP expects this project to advance the associated freely available technologies such that other practices would require minimal customization for WMI uptake.

Based on the experience of Dr. Lynn Ho, as detailed in her attached letter of support, the Process Testing category is also entirely severable from sustainability considerations. Furthermore, this category can be considered largely severable from scalability considerations because these activities will distinguish best practices that inform a simplified implementation package for uptake by other providers, who may need to invest some resources in process testing, but not to the extent required to test the innovation. Of the total

amount budgeted for Project Leadership and Project Personnel ($68,000), 75% of the funds ($51,000) will support Process Testing.

The Data Analysis and Dissemination categories—a combined 49% of the total Project Budget—are entirely severable from sustainability and scalability considerations. These activities and costs are required only for program evaluation and reporting purposes and are not necessary to provide WMI-based usual care. The data analyses required to measure progress toward the Project Goals are particularly onerous because of the number of data sources that have to be compiled across interfaces that are not always compatible. Although WRFP's electronic health record (EHR) and HowsYourHealth.com (HYH) can be configured for compatibility through the Technology Customization activities, Dartmouth-Hitchcock Medical Center (DHMC) uses an entirely different system, and cross-referencing with DHMC thus requires significant manual extraction. The Data Analysis category ($40,000) funds a Data Analytics Consultant with extensive experience with these systems, and of the total amount budgeted for Project Leadership and Project Personnel ($68,000), 25% of the funds ($17,000) will support Dissemination.

WRFP has identified the following individuals to fulfill the roles and responsibilities defined herein.

1. Project Leadership. WRFP physician partner Jill Blumberg, MD, will lead the WMI implementation, guided by her extensive experience fostering excellence in daily primary care practice operations while also testing new concepts and processes. Joanne Arey, WRFP Office Manager and Leadership Assistant, will manage funds accounting and provide a crucial link between the Project Lead and Project Personnel to ensure continuity in training and supervision.

2. Project Personnel. WRFP nurses and medical assistants under the guidance of Lisa Paquette, RN, will help to collect WMI data as detailed in the Project Narrative, Section 2.6. Project Personnel tasks will include but not be limited to: noting patient barriers to access of the WMI and HYH tools; tracking indirect and direct time-costs to determine project savings exclusive of research components; noting personal and patient observations; reporting emerging challenges to Project Leadership; and assisting Project Leadership with dissemination of best practices for frontline clinical staff.

3. Consultants. Data Analytics Consultant Mark Nunlist, MD, MS, holds a Master's Degree in Health Care Leadership from The Dartmouth Institute for Health Policy & Clinical Practice and, as a former WRFP physician partner, was instrumental in implementing previous process changes and conducting the corresponding data analyses. This project will leverage Dr. Nunlist's extensive experience with DHMC's and WRFP's data analytics platforms to evaluate progress toward the Project Goals. WRFP physician partner and Technology Consultant Dave Park, MD, will aid integration of the WMI data fields with WRFP's EHR and will customize HYH to include links to community resources. Data Analytics Consultant John Wasson, MD, a primary care research expert and developer of the WMI and HYH, has volunteered to adapt the HYH technologies and advise on specialized analyses through HYH if necessary to document progress toward the Project Goals.

Over the last several decades, WRFP's physician partners have invested substantial personal resources in analyzing and adapting WRFP's clinical processes to deliver care more efficiently, and we therefore know from experience that these investments can strain WRFP's capacity to provide the care that sustains the practice under the current fee-for-service payment system. Nonetheless, WRFP firmly believes that using the WMI to identify high-risk patients and focus care where it is needed will improve population health and reduce the total cost of care. Rather than limiting the extent to which we can innovate, we request OneCare's support to measure progress toward our shared goals and advance the transformation to a value-based health care delivery system.

July 2, 2019

OneCare Vermont Accountable Care Organization
356 Mountain View Drive
Colchester, VT 05446

Dear OneCare Proposal Reviewers,

I am writing this letter in support of WRFP's proposed project to use the WMI as a risk stratification tool. Specifically, I am writing to share my own practice's experience around sustainability and scalability of the What Matters Index (WMI) and HowsYourHealth (HYH) tools.

Background: My practice, North Kingstown Family Practice (NKFP), is a family medicine solo micropractice located in southern RI. Until January 2019, the practice ran as an insurance-based micropractice with one full time MD practitioner and a part time RN nurse care manager. We are quite light on administrative staff, so we typically review the schedule at the beginning of the week and send an email to all scheduled patients with routine visits asking that they complete the WMI Health Check-up on HYH before their visit by clicking on a link containing the practice code. If patients have not completed the survey before they come in, they are then asked if they will complete it in the office before or at the beginning of their visit on a tablet computer.

Use of WMI and HYH: In 2006, we began to dabble with use of the WMI/HYH tools. We had been using the tool intermittently from 2006 until 2013. In 2014 we decided we would to try to use the WMI/HYH data from the aggregated practice reports to fulfill NCQA requirements for PCMH certification, so we ramped up usage of the tool beginning January 2014. In 2018 (in part due to NCQA requirements, and in part because we like a challenge!), we decided to push the envelope even further and attempt to have every patient perform the survey to see what penetrance could be achieved.

It may be informative to look at the WMI/HYH use data from my micropractice. (Survey numbers were retrieved from the HYH website, and total adult and geriatric wellness exams performed/year were extracted from the practice EHR.)

YEAR	WMI/HYH surveys	Preventive Exams	% Penetrance
2013	17	291	6%
2014	190	299	63%
2015	264	327	81%
2018	316	365	86%

From this data, one can see that the ramp up to obtaining a high penetrance of surveys is effective and rapid; the process of continuing to obtain surveys in a motivated practice is absolutely sustainable (even in a practice with no added administrative support); and a very high penetrance of surveys done can be achieved if so desired.

Conclusion: My practice (NKFP) found use of the WMI/HYH tools to be rapid to implement and simple to sustain with a high degree of uptake and acceptance by patients. Because the information provided by the WMI and HYH is so critical to managing both a primary care population and the individual patient, we are highly motivated to continue its use. If you have questions about our process or data, please do not hesitate to contact me.

Sincerely,

Dr. Lynn Ho, MD

North Kingstown Family Practice
320 Phillips Street, Suite 102
North Kingston, RI 02852
Phone: (401) 667-2537