Q1 Please provide your contact information below.

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Q2 Please describe your company or organizations overall goals and mission.

We improve the well-being of patients and communities by delivering innovative, compassionate, patient- and family-centered health care, enriched by education, science, and technology.

Q3 Please indicate which category your organization falls under. **Health Care Provider**

Q4 Innovation Executive Summary. Please describe the innovation, and how it addresses the social determinants of health. Please identify how the innovation addresses the 6 innovation criteria (i.e. ROI, scaleability, feasibility, evidence based support for innovation, relevance to the Medicaid population and speed to market).

Problem

 Social determinants of health (SDH) are the circumstances in which people are born, grow up, live, work and age, and the systems put in place to deal with illness (WHO Report 2008). These circumstances are in turn shaped by a wider set of forces: economics, social policies, and politics. Despite being one of the most advanced countries in the world for health technologies, the United States lags far behind other countries for morbidity and mortality in large part due to unmet SDH. To reduce these disparities, it is critical for health case professionals to address SDH by creating "social and physical environments that promote good health for all" (Healthy People, 2020).

Eighty-five percent of primary care providers report that unmet social needs, such as food scarcity, unsafe housing, and lack of transportation, directly lead to worse health (RWJ Healthcare Blindside report, 2011), which in turn creates a significant cost burden on the government. Moreover, 80% of health care providers are not equipped to respond to these needs. Universal screening for SDH is widely endorsed within health care settings yet little guidance exists as to how to most effectively and efficiently screen and respond to

these needs once they are identified. Consequently, despite recognition of the need to address SDH, health care professionals are ill-equipped to assess and treat them adequately. Although websites like NowPow, Aunt Bertha, and UniteUs are useful tools that can provide some tailored information based on individuals' social needs and their geographical location, they are not suited for widespread adoption within health care because they are incompatible with electronic medical records (EMR's) and thus are not designed to integrate within medical practices.

Proposed Solution

Health care practices need adequate supports in place to identify and respond to patients' unmet social needs within the context of their practices, communities, and most importantly – their patients' lives. To address these critical needs, we have created an accessible, economical, and scalable tool, Promote Health (Promote; originally conceived by Rhodes & Levenson, JAMA. 2003;289(5):601-605). Promote provides the following:

• Cost-effective SDH assessment within the EMR environment with minimal staff effort required.
• Tailored resource lists generated within the EMR that have already been identified by patients as extremely helpful.
• Customizable resource for the unique needs of different practice groups.
• Scalable within all sizes of health care systems and practices, which will facilitate widespread adoption.

Promote is an electronically-administered health screening approach for SDH and other patient needs. The validated tools used are in the public domain (and are usable without cost) and reflect the psychosocial priorities identified by research, patients and health care professionals as important to health. The EMR emails patients a secure link to complete Promote in advance of each visit on a home computer, tablet, or phone; patients without email access can also complete Promote on a tablet in the office after they check in for their appointments. Promote automatically scores the measures, and the results are uploaded to the EMR. The health care professional is prompted to review the results, which are summarized for easy interpretation, and can therefore address SDH needs while meeting with the patient. Promote also generates a list of referral recommendations based on the patient's identified needs. The health care professional can place this information in the patient's instructions, so they are printed out for the patient when checking out. In addition to making resource information available to patients, benefits of Promote include standardized assessment, low demand on both the patient and the health care professional, and the potential to aggregate data to understand population level needs.

Patients report they find Promote to be easily understood, usable and helpful. For practices that have adequate personnel support, the resource list can also be used as a launching point to partner with patients and help facilitate access to the most needed resources, including opportunities to access housing, sufficient and healthy food, transportation, education, and employment. Reducing unmet social needs can facilitate engagement in care, thus resulting in improved health care engagement and outcomes—which we believe will significantly lower the cost burden on the health care system. In addition, Promote can increase health care professionals' satisfaction by giving them a resource to address a problem they have identified as critically important to their ability to provide patients with good care.

This team has implemented the use of Promote in inner city high schools, emergency departments, and court settings for both research and service efforts. In these previous efforts, the results were printed and provided directly to the individual who completed Promote. When a research study using Promote ended at the University of Rochester Medical Center Women's Health Practice (WHP), an obstetrics and gynecology safety-net practice, the health care professionals were eager to find a way to continue having access to this resource – and to integrate it within the EMR. With the technical support of our internal EMR staff, we were able to integrate administration of the Promote, develop scoring algorithms, and generate tailored resource information directly into the EMR to make it more accessible and practical for health care professionals. The WHP medical director piloted Promote with 50 patients with great success, and WHP just rolled out Promote to the entire practice, including the 20 medical residents.

We believe integrating Promote into the EMR provides the following benefits:

• High return on investment as a result of Promote's low-cost, low burden approach to giving health care professionals a tool to identify and then address unmet SDH.
• Practices can easily take it to scale because it requires minimal training, is intuitive in practices' workflow, the measures are already validated and in the public domain.
• Our pilot work shows high feasibility and acceptability with both patients and health care professionals.

- Promote is based on evidence-based care practices, and we have studied it extensively.
- Our patient partners, who mostly have Medicaid insurance, report the resources provided by Promote are relevant, helpful and responsive to their needs.
- Given the significant development and work that has already been completed, limited effort and time would be required to disseminate Promote widely across New York State.

Challenges

Several initial challenges were identified and addressed. First, concern was expressed by the health care professionals that reviewing SDHs would take more time than they had available in their brief and very full visits. Our pilot work has proven that the conversations in regard to SDH typically occur quite quickly, and only a brief training was needed to alleviate this concern. Second, there was worry Promote might screen for acute needs and then health care professionals might miss responding to them. To that end, we dropped the more acute questions from the version that is sent to the home prior to the patient's visits (e.g. active intimate partner violence; suicidal ideation), and these questions are only administered when the patient is in the office. In addition, we were able to add "hard stops" in the EMR workflow for some of the items, so the health care professional could not accidentally miss problems that require immediate action. Third, we had to overcome workflow issues. For example, because of limited resources, many of our patients do not use e-mail and would not access the questions through this route. For this reason, patients can complete Promote either prior to the appointment or while waiting for the appointment. We also worked with the clinic staff to ensure that administering Promote did not add to wait time at the reception desk or add to the time patients spend in rooms. Through our discussions and team-based problem solving, we minimized the additional burden and time required of clinic staff.

Unmet challenges remain. We do not yet have the technology in place to partner with websites that can tailor resources by geographic location and ensure that they remain current and accurate. It is important the resources provided are current and match the patients' geographic location; developing technology that could partner existing websites that exist for this purpose with Promote would assist with that challenge. In addition, some patients may have language or literacy issues making it difficult to navigate Promote. A future goa is to have Promote available in different languages (including American Sign Language) and administered audibly for those who need it.

Recommendation

The New York State Department of Health (DOH), Office of Health Insurance Programs, Bureau of Social Determinants of Health is uniquely poised to pursue innovative ways to address SDH among Medicaid patients in New York. We believe that minimal resources would allow us to widely disseminate Promote as a highly effective, scalable strategy to helping health care professionals address SDH with their patients and improve health outcomes – which in turn will save significant health care Dollars and quality of life for patients and health care professionals alike.

Q5 Was your innovation implemented? If so, please explain when, the number of people impacted, and the results.

Yes (please specify when and the estimated number of people impacted):

A total of 2,714 patients completed Promote within the context of our funded research study. Since September 2017, 50 women have completed our pilot of Promote integrated in the electronic medical record (EMR) without research support. This pilot has been extremely successful according to patients, staff, and health care professionals. Final modifications and training have now been completed. Full EMR roll-out of Promote is scheduled for July 1 2018 with anticipated participation of 1500 women annually. A second large safety net obstetrics and gynecology practice locally is already hoping to capitalize on our experience and incorporate Promote in their setting.

Q6 Please identify the SDH Domain that your innovation addresses. (Select all that apply.)

Social and Community Context ,

Health and Health Care ,

Neighborhood and Environment ,

Economic Stability

Q7 I give the Department of Health the right to share the information submitted in this application publicly (for example: on the DOH website). I understand that there is no monetary reward/reimbursement for my submission or for attending the summit should my innovation be selected.

I consent to have my innovation shared