P09: Successful Implementation of a Statewide Survey: Observations on Conducting Research in Primary Care

BACKGROUND:
Throughout the United States, primary care presents a critical leverage point for improving diabetes outcomes, but improving support for diabetes care in primary care requires new models of care delivery that increase coordination, emphasize prevention and ongoing support, and enhance collaboration between multidisciplinary teams. The Understanding Infrastructure Transformation Effects on Diabetes (UNITED) study is designed to identify the specific services and resources associated with primary care PCMH practice redesign that result in the greatest improvement in diabetes care. Findings will reflect a multi-methods exploration of office systems and practices across multiple years of detailed health outcomes reports.
Clinicians or providers are among the many possible stakeholder perspectives to pursue. The Physician Practice Connections® - Research Survey has been developed to collect data about primary care and family medicine. Development of the survey corresponded with historical trends in the transformation of primary care, particularly the patient-centered medical home. The survey has its origins in the state of Minnesota where (patient-centered medical home) office certification for creating specified primary care functionalities is conducted through the "Health Care Homes" program.

SETTING & PARTICIPANTS:
The Physician Practice Connections® - Research Survey was administered to both PCMH-certified and non-certified practices in 2017 delivering care to more than 30 patients with diabetes per year. Respondents self-identified as one-third "Lead clinic physician" and two-thirds "Other." Preliminary analysis of responses does not suggest any patterned variations between groups.

METHODS:
Study staff initially identified 594 health care home certified and non-certified practices and developed a survey implementation strategy focused on medical groups.   A letter was sent via delivery service inviting healthcare organization and physician practice leaders to participate, which was followed in one week by a recruitment phone call from one of two family medicine physicians on the research team. Participating medical groups identified recipients of the survey link through which to respond. Letters of invitation were batched to ensure timely personal invitation by phone and follow-up registration of respondents. Survey responses were monitored with three reminders sent weekly to non-responders.

RESULTS:
586 practices were initially identified as eligible, 451 (77%) agreed to participate and 415 (92%) provided survey responses. The presentation will characterize respondents by practice types (e,g. practice size (i.e., number of providers and number of patients with diabetes) and practice location (i.e., urban-rural) and provide additional details on the efforts to obtain survey responses with a focus on response time intervals and expenditure of research resources.

CONCLUSION:
Primary care physicians continue to participate in research, particularly when relevant to patient care. Identification of engaged approaches to recruitment that are appropriate to the current healthcare environment may require examination of the resources necessary for success.

RELEVANCE STATEMENT:
Poor recruitment is the primary challenge to successful research, and this study describes a successful approach to involving primary care practices across one state. This presentation describes an approach for making sure that stakeholders representing primary care and family medicine have the opportunity to contribute to the development and adoption of primary care transformation primary care goals and models.

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P10: "Patients know best" - Lessons learned from a pilot study to test the study design and materials for a large pragmatic asthma trial

BACKGROUND:
African Americans and Hispanics have a high burden of asthma in terms of morbidity, mortality, and societal costs. A patient activated strategy of inhaled corticosteroids used with eacg reliever use (Patient Activated, Reliever-Triggered Inhaled CorticoSteroid (PARTICS) leverages patients' natural use of reliever medications and may improve outcomes for patients with a high burden of asthma. The purpose is to describe participants' experiences and overall satisfaction in a pilot study to inform a larger pragmatic trial.

SETTING & PARTICIPANTS:
A total of 31 English speaking patients from four primary care or pulmonary specialty sites in three states participated. Patients were age 18-75 years old, African-American or Hispanic, diagnosis of asthma for > 1 year, on either ICS/LABA. or on ICS alone, with an ACT < 19 or 1+ asthma exacerbations/past year.

METHODS:
Open-label pilot trial; participants randomized ~3:1 to either PARTICS plus usual care, or usual care only. There was one study visit for eligibility verification, informed consent, baseline assessment, and randomization. Participants answered monthly questionnaires about symptoms, exacerbations, and medication use at the end of Month 1,2, and 3. In addition, we conducted telephone interviews at 1, 6, and 12 weeks post-enrollment. Interview questions asked about participants' experiences with recruitment, enrollment, understanding of study messages and expectations, challenges, and overall satisfaction.

RESULTS:
Overall, patient satisfaction with the study was high. We found that many of our strategies were well received: the asthma video, payments for completing the surveys, and enrollment packets. However, there were issues with patient understanding of medical terms and how to take their medication, enrollment visit length, monthly survey question length and completion, medication log confusion, and our study website that led to changes to our full study.

CONCLUSION:
Patients provided important feedback that exposed problems with our study materials and design. Their feedback was crucial for the successful implementation of our full study.

RELEVANCE STATEMENT:
Relevance Statement (lay terms): Including patients in the development and real-life testing of study materials markedly improves final study protocols.

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P11: Collaborative deliberation: Expanding a shared decision making model for use in primary care obesity management

BACKGROUND:
Shared decision making is crucial to arrive at care plans that are realistic, doable, and meaningful in the lives of patients living with obesity and chronic disease. Yet the application of the principles of shared decision making in chronic complex illness remain under-theorized and not well studied. The collaborative deliberation model conceptualizes the interpersonal work that is involved in sharing decisions. This includes constructive engagement, recognizing alternatives, comparative learning, constructing preferences, and integrating preferences. While applicable for the action-planning phase of an obesity consultation, the model provides less detail for guiding clinicians through the complex interpersonal and emotional processes involved in raising the subject of obesity with patients and appropriately assessing root causes, drivers, and contextual barriers. This research used an in-depth qualitative approach to examine dialogue in obesity consultations and patient experience of the impact and outcomes in their everyday life with the goal to adapt the collaborative deliberation model for the obesity context.

SETTING & PARTICIPANTS:
Practice-based research with a large urban primary care organization that enhances family physician practices with interdisciplinary providers. Purposive recruitment of 20 patients living with obesity for maximum variation in context (age, ethnicity, socio-economic status, co-morbidities, education). Two volunteer providers (family physician and dietician) from the partner organization who were familiar with the approach conducted the consultations.

METHODS:
Video-recording of 20 obesity consultations that were guided by the 5As of obesity management and the collaborative deliberation model aiming to personalize assessment and care planning. Conversational, in-person interviews with patients and providers afterwards. For each of the 20 participants we collected a diary and two follow-up interviews to explore everyday life experience and impact of the consultation over the course of 4-8 weeks. Thematic analysis using a dialogical interaction approach to identify interpersonal processes.

RESULTS:
Synthesizing and comparing themes to the original collaborative deliberation model we identified five processes that may be relevant for collaborative deliberation in the obesity context in addition to the original model's components. Four of these expand the original model's constructive engagement: 1) Making sense of root causes, drivers, and contextual aspects; 2) Reframing views of self and obesity; 3) Integration summary; and 4) Prioritizing. Finally, we found that an integral process for obesity management is: 5) Experimenting with alternatives at home.

CONCLUSION:
The findings of this research suggest that shared care planning with people living with obesity requires foundational processes that foster a shared understanding of patient specific root causes, contextual circumstances, and priorities. As a result, provider and patients are better able to recognize appropriate course of action and develop care plans that support patient activation, optimize interdisciplinary care and use of community resources, and help avoid repeated, misplaced efforts. We have identified processes that can guide clinicians to navigate the complexity of obesity consultations and pay attention to associated interpersonal and emotional processes in order to achieve more meaningful conversations.

RELEVANCE STATEMENT:
In partnership with patients and providers we have created a guide that supports meaningful conversations about obesity and sharing decisions about care.

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P12: Patients' understanding of preventive services: high confidence and low knowledge

BACKGROUND:
Colorectal, breast, cervical, and prostate cancers are the leading causes of U.S. cancer deaths, claiming 127,860 lives annually. Though many forms of cancer screening can reduce mortality, a sizable proportion of the eligible population does not receive recommended screening tests. Many adults are unclear about their preventive care needs. Less than half of adults are up-to-date with clinical preventive services and the gap is even more pronounced among low-income Americans and racial and ethnic minorities. Some of these problems might be alleviated by health information technology, especially personal health records. A program was created called MyPreventiveCare (MPC) that is integrated into the EHR/PHR that creates a personally tailored list of recommendations for preventive services for patients. MPC also includes detailed personal messages that explain the preventive service and its rationale using information from the patient's history in the EHR/PHR. MPC is able to help with patient misinformation about preventive care and can help patients stay up to date with their preventive care.

SETTING & PARTICIPANTS:
Patients were selected from 20 practices serving disadvantaged patients, located in 5 states, and spanning 2 networks.

METHODS:
4352 patients from 20 practices were randomly selected to be mailed a survey. The sample was stratified by age and gender (females 40-49 and 50-75; and males 40-54 and 55-75). The surveys assessed components of shared decision making, knowledge, communication, decisional conflict, and locus of control. Surveys addressed colorectal, breast, cervical, and prostate cancer screening. Some survey questions varied based on age- and gender-based eligibility for preventive services. Surveys were mailed to patients using a modified Dillman method. Responses were entered into REDCap and analyzed using a statistical package.

RESULTS:
1706 (39.2%) patients completed the survey. Across four domains of prevention (cardiovascular care, cancer care, immunization, and general prevention), 74.2% of respondents said they are either very confident or completely confident in managing that preventive domain. 15.8% reported complete confidence for all 4 questions. When asked knowledge questions, out of all respondents, 79.1% answered incorrectly about how many cups of vegetables and fruits you should eat in a typical day and 67.7% answered incorrectly about how many minutes you should exercise in a typical week. For knowledge questions asking about preventative care: 22.4% of men and 23.7% of women answered correctly about colon cancer prevention, 15.4% of men answered correctly about prostate cancer prevention, 11.9% of women answered correctly about breast cancer prevention, 23.6% of men and 24.5% of women answered correctly about heart attack or stroke prevention, 59.5% of men and 49.2% of women answered correctly about diabetes, 34.0% of men and 41.1% of women answered correctly about pneumonia vaccines, and 72.8% of men and 77.5% of women answered correctly about depression. Will present further sub-analyses including demographics, how patients rated their health, and for patients who may be at risk for disparities, specifically ethnic/racial disparities, and those with Medicaid/no insurance.

CONCLUSION:
Current findings show that while patients are very confident about their knowledge and understanding of preventive care, when asked knowledge questions on preventive care and services, a majority of patients did not know the right answers. There are gaps in patient education related to preventive services primarily in cancer prevention. Better interventions and education are needed to improve and close the gaps on patient misinformation in regards to prevention. Further analyses will be conducted to see if those using the intervention that was created, MyPreventiveCare, are more knowledgeable about prevention services compared to those who are not.

RELEVANCE STATEMENT:
Patients are very confident about their knowledge on preventive services yet patients are often misinformed and have incorrect beliefs about preventive care.

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P13: Using Physician and Staff Input to Inform EHR Design: A WREN supported study

BACKGROUND:
Although electronic health record systems were expected to improve the quality of care and efficiency in the health care system, analyses of their effect in primary care have shown mixed results on the quality of care in areas such as preventive care, cancer and mental health screening, and chronic disease care. The evidence for improved patient outcomes and safety is also weak, and EHRs have been found to disrupt clinic workflows and established patterns of teamwork. We propose that a well-designed EHR would support clinician and staff cognitive work and support the teamwork needed by high-functioning primary care clinics. This poster highlights the role of primary care clinicians and staff in providing the information needed for EHR redesign.

SETTING & PARTICIPANTS:
We interviewed 14 physicians, 3 physician assistants, 2 nurse practitioners, 16 registered nurses, 2 licensed practical nurses, 17 medical assistants and 49 other staff including receptionists, schedulers, pharmacists, educators, social workers, technicians, case managers, care coordinators and clinic managers. Clinics varied by size, location (urban or rural), organizational structure (including regional healthcare organizations, independent clinics and solo practices), patient mix (including capitated patients and Federally Qualified Health Centers) and patient primary language (English and Spanish.)

METHODS:
Researchers at the University of Wisconsin-Madison worked closely with the Wisconsin Research and Education Network (WREN) to recruit a set of internal medicine and family medicine practices in Wisconsin and Iowa that represent a diversity of clinic types. Through observations and semi-structured interviews, the research team then identified the goals, decisions and information needs of clinicians and staff during each stage of a patient visit. This process, called Goal Directed Task Analysis, involved asking participants what were their goals for each stage of the patient encounter, what decisions were required to meet the goals and what information was needed to make those decisions. Using the information gathered, researchers created a map of the goals, decisions and information needs and identified areas where team members share goals, decisions and information.

RESULTS:
Using the results from 103 interviews (194.3 hours) and 83 direct observations (221.8 hours), the research team developed maps of goals, tasks and information needs at each stage of the encounter for each team member. These maps are being used to design EHR interfaces that provide the information a clinician needs, in a form that is easy to use quickly, at the time the clinician is making a decision. To use a simplified example, a physician who is deciding

whether to increase the dose of a medication needs information about the current medication order, whether the patient is taking the medication as prescribed, treatment outcomes related to medication use, and the results of related blood tests or other monitoring to determine the effectiveness of the medication and monitor for adverse effects. With this information all presented in one interface of the EHR, the physician can easily decide how the dose should be changed and enter the order.

CONCLUSION:
Using information gathered primary care teams, EHR interfaces can be designed to support the information needs of team members and enable them to easily make the decisions needed to meet their goals for a patient visit.

RELEVANCE STATEMENT:
EHRs will be more useful if designed around the information needs of the primary care team. Our work can provide useful input into future EHR development.

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P14: Development of a Technology Based Patient Navigation Program for Colorectal Cancer Screening

BACKGROUND:
We developed this project in response to a recognized need to improve systems efficiency for navigating and coordinating timely completion of colorectal cancer (CRC) screening, including completion of FIT and colonoscopies, at two affiliated medical institutions within the Southern Primary Care Urban Research Network (SPUR-Net)-Baylor College of Medicine (BCM) and Harris Health System (HHS) in Harris County, TX. At inception the CRC screening rate at the two institutions was well below established benchmarks. Furthermore, CRC was the second leading cause of cancer related deaths among residents of Harris County. Review of CRC screening workflow involving referrals, scheduling, and follow-up of patients eligible for screening revealed a several gaps and inefficiencies, most of which could be remedied through patient navigation and documentation of CRC screening outcomes in the electronic medical record (EMR).

SETTING & PARTICIPANTS:
The setting is Baylor College of Medicine clinics and multiple Harris Health System community health centers. Participants are patients of these health systems, which include highly diverse populations in terms of income, education, and race/ethnicity. Inclusion criteria are all patients 50 to 74 years of age, or patients identified as high risk for CRC (FIT positive, iron deficiency anemia, or rectal bleeding).

METHODS:
We formed a clinical advisory committee, including both family medicine and gastroenterology specialists who function in complementary roles. Family medicine physicians primarily advise on CRC screening content, specifics regarding open access colonoscopies, development of the EMR navigation workbench, and input for app and website development. The gastroenterologists advise on CRC screening content, specifics of high risk colonoscopy (adequate prep, cardiac clearance and when to discontinue medications), as well as scheduling and bringing CRC outcomes into the EMR. In addition, we established multiple work groups that meet regularly to develop specific features that support the overall patient navigation process. EMR Patient Navigation Workbench Group: The patient navigation module includes CRC screening data, outcomes of patient navigation including status (CRC screening referrals FIT completed, colonoscopy scheduled and completed, cancellations, reschedules, and no-shows). The efforts of this work group have been essential in developing the patient navigation workbench, which also includes such details as patient contacts, as well as CRC screening outcomes from chart abstractions and media files and lab results on precursors and cancers. Patient Navigation Group: A CRC screening registry in the Electronic Medical Record (EMR) includes all age-eligible and high-risk patients identified for navigation. Our patient navigators contact patients who have a FIT or colonoscopy order in the EMR to ensure scheduling and follow through. By regular contact with via telephone and EMR based communications, patients are navigated to completion of recommended procedures. App and Website Group: An interactive CRC education app, as well as a website, featuring a standardized colonoscopy preparation guide, modifiable CRC risk factors, and links to existing resources, is currently under development. These resources will support the patient navigation process by providing CRC education screening education.

RESULTS:
During the first year of the project, we provided CRC screening navigation to 13,698 individuals via telephone and EMR-based communications. Out of the total navigated population, 7,213 individuals completed FITs, and 5,740 completed colonoscopies. Considering that 3,718 FITs, and 2,983 colonoscopies were completed in the year prior to the project, Year 1 results show a marked increase in FITs and colonoscopies (48.5% and 48.0%, respectively). In addition, the patient navigation program has positively impacted quality of completed colonoscopies. In comparison with Boston Bowel Preparation Scale (BBPS) scores from the previous year, significant differences in mean BBPS scores were observed between patients who received dedicated patient navigation services compared to those who did not (mean BBPS 8.1 ± 1.45 vs. 7.6 ± 1.5, respectively, $p = 0.004$). In year one, 400 high risk colonoscopies were completed, compared to 297 at baseline (25.8% increase).

CONCLUSION:
The patient navigation program has had a positive impact on overall CRC screening completion, and a significant impact on follow up for high risk patients. Our multifaceted approach provides patients individualized navigation services through the screening process, and the colonoscopy preparation education provided by our patient navigators has been effective across all racial/ethnic and gender groups.

RELEVANCE STATEMENT:
Through technology based navigation, patients are better enabled to complete recommended CRC screening procedures and physicians can efficiently monitor the outcomes of patient CRC screening.

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P15: Use of Boot Camp Translation in Western Colorado as a Means to Engage Community in Intervention Development

BACKGROUND:
Boot Camp Translation (BCT) is a method of community engagement used to translate scientific findings into community specific messaging. BCT starts with a kick-off meeting including an expert presentation on the chosen topic which is followed by several phone calls and in-person meetings. This allows groups to brainstorm and then hone ideas to develop a message or product. However, recently, BCT has been used as a Community Based Participatory Research (CBPR) method to develop interventions instead of messaging. The purpose of this presentation is to describe this new use of BCT in western Colorado and its success as an intervention development method.

SETTING & PARTICIPANTS:
The BCT was held in 2015-2016 in Mesa County, Colorado to address childhood obesity. This BCT had nine community participants representing multiple organizations and community groups including the school district, health department, primary care providers and parents. It was co-facilitated by Drs. Holtrop and Nederveld.

METHODS:
We followed the usual BCT format of a kick-off meeting with expert presentation on the chosen topic followed by a series of phone calls and in-person meetings. However, in this case, the "product" was not community specific messaging, but community generated ideas for interventions and projects. Grants were written for these interventions after the BCT process was complete. This project cost less than $10,000 US.

RESULTS:
The BCT resulted in two-successfully funded projects to increase physical activity in the built and natural environment in Mesa County, Colorado. These projects led to development of an app by Grand Junction Parks and Recreation to inform people of local recreation offerings and track participation. In addition, several of the members of the BCT have applied to the Robert Wood Johnson Foundation (RWJF) Clinical Scholars program to develop an intervention using outdoor recreation to address trauma and promote resilience in families that have experienced adversity (i.e. adverse childhood experiences) in an effort to reduce downstream risk for obesity.

CONCLUSION:
Preliminary use of BCT as a CBPR method to develop interventions is promising as this project led to interventions that were funded and implemented. Further use of BCT and evaluation of the effectiveness of these interventions is warranted and needed to support development of CBPR methodology. Over the next two years, we will use BCT to develop a patient interface for a health-information exchange and in the RWJF project for intervention development if this is funded.

RELEVANCE STATEMENT:
CBPR is seen as important in primary care research, but there are few specific methods described in the literature. BCT may be an effective and relatively inexpensive way to use community engagement in intervention development.

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P16: Increasing capacity for substance use disorder research in the NIDA Clinical Trials Network by building collaborations with primary care practices

BACKGROUND:
The National Institute on Drug Abuse Clinical Trials Network (NIDA CTN) called for its national nodes to engage primary care practice-based research networks (PBRNs) and promote the translation of evidence-based interventions from substance use disorder (SUD) research into community-based practices. Seven of the 13 CTN nodes were known to have formal affiliations with PBRNs, yet their capacity to collaborate on SUD research is untested. This project sought to engage PBRNs affiliated with the NIDA CTN in a collaborative demonstration project using electronic health record data (EHR) and survey data to demonstrate SUD research capacity.

SETTING & PARTICIPANTS:
A total of 7 PBRNs representing five CTN nodes participated in the project. Five PBRNs collected both EHR and survey data; one contributed EHR data only, and one contributed survey data only. The EHR data included 561,017 adult patients with an office visit at 84 primary care clinics during the defined study period of 10/1/15 to 9/30/16. Surveys were completed by participants from 58 practices.

METHODS:
Practice based research networks affiliated with NIDA CTN nodes completed a simple query of PBRN practices' electronic health records to calculate the proportion of adult patients prescribed an opioid medication in the prior year, and the proportion of those prescribed opioid medication who were also prescribed a sedative. Practices also completed a survey detailing their respective opioid management policies and procedures.

RESULTS:
Of 561,017 adult patients in the study, 128,367 (22.9% overall, practice range 3.1%-25.4%) were prescribed opioid medication in the study period, with 52.1% (practice range 8.5%-60.6%) of those patients also prescribed a sedative in the study period. When stratified by age, 31.5% of patients aged 80 and older were prescribed an opioid in the study period. In the 58 practices returning a survey, the resources most commonly available for prescribing chronic opioid therapy included formal written treatment agreements (98.1%), a formal written policy for periodically checking the state Prescription Monitoring Program (96.1%), and a urine drug testing policy (88.9%). However, consistent use of these three resources was lower, ranging from 61.1% and 76.5%.

CONCLUSION:
As the NIDA CTN seeks to expand the involvement of PBRNs in substance use disorder research, this demonstration project illustrates the ability of CTN-affiliated PBRNs to generate data both within and across networks on the prescription of opioids as well as on clinic policies and procedures related to opioid management. Five CTN nodes were able to cultivate PBRN engagement with substance use disorder research, and demonstrate feasibility of substance use disorder research within CTN-affiliated PBRNs.

RELEVANCE STATEMENT:
The National Institute on Drug Abuse Clinical Trials Network has created an effective new resource for substance use disorder researchers - a network of PBRNs that is ready to collaborate with academic investigators. There is some variation in capabilities across PBRNs, but overall they have the capacity to reach large numbers of patients in multiple clinics across diverse organizations.

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P17: Maintaining PBRN Practice Contacts: The CRM Method

BACKGROUND:
Maintaining contact information at a PBRN level is difficult with provider relocation frequently occurring. Tracking contact changes and logging project participation is an important component of interacting with PBRN practices. Old-school methods of tracking changes in multiple Excel documents with no uniformity and the inability to update with ease is a thing of the past for SNOCAP as we move into tracking practices with an online Customer Relationship Management (CRM) site.

SETTING & PARTICIPANTS:
As of 2017, SNOCAP had 102 total practices active in their five PBRNs. The majority of the contact information we had on file was old and therefore we had no proper way of contacting the practice. We found out through this process that many practices had even closed their doors. The SNOCAP Student Assistant worked to find contact information to be able to reach out to each of the 102 practices in the network. We baldy wanted to re-engaging the practices that had fallen off the radar, verify information from practices we have regular communication with, and gather information up-front from practices that are new to the network.

METHODS:
There are many online tracking systems for business settings to track what was sold and to whom. In the PBRN setting, we needed to try tracking in a similar fashion, but with a less business-oriented and more clinic/physician relationship lens. In March 2017, SNOCAP hired a student assistant to focus on creating an online Customer Relationship Management (CRM) site. Once hired, she took on the daunting task of researching CRMs, choosing the one that was most affordable and easiest to adapt to the needs of a research-oriented, relationship management group. She found that HubSpot was easy to import and export contacts; create projects and track their progress; schedule meetings, calls and set reminders for practices; assign tasks to facilitators, providers, practices, and log their activities; and keep a close historical account on all SNOCAP happenings. Prior to using a CRM to track information, partner practice contacts were saved on Excel spreadsheets and participating practices were listed as active or inactive. We began the process of moving contact information to an online platform by email outreach to every SNOCAP practice. Each active practice received a link to a REDCap survey to update information such as: practice name, mailing address, personnel associated with practice, telephone number and email address. SNOCAP had a set timeline of three months to gather responses to initiate the HubSpot project. After a set period of time, the SNOCAP student assistant sent two reminder emails, then began reaching out via phone calls.

RESULTS:
After a nearly five-month process, 49 of the 102 active practices completed the REDCap survey-a 48% completion rate. While this is far from the rate we anticipated, a start had been made and connections have again started forming. SNOCAP plans to continue to roll this survey out to all practices each year. SNOCAP has also begun practice visits and are in discussions with other entities at the University to partner with to conduct additional practice visits throughout 2018/2019.

CONCLUSION:
A starting point has been established and the groundwork has been laid for a successful future of maintaining close contact with our active practices. One goal SNOCAP had in 2017 was to create a database to streamline "active" contacts and periodically update without facing the hassle of maintaining numerous excel sheets. This will also facilitate historical documentation of project involvement and make outreach to practices more readily available for project recruitment. With this online practice database, SNOCAP can provide timely updates about upcoming activities and extend invitation to events and conferences to these practices, thereby bind practice networks together under the SNOCAP umbrella.

RELEVANCE STATEMENT:
This poster will share successes and challenges for setting up a CRM to use for PBRN practice contact. SNOCAP will share stories of how they have been able to have better insight on practice involvement and more easily update contact information of the associated personnel. By using HubSpot, SNOCAP has found an easy to use method which provides uniformity, numerous integrations, and better visualization of their PBRN in one place. It can help create a project, track participation of practices and progress of project. It enables SNOCAP to maintain and expand its state-wide practice networks by engaging in more frequent communication, share successes, involve practices in meetings and conferences, and track practice engagement.

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P18: Impact of Electronic Health Record Alert in Primary Care Screening for HIV Within a Large Healthcare System

BACKGROUND:
Societal and economic burdens of human immunodeficiency virus (HIV) continue to grow, even as treatments and prevention for this disease becomes more readily available and efficacious. Still, one in eight individuals living with HIV in the US are unaware of their infection, and 40% of all new infections come from people unaware of their HIV status. The Center for Disease Control and Prevention recommends a one-time HIV screen for all individuals between ages 13-64 regardless of risk factors, and the US Preventative Services Task Force recommend one-time screenings for patients between the ages of 15-65. Both organizations recommend more frequent screening based on individual risk factors.

SETTING & PARTICIPANTS:
Atrium Health is a large, non-profit, vertically integrated healthcare system with approximately 12 million patient encounters per year across the Southeast US. Twelve primary care practices, including four safety-net practices serving predominantly Medicaid and uninsured patients, with over 67,000 patients between the ages of 18 and 64 were selected for the educational intervention.

METHODS:
A system-wide electronic medical record alert prompting HIV screening was implemented in October 2017 targeting adults between 18-64 years old. In addition to the system alert, a provider peer-to-peer educational program detailing HIV disease epidemiology, screening recommendations, and algorithms to guide screening efforts was developed by a quality improvement team to further increase screening and linkage to care for patients testing positive for HIV. Provider peer-to-peer education offered further behavioral and clinical preventative options for HIV-negative patients with high-risk of infection.

RESULTS:
In the five months prior to the system-wide HIV alert being activated, from May - September 2017, 3,642 patients were screened for HIV at the twelve participating primary care practices. Immediately after the HIV alert activation, from October 2017 - February 2018, 6,150 patients were screened, resulting in a 69% increase in screening (p=0.001). When screening numbers are compared year-over-year, 2,921 patients were screened from October 2016 - February 2017 compared to the same period post-alert activation, equaling a 111% increase (p=0.001).

CONCLUSION:
EMR modifications and provider education along with availability of connect to care partners within a large, vertically integrated healthcare system can significantly enhance prevention, as well as screening and care for patients with HIV.

RELEVANCE STATEMENT:
HIV is a high impact chronic illness that affect millions of Americans, many of whom are not aware of their diagnosis. Innovative interventions are needed to increase screening rates and link positive patients into care to improve patient outcomes and reduce new disease incidence.

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P19: SPIDER: A Research and QI Collaboration Supporting Practices in Improving Care for Complex Elderly Patients (Research in Progress)

BACKGROUND:
Elders living with multiple chronic conditions may be taking some medications that do not benefit them. One of our team members (S. Dahrouge) found that the number of prescription was the most reliable predictor of persistent care complexity for patients age 65 or more. Polypharmacy can be associated with elevated risks of poor health, reduced quality of life, high system costs and frustration for physicians. While many medications could be problematic, this project targets the following four as recommended by Choosing Wisely Canada and Canadian Deprescribing Network: Proton pump inhibitors, benzodiazepines, antipsychotics, and long-acting sulfonylureas. We propose a collaboration between QI and research, SPIDER: a Structured Process Informed by Data, Evidence and Research (SPIDER). The objective of this study is to assess whether SPIDER can reduce potentially inappropriate prescriptions (PIPs) and improve care for elderly patients living with complex care needs.

SETTING & PARTICIPANTS:
The study will be open to all family practices, regardless of their remuneration model (e.g., fee for service, capitation, etc.). Eligible practices are required to provide comprehensive primary care and have at least one family physician that consents to participate and contributes EMR data to Canadian Primary Care Sentinel Surveillance Network (CPCSSN). All community-dwelling patients aged 65 years and older, having at least one visit in the past two years, and having had ten or more unique medication prescriptions in the past year will be included in the analysis. Ten percent of patients who have at least one PIP at baseline will be randomly selected to participate in the assessment of patient experience and self-reported outcomes.

METHODS:
The study will first be tested for feasibility in two PBRNs in Toronto (UTOPIAN) and Edmonton (NAPCReN), followed by a pragmatic cluster RCT in five other PBRNs (Calgary, Winnipeg, Ottawa, Montreal and Halifax). Each PBRN will form an interprofessional Learning Collaborative; practices will work with QI Coaches. Practices will be provided with de-identified and validated patient EMR data through their respective PBRN; they will be supported in their efforts to implement QI. The feasibility study will be a prospective single arm mixed methods study. Ten to fifteen practices per PBRN will be recruited. Surveys, interviews and focus groups will be used to explore patient and physician experience and evaluate the SPIDER process. Findings from the feasibility study will be used to guide the RCT.

RESULTS:
This project is a study in progress.

CONCLUSION:
This project is a study in progress. We hypothesize that the SPIDER approach will 1) reduce PIPs and improve the quality of care for complex elderly patients living with polypharmacy; 2) improve patient experience with care; 3) improve care provider satisfaction; and 4) be cost-effective.

RELEVANCE STATEMENT:
This study is important as it aims to address a common issue facing by elderly patients living with multiple chronic conditions. This group of people may take many different medications (polypharmacy), some of which do not benefit them. Research has shown that almost one quarter of elderly patients were taking ten or more different medications on a regular basis. In addition, each physician has, on average, 24 elderly patients who were prescribed ten or more different medications in the past year. Polypharmacy can increase the risk of poor health and reduced quality of life. It can also cause frustrations for physicians and high system costs. We propose SPIDER, a Structured Process Informed by Data, Evidence and Research, as a method to improve care for these complex patients. Using quality improvement (QI) methodologies and supported by validated patient electronic medical record (EMR) data, SPIDER will engage multi-disciplinary practice teams to form Collaboratives to work with QI Coaches to identify areas to improve, develop strategies and implement changes. We believe that integration of SPIDER approach in the primary care practice will improve care by empowering patients and physicians so that they can have more meaningful discussions about medications prescribed and taken.

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P20: Proposal of a short satisfaction scale to measure the quality of the consultation in ED

BACKGROUND:
As part of a multi-faceted project on the quality of emergency consultations seeking to link Doctor-Patient Communication, patient' and physician' behaviors and adherence together, a patient satisfaction questionnaire was required. To construct and validate a satisfaction scale compatible with the model. Then, the objective was to measure satisfaction and to study its determinants in emergency departments.

SETTING & PARTICIPANTS:
All adults and adolescents > 15 years diagnosed with ankle sprain, diverticulitis, infectious colitis, pyelonephritis, pneumonia or prostatitis in two EDs were included. Seven to 10 days later, patients were contacted by phone to answer questionnaires.

METHODS:
We based the construction of the satisfaction scale on a multidisciplinary theoretical model describing the main outcomes involved in an emergency consultation and on the synthesis of the validated satisfaction scales found in the literature. Then, we validated its psychometric properties in a prospective observational study in two EDs between November 2013 and May 2014. One week after the consultation, patients were contacted to answer to phone questionnaires.

RESULTS:
The satisfaction scale consists of 5 items on infrastructure, nurse, physician, overall satisfaction with the consultation and recommendation from the hospital to family or friends. From 189 patients included and 156 replies analysed, the median satisfaction score was 19 IQR [16-20] (range from 5 to 20).The internal coherence was good (Cronbach'Alpha= 0.83) and the weights of the hospital infrastructure, doctor and paramedical services were similar. In multivariate analysis, the only determinant of satisfaction was Doctor-Patient Communication (p>0.01) (cut off at ≥ 16; n=Y/154)

CONCLUSION:
We elaborated a short satisfaction scale compatible with a theoretical model that allow to the study of other health indicators involved in the consultation for an acute condition. Although overall satisfaction depends as much on the infrastructure (waiting time, food, cleanliness, etc.) as on the medical and paramedical staff, improved Doctor-Patient Communication can considerably increase overall satisfaction.

RELEVANCE STATEMENT:

AUTHOR/PRESENTER NAME(S):
Melanie Sustersic, MD, PhD; Jean Gales; Alison Foote ; Céline Vermorel, Jean-Luc Bosson

P21: Building a proof of concept national diabetes repository: work in progress

BACKGROUND:
Diabetes Action Canada (DAC) is a national chronic disease initiative to improve the care of patients with diabetes and its complications through a comprehensive program of research, quality improvement and service. Data management on a national level can provide an important informational resource for conducting patient-oriented research.

SETTING & PARTICIPANTS:
The PoC repository will be housed within the CPCSSN data center at the Centre for Advanced Computing and be managed and controlled by DAC.   It will include a virtual research environment to allow researchers to conduct their studies without giving them a copy of the dataset.Four CPCSSN Networks in Alberta, Ontario, and Quebec will be pooling their CPCSSN data relevant to patients with diabetes, representing 50,000 patients.

METHODS:
Diabetes Action Canada (DAC) is a national CIHR-funded Chronic Disease SPOR initiative that aims to improve the care of patients with diabetes through a comprehensive program of research, quality improvement and service. The CPCSSN (Canadian Primary Care Sentinel Surveillance Network) extracts, de-identifies and cleans primary care electronic medical record data, which is then entered into a structured national data set. The CPCSSN has validated algorithms to identify primary care patients with diabetes. A Proof of Concept (PoC) data repository for DAC could be formed using primary care data, to enable an information technology foundation that can support DAC projects.

RESULTS:
The PoC repository has been approved by DAC Leadership and by CPCSSN's Steering committee. Work has been undertaken to form the repository, and to set the stage for future expansion to include or link to other data: administrative data in several provinces; patient-reported outcome and experience data via smartphone apps or tablets.

CONCLUSION:
The PoC repository will be used for a variety of studies. Primary care EMRs can provide the data enabling a national repository for the study of diabetes in Canada.

RELEVANCE STATEMENT:
The main objectives of Diabetes Action Canada are to address the questions repeatedly articulated by patients living with diabetes: "what is my individual risk of developing blindness, kidney failure, lower limb amputation or heart failure?" and "what are the most effective ways to mitigate these risks?"

AUTHOR/PRESENTER NAME(S):

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P22: A Cluster-Randomized Trial Comparing Team-Based versus Primary Care Clinician-Focused Advance Care Planning in Practice-Based Research Networks

BACKGROUND:
The potential of ACP has been demonstrated in several studies. When prognosis, concerns, preferences, priorities and trade-offs are discussed with patients and families, plans can be made that align care with what patients and families want, quality of life improves, patients and clinicians are more satisfied with communication and decisions, death is more likely to occur at a patient-preferred location, and bereaved family members are less likely to experience regret or major depression.1-3 Yet, ACP is not happening for most people.

Primary care practices (PCPs) are ideally suited for ACP given their focus on continuity and coordination of care and the trusted and longitudinal relationships they have with patients, families, and communities. Shortages of subspecialists in many areas and the increased focus on medical homes and care transitions place PCPs as the center for care for many people with serious illnesses. However, primary care clinicians face competing demands, many perceived as more immediate than ACP. This pressure combined with deficits in skills, discomfort with prognosis, uncertainty about when to initiate ACP, and systems constraints (e.g., inadequate documentation and incentives) construct barriers to ACP in PCPs.4 Furthermore, while medical expertise is valuable and needed, patient and family concerns in ACP are not limited to medical care. A facilitated, team approach has the potential to expand access to ACP, mitigate primary care clinician burden, and comprehensively address patient and family priorities and needs.

The purpose of the study is to conduct a cluster-randomized controlled trial (RCT) in 7 PBRNs to examine the comparative effectiveness of a facilitated, team-based ACP versus primary care clinician-focused ACP using the SICP. Following the PICOS framework: population (P) is patients with serious illnesses and their families; intervention (I) is the facilitated, team SICP; comparator (C) is primary care clinician-focused SICP; outcomes (O) include short and long term effects listed below; and setting (S) is primary care practices. The specific aims and related hypotheses are:

AIM 1. Assess implementation in primary care of a facilitated, interdisciplinary team-based SICP vs. primary care clinician focused SICP on the primary long-term outcomes of concordance of care with patient goals, including place of death, and family bereavement for patients with serious illnesses. General hypothesis: Concordance of care with patient goals including place of death, and family bereavement will be higher with team SICP than with primary care clinician focused SICP

AIM 2. Assess implementation in primary care of a team-based SICP vs. primary care clinician focused SICP on secondary short and intermediate outcomes including ACP initiation, documentation, review and revision; family and clinician satisfaction with communication and decisions; and patient quality of life and caregiver burden. General hypothesis: ACP initiation, documentation, review and revision; family and clinician satisfaction with communication; patient quality of life and reduction in caregiver burden will be higher with team-based SICP than with clinician focused SICP.

AIM 3. Explore determinants of successful implementation of ACP across the primary care practices, with a focus on the comparison of practices in the US and Canada and on practice-level characteristics (e.g., size, rural/urban, affiliation with an integrated health system, prior ACP activities, PCP staff disciplines and training) to inform scale up and spread to wide variety of PCPs. General hypothesis: Differences across sites in factors such as acceptability, adoption, intervention and fidelity, affect successful implementation and ultimately patient and family outcomes.

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SETTING & PARTICIPANTS:
See Methods above

METHODS:
We will conduct a 4-year cluster-randomized trial (with allocation concealed) in which practices will be randomly assigned to either team SICP or primary care clinician-focused SICP. Facilitated and interdisciplinary team SICP can include people in roles such as community health workers, care managers, socials workers, and peer facilitators. Primary care clinicians can include physicians, physician assistants, or nurse practitioners.

We will develop a protocol following the SPIRIT checklist in which 5 practices will be recruited and enrolled from each of 7 PBRNs (160 patients at each PBRN). To be included, PCPs must have a patient panel that includes adults with serious illnesses, be able to identify

these patients, be willing to implement the randomly-assigned program, and contribute to data collection. Clinics must also have access to people other than primary care clinicians (e.g. community health workers, peer facilitators, care managers, social workers) who could participate if randomized to that arm. PCPs that have a comprehensive ACP program will be excluded. Recruitment will target adult patients, with a focus on patients over 65 years old, who have a serious chronic illness (e.g., end stage kidney disease, liver disease, COPD, CHF, or dementia), advanced cancer, frailty, or who a clinician indicates that death in the next year would not be a surprise. Patients can speak (and relevant patient materials will be available in) English, French or Spanish. Patients may be planning hospital discharge, but they must be returning to community living, to care at the PCP, and not enrolled in palliative care or hospice at the time of recruitment. Patients and caregivers will be followed for at least 1 year after recruitment or until death. Caregivers will be followed for 3 months after patient death.

Though no gold standard for measurement or provision of goal-concordant care has yet been established, our literature review suggests that an approximate 20-percentage-point difference in proportion of patients whose top-priority goals are met in the last months of life will be achievable and clinically relevant. We assumed a maximally conservative estimate of 40% for primary care clinician focused SICP and 60% for the team SICP, and an intracluster (practice) correlation coefficient (ICC) of 0.1. We plan to randomize 34 practices, randomizing equally to team SICP and primary care clinician-focused SICP, stratified by PBRN. Each practice will recruit 30 patients (N=1020). Allowing for dropout of one clinic before randomization, attrition of two clinics and 20% of remaining patients (25% overall), we will be powered at ≥90% with a final sample size of 768 (32 practices*24 patients) to detect this difference using a two-sided test with alpha of 0.05.

Subgroup analyses of interest are reflected in Aim 3. The focus will be on understanding the impact of practice and patient level characteristics. We will compare the outcomes by country (U.S. vs. Canada) and across key practice characteristics (urban/rural, small/large). We will also consider clinical population subgroups: 1. cancer, 2. advanced chronic conditions, 3. frailty/advanced age, and 4.dementia. We will explore the impact of these variables on the outcomes to determine if the ACP programs function differently in these different groups of target patients. Enrolled participants will be split 1/3 from Canada and 2/3 from the U.S. (approximately 280 patients in Canada and 560 in the U.S.). The clinical conditions subgroups are more difficult to estimate a priori, but we will monitor enrollment and adjust our analytic strategy as needed to ensure representation.

RESULTS:
The primary outcomes will be care that matches patient preferences including place of death and family satisfaction/bereavement.

Secondary outcomes are ACP documentation, patient and clinician satisfaction with communication and decisions, and patient quality of life.

CONCLUSION:
The potential of ACP has been demonstrated in several studies. When prognosis, concerns, preferences, priorities and trade-offs are discussed with patients and families, plans can be made that align care with what patients and families want, quality of life improves, patients and clinicians are more satisfied with communication and decisions, death is more likely to occur at a patient-preferred location, and bereaved family members are less likely to experience regret or major depression.[1-3]

References
1. Brinkman-Stoppelenburg A, Rietjens JA, van der Heide A. The effects of advance care planning on end-of-life care: a systematic review. Palliat Med. 2014;28(8):1000-1025.
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RELEVANCE STATEMENT:
The proposed project is designed to address the PCORI-identified need "for evidence to support adults with advanced illnesses and their caregivers in care planning over time so that care is consistent with their goals and preferences." Our objective is to determine if the Serious Illness Care Program (SICP) an evidence-based Advance Care Planning (ACP) program, can be adapted to address the resource constraints (e.g., limited clinician time, staffing challenges) common in primary care practices. To do this we will compare (A) SICP using interdisciplinary teams to complement the primary care clinicians to (B) SICP focused on primary care clinicians in 7 linked practice-based research networks (PBRNs) in the United States and Canada

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P23: Cough Drops: Cause for Concern?

BACKGROUND:
Over-the-counter (OTC) cough remedies are lightly regulated and their potential side effects may go unrecognized. During 2015, over 282 million cough drops were sold in the United States. A Wisconsin community clinician (RM) made clinical observations suggesting that excessive use of OTC cough drops may exacerbate rather than benefit coughs. The goal of this project was to assess whether menthol in cough drops is related to worse cough symptoms.

SETTING & PARTICIPANTS:
Adolescent and adult patients with an acute or subacute cough seeking care at one of five primary care clinic members of the Wisconsin Research & Education Network (WREN) located in urban, suburban and rural settings.

METHODS:
From April 2016 through May 2017 five Wisconsin primary care clinics invited adolescent and adult outpatients seeking medical care for an acute or sub-acute cough to take a voluntary, anonymous, 10-question cough drop use survey that included age, sex, smoking status, cough severity, cough duration, and cough drop use (including type and amount).

RESULTS:
Of the 548 surveys collected and analyzed, 363 (66.2%) reported using cough drops. Cough drop use was significantly associated with longer duration of cough at presentation ($P < 0.001$) but not with overall cough severity ($P = 0.09$). 269 (90%) cough drop users reported consuming drops with menthol. Univariate analysis found no statistically significant differences between the menthol and non-menthol groups for either severity ($P = 0.65$) or duration ($P = 0.17$). However, significant independent associations were found between cough severity and (i) average menthol dose per cough drop ($R = 0.19$, $P = 0.007$), (ii) number of cough drops consumed daily ($R = 0.2$, $P = 0.002$) and (iii) total amount of menthol consumed per day ($R = 0.21$, $P = 0.001$) that remained significant ($P = 0.003$) after controlling for age, sex, smoking status, season and clinic site.

CONCLUSION:
Cough severity in some individuals may be negatively influenced by the amount of menthol consumed via cough drops. Clinicians should include cough drop use in history taking of patients with persisting cough illnesses. Further research into potential mechanisms is warranted.

RELEVANCE STATEMENT:
People take cough drops frequently to treat cough symptoms and one common active ingredient is menthol. This study found that taking too many menthol-containing cough drops MIGHT make some coughs worse. This unanticipated possible harmful effect of menthol requires more study before we can know for sure. In the meantime, be sure to tell your doctor ALL of the over-the-counter (OTC) medicines you take, including cough drops. Even though you don't swallow them, cough drops are an OTC medication.

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P24: Managing Depression for New Cancer Diagnoses in Primary Care

BACKGROUND:
Primary care providers are an important link in the cancer diagnosis and beginning therapy. Any cancer diagnosis is a severe change for the patient; however, we believe the first cancer is a particularly life-altering event for the patient and their family. While the oncologic therapy is directed at specialist care, many patients still feel a strong connection to their primary care provider. They will often return to their primary care provider after cancer therapy has completed. Most recently, it has been possible for cancer patients to continue to see their primary care provider during their cancer therapy. There are been increased efforts on the part of both mental health and cancer advocacy groups have petitioned for more response from medical providers to mental health needs. This parallel development is found   in primary care in general and cancer survivors in specific. Prior literature showed that response to abnormal depression screenings in the primary care setting was often inadequate. This project looks at those patients who are at the intersection of both of these efforts. In our project, we examine the primary care response to depression and anxiety needs for patients with a new cancer diagnosis.

SETTING & PARTICIPANTS:
Family medicine offices at a University of Iowa were sampled for patients who were seen prior to their cancer diagnosis and continued to follow after their cancer diagnosis. This project focused on patients who were seen in the 2 years prior to and 2 years after their diagnosis.

METHODS:
This study is a retrospective review of medical records of patients of primary care clinics who had a new initial diagnosis of cancer. Patients were identified who had no history of cancer when they were initially seen at the primary care office, but developed a first cancer and continued to be followed by primary care after their diagnosis. Descriptive statistics and linear regression models were used. Qualitative review of the records was done to determine how providers are addressing depression and anxiety.

RESULTS:
Patients with higher depression screening score were receiving therapy (statistically significant). We found that there was also a significant skew towards more recently diagnosed patients, with patients diagnosed more recently significantly more like both be evaluated and receive therapy. As many of these patients had availed themselves support groups, we found that there was an almost equal distribution of provider type in managing the depression if found. However primary care providers where most likely to screening and discussion of mental health this part of their care.

CONCLUSION:
Primary care providers can be an important part of providing care for cancer patients and survivors as early as the time of diagnosis.

RELEVANCE STATEMENT:
The family physician is an important link in ensuring that new cancer patients receive comprehensive care before, during and after their, including mental health screening and therapy.

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P25: Patterns of thyroid screening and case detection in patients without thyroid disease in Canadian primary care

BACKGROUND:
Population based screening of asymptomatic adults for thyroid disorders is not recommended.(1) The annual incidence of thyroid disorders is less than 1%(2) and it is not known if screening will result in improved outcomes.(3) The US Preventive Services Task Force found insufficient evidence for or against screening;(3) Through Choosing Wisely Canada, the College of Family Physicians of Canada advises against ordering thyroid function tests in asymptomatic patients.(4)

The recommended test for the detection of hypo or hyperthyroidism is a Thyroid Stimulating Hormone, or TSH.(5) In one Ontario-based report, this test accounted for the second highest laboratory costs after microbiology cultures.(6) Due to concerns about possible overuse, the TSH checkbox was removed from the standard Ontario lab requisition in 2012.(7)

There is documentation of large practice variations in TSH ordering in the UK.(8) A recent study, as yet unpublished study in two family practices in or near Toronto found significant rates of over-use. There are no pan-Canadian studies on patterns of TSH ordering in primary care.

Using a preliminary analysis of UTOPIAN data, we found that 62% of patients without thyroid disease and not on thyroid medications had at least one TSH test recorded in their chart in two years. 93% of those tests were normal; 38% of patients with a normal test had one or more repeat test in a two-year period.

SETTING & PARTICIPANTS:
Our aim is to describe TSH ordering for adult patients without thyroid disorder in primary care. We will exclude patients with a diagnosis of thyroid disease (hyperthyroid, hypothyroid, thyroid cancer) or those prescribed thyroid replacement therapy. Patients with indications for thyroid testing (on amiodarone or lithium, currently or recently pregnant)(1) will be excluded. While the data may not allow us to fully differentiate between screening and case finding, we will report parameters commonly associated with case finding: obesity, depression.(1) The prevalence of thyroid disorders is greater in the presence of auto-immune conditions; we will include the commonest condition, rheumatoid arthritis, as a co-factor. We will also look for evidence of screening by measuring the prevalence of TSH testing done concurrently with blood tests that are often done for screening (total cholesterol, A1c).

METHODS:
We will use routinely collected clinical EMR data from the latest data extraction contained in the Canadian Primary Care Sentinel Surveillance Network (CPCSSN). (9) CPCSSN is Canada's largest EMR-based chronic disease surveillance system;(9) it includes data collected from eleven primary care practice based research networks in eight provinces. Consenting family physicians and other primary care providers participating in CPCSSN contribute de-identified EMR data to a regional CPCSSN repository; patients can opt-out if they choose to do so. Data from all participating networks are aggregated in a single central database.(9, 10) The distribution of the CPCSSN patient population is reasonably similar to that of Canadian census.(11)

RESULTS:
There were 184,777 patients who were considered to be eligible for this study. These 184,777 patients did not have any thyroid-related problems, thyroid-related medications, and pregnancy/infertility in the past, and also had more than one visit; seen by their doctor after Jan 01, 2015 and were at least 20 years of age as of December 31, 2016.

**Please note that these results are preliminary as this project is still in progress.

CONCLUSION:
We observed that a high proportion of patients had TSH test done in the last two years with no evidence for thyroid related illnesses from health condition, lab, billing and encounter diagnosis tables.

RELEVANCE STATEMENT:
Population based screening of asymptomatic adults for thyroid disorders is not recommended. However, we are observing a high proportion of patients who had TSH test done in the last two years in spite of no evidence for thyroid related illnesses from health condition, lab, billing and encounter diagnosis tables.

AUTHOR/PRESENTER NAME(S):
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P26: Feasibility of Targeted Screening for Poverty in a Large Primary Care Team

BACKGROUND:

In Ontario, poverty affects up to 20% of families and is considered to be a very significant influence on the health of individuals. An evidence-based tool for poverty screening and intervention in primary care is available and effective, but physicians may not be able to screen all their patients due to time constraints.

SETTING & PARTICIPANTS:

80 North York Family Health Team (NYFHT) Physicians and their care teams in Toronto, Ontario, Canada looking after over 80,000 patients

METHODS:

Following a successful pilot, all 80 family physicians in the NYFHT have been invited to participate in the study. A search for social and material deprivation, using postal codes and the Canada Postal Code Conversion File has been done. An alert will be placed in the EMR of those patients living in the most socially and materially deprived areas, for those physicians who agree to participate. The alert will prompt a member of the care team to screen for poverty, using two questions. Patients screening positive will be referred to a FHT Case Worker for assistance in supplementing income, and to free tax clinics. This will be evaluated at six and 18 months.

RESULTS:

We expect reasonable feasibility and uptake of targeted screening.

CONCLUSION:

If this approach is feasible, it may provide a clinical pathway towards improved screening for poverty in routine Canadian primary care.

RELEVANCE STATEMENT:

Currently, there is no routine poverty screening in our family health team. We seek to increase awareness that poverty is a relevant and important determinant of health in our community, and set the stage for helping to address poverty at the primary care level.

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P30: Unique Depression Screening Opportunity in a Diverse Sample of Adolescent Athletes

<u>BACKGROUND:</u>
Depression is a common mental health issue, with increased prevalence in adolescents. Studies show rates of depressive symptoms in college athletes at 6.3% and higher, but little is known about the rate of depression in adolescent athletes. Females are twice as likely to develop depression by 15 years of age, compared to males, however this discrepancy has not been studied in adolescent athletes. Additionally, ethnic minority adolescents demonstrated higher prevalence of depression, but lower rates of treatment for depression, even after adjusting for family income and insurance status. There is evidence that athletes are less likely to seek care for mental health disorders than non-athletes. As such, it is important to identify non-traditional opportunities for mental health assessment in diverse, adolescent, underserved athletes, and to establish base rates of depressive symptoms in a diverse population.

As part of a mandated routine in sports medicine, mental health screening during the pre-participation evaluation (PPE) has the potential to reach adolescent athletes who would not otherwise be willing or able to access mental health assessment. The PPE is often an adolescent's only contact with the healthcare system, making it a unique and critical time for assessment and intervention. A National Athletic Trainers' Association's Consensus Statement states the importance of recognizing secondary school athletes with psychological concerns and designates the PPE as an optimal time to screen for mental health issues. Our purpose is to examine and describe a unique method of screening for mental health symptoms in an economically and ethnically diverse sample of high school athletes, and to report rates of depressive symptoms, as reported on the PPE, in this sample.

<u>SETTING & PARTICIPANTS:</u>
Adolescent athletes (N=2213) from urban, suburban, and rural public high schools in Charlotte, NC, USA were offered a free, comprehensive PPE conducted at a healthcare center, in a mass participation station-based setting.

<u>METHODS:</u>
We examined responses to mental health screening questions, that were included as part of large-scale, free, comprehensive PPE screening event for high school athletes.

<u>RESULTS:</u>
Our findings demonstrate a lower rate of depression symptom endorsement in adolescent athletes, compared to the general population. Adolescent female athletes reported symptoms of depression on the PPE at twice the rate of male athletes. We found that 30.3% of those who reported depressive symptoms were African American females, while this subgroup only made up 10.3% of the total sample population.

<u>CONCLUSION:</u>
Adolescent athletes who participate in high school athletics may have lower rates of depressive symptoms than the general population of adolescents. This may suggest that participation in high school athletics is protective factor against symptoms of depression. However, adolescent African American female athletes endorse depressive symptoms at higher rates than males or whites.

<u>RELEVANCE STATEMENT:</u>
Mental health screening as part of the PPE plays an important role in identifying potential depression in athletes, particularly in certain subsets of these populations. African American females participating in high school sports reported higher rates of depression than males or whites. Athletic trainers, as the gatekeepers of screening for participation, are well-positioned to arrange proper intervention and referral for athletes with depressive symptoms.

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P31: Does the number of adverse childhood events effect patients' trust in physician?

BACKGROUND:

Patient trust in physician is associated with higher utilization of more appropriate outpatient services, greater satisfaction with care and superior self-reported health outcomes. There have been a number of studies of patient trust in physicians and psychiatric health, but none to our knowledge that focuses specifically on exposure to traumatic stressors during childhood. Given the effect of childhood traumatic events on trust and relationship building, we thought it would be necessary to determine whether traumatic events occurring during childhood later predict adult trust in physician.

SETTING & PARTICIPANTS:

Family Medicine patients at 4 university and 2 private practices via the ARCHNet PBRN

METHODS:

We surveyed patients on their exposure to adverse childhood events and their trust in physician using the Anderson & Dedrick Trust in Physician Scale (N=186). Logistic regression was used to measure likelihood of having neutral to high levels of trust (score of 33 or higher).

RESULTS:

Patients with more ACEs had a lower likelihood of trusting their physicians (OR=0.79 95% 0.64, 0.98) in unadjusted models but no affect when adjusted for demographic variables (OR=0.83, 95% 0.64, 1.07), and (OR=0.84, 95% 0.64, 1.10), when adjusted for depression and anxiety. Meanwhile, although not significant at $p<.05$, individuals with higher incomes tended to have a higher level of trust (OR=1.19, 95% 0.99, 1.42).

CONCLUSION:

We found that adverse childhood events could lower trust in physicians but this trust is mediated by income. The importance of building strong, trusting relationships with patients starts early, and may be of stronger importance among low income children who are at higher risk of experiencing adverse events during childhood. Future studies should confirm these findings with larger samples, as well as consider focusing on trust in physician as children grow older to assess periods of higher risk.

RELEVANCE STATEMENT:

The importance of building strong, trusting relationships with patients starts early, and may be of stronger importance among low income children who are at higher risk of experiencing adverse events during childhood

AUTHOR/PRESENTER NAME(S):

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P32: Loneliness in Primary Care: A prevalance Study

BACKGROUND:
Loneliness has been identified as an important social determinant of health and is associated with depression, cardiovascular risks, and all-cause mortality. While it is known that the prevalence of loneliness in older adults in the general population is about 10%, to our knowledge there are no studies that have prospectively asked clinical populations about loneliness. The objective of this study is to determine the prevalence of loneliness in patients presenting for care in primary care clinics. Additionally, we hope to understand associations with loneliness and specific patient factors, including demographics and health care utilization.

SETTING & PARTICIPANTS:
The UCLA Three Item Loneliness Scale was administered in outpatient urban and rural primary care practices associated with practice-based research networks in Colorado and Virginia. The survey also included questions regarding health care utilization, number of healthy days, and other patient demographics. Participants were English-speaking patients, age 18 and older, presenting for routine care in participating outpatient primary-care practices (n=1235).

METHODS:
Cross- sectional card study. The primary outcome was the prevalence of high loneliness scores. Secondary outcomes include associations with loneliness and utilization, number healthy days, and demographic data. Analysis was performed with SAS generated linear and generalized linear mixed models to examine associations.

RESULTS:
The overall prevalence of loneliness was 20% (246/1235), while the prevalence in adults above 65 years old was 11.1% (34/307) and below 65 years old was 22.9% (210/919). There was a significant and negative association with loneliness and age (OR = 0.98, 95% CI: 0.98, 0.99). We did not find a significant association between loneliness scores and location, with prevalence in rural areas (20%) similar to that in urban areas (16%). However, there was a significant and positive association between high loneliness scores and female gender (OR=1.43, 95% CI: 1.06, 1.95), number of unhealthy days (OR=1.06, 95% CI: 1.05, 1.08), number of primary care visits (OR= 1.08, 95% CI: 1.04, 1.12), number of hospitalizations (OR= 1.18, 95% CI: 1.04, 1.34), and emergency room or urgent care visits (OR= 1.26, 95% CI: 1.14, 1.39). Additionally, loneliness classifications were significantly different based on respondent race, relationship status, and employment category ($p < .05$).

CONCLUSION:
Our findings suggest there is a higher prevalence of loneliness in adults presenting to primary care than in the general population and those with high loneliness scores are more likely to be female, report higher health care utilization, and report lower number of healthy days.

RELEVANCE STATEMENT:
While a variety of proposed individual and community-based solutions for loneliness exists, the health care and public health community lacks widely accepted and generalizable evidence-based interventions. Identifying patterns of loneliness in primary care will allow for an enriched dialogue about potential interventions while proliferating a conversation about primary care as a potential site for intervention delivery.

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P33: Governance Principles and Operational Model of Diabetes Action Canada's Data Repository for Patient-Oriented Research

BACKGROUND:
Diabetes Action Canada (DAC) is developing a data repository to support research, QI, and service that will improve diabetes care. The objective is to design an information governance process for the intended diabetes data repository that will support research, QI, and service.

SETTING & PARTICIPANTS:
Settings: Provinces of Alberta, Ontario and Quebec in Canada. Participants: Through an extensive, global literature review, DAC developed a principles-based governance framework and draft information governance model focused on patient participation. We are conducting key informant interviews in up to 6 organizations to determine how national and global leaders in developing data safe havens have instantiated these principles.

METHODS:
Literature review and key informant consultations

RESULTS:
DAC has identified eight values-based principles to guide our governance model: transparency; accountability; following the rule of law; integrity of purpose, science and ethics; participation and inclusiveness; impartiality and independence; effectiveness, efficiency and responsiveness; and reflexivity and continuous quality improvement of process. There is a strong representation of patient and healthcare professional (HCP) partners: Patients represent 50% of members on the research governing committee and HCPs 20%. Applicants for access to data must indicate involvement of patients and HCPs in the research. DAC is in the process of identifying best practices internationally in information governance. The poster will present our draft governance model and key informant findings to date.

CONCLUSION:
To earn and maintain public trust, information governance must go beyond compliance with formal regulations to ensure a 'social licence' for the use of the data. The DAC data repository and patient registry will accomplish this through a focus on research that is scientifically sound, ethically robust and in the public interest.

RELEVANCE STATEMENT:
Participants who have viewed this poster should appreciate the importance of patients and healthcare provider partnerships when establishing a data repository and involving diverse stakeholders in the governance of health information for research purposes. Participants should also understand how a principles-based governance framework may be translated into an operational model of information governance.

AUTHOR/PRESENTER NAME(S):

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P34: Demographic, clinical and echocardiographic characteristics of heart failure patients in a Haitian teaching hospital

BACKGROUND:
In low and middle-income countries, non-communicable diseases are becoming increasingly more important. In Haiti, cardiovascular diseases, including heart failure are often the leading diagnoses at the time of admission. This study aims to better characterize heart failure admissions through data collection at a rural Haitian teaching hospital.

SETTING & PARTICIPANTS:
The University Hospital of Mirebalais is a public referral health facility, managed by Zanmi Lasante a non-profit organization. It is a two hundred thousand square feet teaching hospital of 320 beds, from which 38 are for Internal Medicine. The medical team includes 9 internal medicine specialists and 15 residents in training.
The charts of all the patients admitted to the Internal Medicine for heart failure from September 2016 to February 2017 were looked at. Those which the diagnosis was confirmed by the cardiologist and the essentials parts of their paper chart were found were included in the study.

METHODS:
In this cross-sectional descriptive study, secondary data from electronic medical records and paper charts were extracted. The majority of patients received a comprehensive evaluation, which included a physical examination, compete blood count, basic metabolic panel, an electrocardiography and a specialized echocardiography performed by a cardiologist. Data were recorded and analyzed on Epi Info 7.2 using proportion, mean and standard deviation (SD).

RESULTS:
Among the 171 patients admitted during the study period there were more women than men (59.06%). On average, the women were about 9 years younger than their male counterparts (48.09 yo, SD 19.32 vs. 56.82 yo, SD 19.19 respectively). The vast majority of the studied patients presented with anemia (66.8%) and more than half (54.46%) of the patients reported a history of hypertension. Almost all patients (95.32%) were admitted in NYHA class IV. It should be noted that nearly one-third (32.16%) of the study participants were re-admissions. The leading three heart failure diagnoses were: idiopathic dilated cardiomyopathy (38.46%), hypertensive heart disease (19.5%) and peripartum cardiomyopathy (14%). Ischemic heart disease was less common (8%). Peripartum cardiomyopathy accounted for 24.75% of heart failure admissions among women.

CONCLUSION:
In summary, women were admitted more frequently than men and were about 9 years younger on average. Patients usually presented late in the course of the disease. Idiopathic cardiomyopathy was the most frequent diagnosis followed by hypertensive heart disease. It should be noted that nearly a quarter of the women who were admitted were diagnosed with peripartum cardiomyopathy. Based on this analysis, strategies should be developed to address the high prevalence of heart failure in the region and more orientated studies indicated regarding peripartum cardiomyopathy.

RELEVANCE STATEMENT:
There is the hypothesis of a high prevalence of cardiovascular diseases in Haiti, notably heart failure. However, very few reliable data are available on that matter. This study conducted in the internal medicine department of a brand new teaching hospital in Haiti is one of the most complete to date. All patients had a comprehensive evaluation including basic workup and echocardiography.

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P35: Developing and Implementing Large-Scale Community-Driven Integrated Care

BACKGROUND:
In the United States, social determinants of health (SDOH) are increasingly recognized as important causes of poor health outcomes. This has given rise to efforts to coordinate care across biomedical, behavioral and mental health, and social services organizations to provide what is often described as integrated care. Two community-driven projects are currently underway in southeast Michigan to develop and test the effectiveness of enhanced community-clinical linkages to better identify and manage unmet social needs and improve clinical outcomes. In both settings, these efforts include developing new community-clinical workflows and information technology (IT) capabilities to support care coordination or social services navigation. Here we describe the results of an ancillary study that qualitatively explores the processes for developing and implementing novel integrated care models in these two communities.

SETTING & PARTICIPANTS:
The two communities have taken different approaches to improving community-clinical linkages. In Jackson, a small industrial city with a poverty rate higher than the national average, multiple stakeholders have employed the Collective Impact model to implement a broad community-wide SDOH screening and care model that focuses on helping individuals with social services navigation. The second initiative, which encompasses the more economically-diverse Livingston and Washtenaw Counties, has a narrower focus on SDOH screening and provider-driven care coordination for individuals at highest risk for frequent emergency department utilization. At both field sites, our participants included local leaders overseeing the planning and implementation, as well as managers and clinical and social service providers from participating organizations.

METHODS:
We used participant observation and in-depth semi-structured interviews for data collection. We engaged in participant observation of key development activities, including meetings of multiple local committees responsible for planning and implementation, extensive site visits at each participating organization, and planning and implementation processes such as IT design and quality improvement. We interviewed project leaders and care managers to understand existing service linkages, practices for information exchange, current IT capabilities, and perceived opportunities and barriers for improving care integration. We used inductive methods to analyze interview transcripts and fieldnotes.

RESULTS:
Preliminary findings show that: (1) In both communities, integrating care across clinical and social services requires the development of new inter-organizational workflows, norms, and IT capabilities that are vigorously negotiated by the community. This is a slow process that requires facilitation, and rigid adherence to the Collective Impact model may impede the pace of transformational change; (2) Inter-organizational IT systems are necessary for integrating care, but also cause disruptions to local workflows such as increasing the burden of documentation for care managers; (3) Care managers often do not want or need access to granular medical or social data; instead, they want to know who else is involved in the care of the patient and the distribution of care responsibilities; (4) Trust between care managers and the patient, and between care managers from different organizations, are paramount to the success of SDOH screening and effective care integration. Trust is critical for obtaining and sharing patient data between a range of service providers.

CONCLUSION:
Developing and implementing community-driven integrated care models is a slow and iterative process but a necessary requirement for effective action. It is important to document where breakdowns occur and how repairs are made over time. Our preliminary findings highlight implications for inter-organizational partnerships and suggest long-term challenges such as the sharing and governance of patient data.

RELEVANCE STATEMENT:
Large-scale community-driven projects are necessary to learn how to effectively connect SDOH assessment to clinical care. Studies that explore the inner workings of cross-sector community partnerships are of tremendous value in identifying the critical components for success in planning and implementing integrated care models in 'real world' community settings.

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P36: Failure to Launch: Lessons Learned from Difficulties Encountered While Implementing a Clinical Intervention in the Busy Primary Care Practice Setting.

BACKGROUND:
Physician members of the South Texas Ambulatory Research Network (STARNet) reported problems managing overweight or obese patients, and asked STARNet to devise a project to help them manage this difficult and prevalent problem. We used an Academic Detailing approach to teach Motivational Interviewing skills to primary care physicians and staff, hypothesizing that this more collaborative counseling style would help patients adopt healthier lifestyles more readily. The purpose of this session is to review difficulties encountered with enrolling overweight and obese subjects in the busy primary care practice setting, and to suggest various non-confrontational approaches to help practices overcome these barriers.

SETTING & PARTICIPANTS:
Setting: small- (1-4 clinicians) and medium-sized (5-10 clinicians) physician-owned primary care practices in South Texas. Participants: Physicians, midlevel providers (Physician Assistants and Nurse Practitioners) and other practice staff (both clerical and clinical staff).

METHODS:
STARNet practices were invited to take part in this educational project, teaching Motivational Interviewing (MI) skills to physicians and staff, with the goal of delivering more patient-centered counseling for overweight and obese patients. Participating practices received four 1-hour training sessions during their usual staff meeting time over the course of 4 months. Training sessions addressed four key Motivational Interviewing skills: 1) OARS (Open-ended questions, Affirmations, Reflective statements, Summaries); 2) Setting the Agenda; 3) Assessing Importance & Confidence; and 4) Eliciting Change Talk. Once these MI training sessions were completed, a fifth meeting was scheduled to review human subjects protection guidelines and subject enrollment protocols.

RESULTS:
Most practices were open to the idea of physician and staff training re principles of Motivational Interviewing and did well with the training sessions. However, many sites that were "champs" at training were unable to make the transition to enrolling patients. Some approaches that worked for us included: 1) activate physician champions (MD enthusiasm and endorsement are keys to success); 2) reassure office managers (e.g., time commitment, staff training, "one more thing to do", etc.); 3) empower staff ("yes, you are important to the success of this project!"); 4) recognize and address practice communication problems; 5) be crystal clear about expectations (i.e., don't downplay the workload); 6) listen to their concerns (take the time during the protocol review session to answer all their questions, brainstorm about solutions, let them ventilate about practice difficulties, etc.); 7) maintain close communication with the assigned staff and MD champion at each site; 8) train physicians and staff together (i.e., principles of MI, human subjects protection, enrollment protocol); 9) anticipate enrollment problems (help practices do a better job of planning for enrollment: who, what, when, where, how, why); 10) be patient ("If there is one thing we understand, it is that primary care practices are very busy these days"); 11) be humble ("We are guests in your home"); 12) defuse awkward situations with humor; 13) be persistent (even well-intentioned sites need frequent reminders and support); 14) try the Motivational Interviewing approach (i.e., emulate the behavior you are trying to instill).

CONCLUSION:
Even well-organized and motivated clinics have difficulty enrolling patients in the busy practice setting. Primary care researchers must be prepared for the many barriers and obstacles that impede subject recruitment, and help practices relatively new to the research paradigm find ways around these obstacles. Our experience taught us that "anticipatory guidance", patience, persistence, and humor are valuable tools to insure timely subject recruitment.

RELEVANCE STATEMENT:
Primary care practices struggle to help overweight or obese patients adopt a healthier lifestyle, but recruiting subjects in a busy clinic can be challenging. The purpose of this presentation is to review the difficulties we encountered with enrolling overweight and obese subjects in typical primary care practice settings, and to suggest various non-confrontational approaches that can help practices overcome these barriers.

AUTHOR/PRESENTER NAME(S):
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P37: The role of race/ethnicity in the communicative identity of patients diagnosed with Type 2 diabetes

BACKGROUND:
Disclosure and discussion of a disease diagnosis by a patient with family members and friends can strengthen social support networks and influence behaviors such as healthy eating and physical activity, which are critical to disease self-management. This study explored how race/ethnicity may influence how and to whom people disclose personal health information related to a diabetes diagnosis.

SETTING & PARTICIPANTS:
Primary clinics at two federal medical centers in Georgia and Nevada. Patients who met the inclusion criteria of age (25 to 64) and presenting with T2DM (A1c ≥ 6.5) were mailed surveys and invited to interview.

METHODS:
Within the practice-based research network, a cross-sectional survey was mailed to patients diagnosed with T2DM at two medical centers. Follow-up mailings also invited patients to interview. In an ANCOVA controlling for age and patient activation (PAM), race/ethnicity and gender were tested onto three isolated Diabetes Illness Representations Questionnaire (DIRQ) items. Interview transcripts (n = 33) were analyzed to explore how participants disclosed and discussed their diagnosis with family members and friends.

RESULTS:
The quantitative dataset (n=697) included patients who identified as non-Hispanic Black/African-American, non-Hispanic White American, Hispanic American, and Asian American. The first item, "My diabetes strongly affects the way other people see me as a person," revealed a main effect of race/ethnicity, $F(3, 694)= 5.34$, $p<.001$. Asian American patients perceived diabetes as more influential than patients of other races/ethnicities. The second item, "My diabetes causes difficulties for those who are close to me" revealed a main effect of gender, $F(1, 694)= 8.09$, $p<.005$. Male patients perceived their diagnosis as being more difficult for others than female patients. The third item, "My diabetes strongly affects the way I see myself as a person" revealed a main effect of race/ethnicity, $F(3, 691)= 4.18$, $p=.006$. Asian American patients perceived diabetes as having greater impact on their self-image than patients of other races/ethnicities.

Among participant interviews, across R/E, a theme emerged regarding patient silence on diagnosis. Within this theme, some patients explicitly stated they chose not to disclose or discuss their diagnosis with either family members and/or friends. Of those who did not self-disclose, patients specifically restricted diabetes communication with their children. Even some patients who noted family members/friends "knew" of the diagnosis voiced an underlying desire not to discuss it any further with these family members or friends.

CONCLUSION:
Survey results identify racial/ethnic and gender differences, especially in Asian American and male patients, in patient identity and perceived impact of diabetes diagnosis. Interview results reveal a reluctance to engage with others about their diagnosis beyond the superficial.

RELEVANCE STATEMENT:
Patients should be encouraged to build strong, positive social networks. Research is needed to understand the impact of self-disclosure on self-management behaviors. Moreover, we must consider the ethical questions of whether we should influence a culture's diabetes communication norms.

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P38: Childhood Underinsurance in Southwestern Ohio: Pre and Post the Affordable Care Act (ACA)

BACKGROUND:
In 2016, the national uninsurance rate for children was 4.5%. In Ohio, the rate was 3.6%. In 2009-2011, this study's investigators published a study that reported a childhood underinsurance rate of around 16% in southwestern Ohio prior to the Affordable Care Act (ACA). This analysis compares childhood underinsurance findings reported in the earlier paper (2009-2011) with children from southwestern Ohio in 2016, post ACA implementation.

SETTING & PARTICIPANTS:
SOARNet (Southwest Ohio Ambulatory Research Network) is a practice based research network in the Miami Valley of Ohio. It consists of a diverse group of pediatric and family practice settings in our community. Participants were recruited from many of our practices. Any children between 6 months and 18 years old with health insurance during the 12 months prior to the survey were included.

METHODS:
The Medical Expenses for Children Survey was used during each year of this study. It was adopted for children based on Vorrhess' earlier study of underinsurance in adults. Underinsurance was defined as parents' inability to follow at least one of their child's pediatricians's recommendations in the past 12 months due to their inability to pay for that recommendation. This was a convenience sample of parents recruited in the waiting room of their child's pediatrician. All study pediatric primary care practices participate in the Southwestern Ohio Ambulatory Research Network (SOARNet). Inclusion criteria were index children between 6 months and 18 years of age with health insurance during the 12 months prior to the survey administration. The response rate was about 90% (N=3988) pre ACA (2009-2011) and around 80% (N=1151) post ACA (2016).

RESULTS:
The Pre ACA underinsurance rate was 16.9%, the post ACA rate was 14.4% (p=0.05) 85.8% of all respondents were mothers, 83.2% were white, 79.9% were married, 92.8% had at least a high school education, 51.9% reported annual household income less than $50,000 and 58.8% of index children had private insurance. The 95% CI for the adjusted OR (adjusted for demographic variables) for the time period (pre/post ACA) and underinsured/not underinsured (N=4802) included the number 1.0. About 40% of both time subgroups had public insurance, and about 17% of both time subgroups of parents thought it was becoming more difficult to obtain health care for their child compared to three years earlier. Over 90% of underinsured children's parents pre as well as post ACA thought their child's health had suffered as a result of their inability to pay for recommended care.

CONCLUSION:
While data indicate that American children's rate of uninsurance has improved post ACA, children in southwestern Ohio continue to struggle with high rates of underinsurance after implementation of the ACA. Parents in SOARNet continue to report that their inability to pay for their children's healthcare has an adverse effect on their children's health.

RELEVANCE STATEMENT:
Even if children have insurance, it may not fully cover all of the services that families need to use (x-rays, pharmacy, lab tests, etc.) If families can't afford to pay for these services, children may not get all of the care they need and their health may suffer.

AUTHOR/PRESENTER NAME(S):
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P39: Can I pick your brain? Top tips for practice facilitation

BACKGROUND:
Practice facilitators have been present in PBRNs since the 1990's in the UK and the USA but are not common in Canadian PBRNs. In Quebec there are four PBRNs, each affiliated with the Department of Family Medicine at the four medical schools. They receive funding from a primary health care knowledge network (Réseau-1 Québec), which is creating a community of practice among the PBRN coordinators, who are mostly trained in research methods. Since 2017 the coordinators are trying to re-orient their functions to include elements of practice facilitation with a goal of eliciting research questions from clinicians and facilitating clinic involvement in research projects. Their role does not include quality improvement activities, though they try to form a collaborative relationship with the quality improvement agent in each clinic. The objective of this poster is to gather advice from conference attendees - especially experienced practice facilitators - about successful practice facilitation.

SETTING & PARTICIPANTS:

METHODS:
We will do a thematic analysis of the burning questions posed by our PBRN coordinators and directors. The top three or four issues will be stated as questions in our poster. The poster will include generous blank space where attendees can answer the questions by writing on the poster 'wall'. We anticipate questions such as: 1) What qualities are most important in a good facilitator? 2) How do facilitators manage and maintain relation shops with several clinical settings at a time? 3) What training would you recommend? 4) What are major "no-no's", things to avoid. In addition, we would like an active participation by encouraging the participants to formulate new questions / comments related to the facilitation of the practice.

RESULTS:
Answers, new questions and comments will be compiled and analyzed and discussed at the monthly PBRN coordinator meetings. They will be shared with the attendees via email and be presented at the International Conference on Practice Facilitation 2018.

CONCLUSION:
The practice facilitators are a very useful resource for improving the health of the population in practices and in communities, this is why an improvement of their capacities is linked to a better knowledge of their challenges.

RELEVANCE STATEMENT:

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P40: Impact of Patient Information Leaflets on Doctor-Patient Communication in the context of acute conditions: a before-after prospective controlled study

BACKGROUND:
In the context of acute conditions, where communication is difficult, Patient Information Leaflets (PILs) could improve the exchange of information and Doctor-Patient Communication (DPC).The objective is to assess the impact of PILs on DPC, satisfaction, adherence, and patient and doctor behaviors by a prospective controlled before-after study in two Emergency Departments.

SETTING & PARTICIPANTS:
Adults and adolescents > 15 years diagnosed with ankle sprain, diverticulitis, infectious colitis, pyelonephritis, pneumonia or prostatitis, recieved from the doctor a PIL along with an oral explanation.

METHODS:
Seven to 10 days later, patients were contacted by phone to answer questionnaires.

RESULTS:
Analysis of the 324 patients showed that PILs improved the DPC score (range from 13 to 52): 46 [42-49] for 168 patients with PILs versus 44 [38-48] for 156 patients without (p-value< 0.01). The adjusted Odds Ratio for good communication (score >35) was 2.54 [1.27-5.06]. The overall satisfaction and adherence scores did not show significant differences. In contrast, satisfaction with healthcare professionnals and timing of medication intake were improved. The overall satisfaction score improved significantly on per-protocol analysis. With PILs, the doctors prescribed less drugs and more examinations (radiology, biology, appointment with a specialist); the need for a new medical consultation for the same pathology was reduced from 32.1% to 17.9% (OR 0.46 [0.27-0.77]) and particularly in ED.

CONCLUSION:
In emergency departments, PILs given by the doctor improve DPC, satisfaction with healthcare professionnals, reduce the number of emergency consultations for the same pathology and change the doctor's behavior.

RELEVANCE STATEMENT:
In emergency departments, PILs given by the doctor improve DPC, satisfaction with healthcare professionnals, reduce the number of emergency consultations for the same pathology and change the doctor's behavior.

AUTHOR/PRESENTER NAME(S):

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P41: Using the Consolidated Framework for Implementation Research to Identify Barriers and Facilitators for a Colorectal Cancer Screening Patient Education Video: A Qualitative Study

BACKGROUND:
Colorectal Cancer (CRC) is the second leading cause of cancer deaths in the United States. Despite growing evidence supporting the effectiveness of CRC screening in adults aged 50 to 75 years, implementing culturally appropriate screening programs into clinical practice can be challenging. The two aims of this study were to (1) identify barriers and facilitators influencing the implementation of an evidence-based CRC screening patient education video using the Consolidated Framework for Implementation Research (CFIR), and (2) compare factors between two clinical practices who used the CRC patient education video to increase screening completion.

SETTING & PARTICIPANTS:
All providers and leadership that completed a brief survey were invited to participate in an interview. Out of the 21 completed surveys, 7 participants agreed to be interviewed and 4 interviews were completed. Key informants included 2 clinical faculty, 1 part-time provider, and 1 nurse manager.

METHODS:
In January 2017, we implemented a CRC screening patient education video in two family medicine practices that serve a large proportion of Medicare and Medicaid patients. We used CFIR to design an interview guide to elicit the care team's perceptions of barriers and facilitators to uptake of the intervention and associated CFIR constructs. Key informant interviews were conducted between November and December 2017. Responses were coded to identify CFIR constructs that influenced implementation of the CRC screening intervention.

RESULTS:
CFIR is comprised of five major domains: Intervention Characteristics, Outer Setting, Inner Setting Characteristics of Individuals, and Process of Implementation. Of the 39 CFIR constructs, 21 were discussed in the interviews: (4) constructs related to Intervention Characteristics, (1) Outer Setting, (10) Inner Setting, (2) Characteristics of Individuals, and (4) Process of Implementation. Using an interview guide designed to elicit responses relating to CFIR constructs, it was revealed that both practices adopted the CRC patient education video intervention to varying degrees. Providers and leadership at both practices felt the patient education video was beneficial to patients and providers, and reinforced the CRC screening intervention. However, lack of available resources and competing clinical demands were identified as implementation barriers to the CRC screening intervention. There was no negative association related to complexity of the intervention, as a majority of providers stated the video was compatible with existing clinic workflow. Maintaining leadership engagement, networks and communication, and access to information and knowledge were discussed as implementation challenges. Suggestions for improving implementation included identifying a nurse champion and empowering nurses to initiate the CRC screening video.

CONCLUSION:
The CFIR framework helped identify barriers and facilitators influencing implementation of a colon cancer screening intervention.

RELEVANCE STATEMENT:
Guideline based colon cancer screening is known to improve outcomes for patients. Here we describe a process to identify barriers and facilitators to implementing an educational video around colon cancer screening choices.

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P42: The Comprehensive Curriculum in Medication Assisted Treatment for Opioid Use Disorder for Rural Primary Care Practice Teams

BACKGROUND:
Opioid use disorder (OUD) is a national epidemic and identified as a top priority by the practices and communities in rural Colorado. Few providers and practices offer medication assisted treatment (MAT) with buprenorphine, and access to treatment services and resources are scarce in rural communities. The High Plains Research Network (HPRN) and the Colorado Research Network (CaReNet) engaged the American Society of Addiction Medicine and practice-based research network practice coaches and research liaisons to create a comprehensive curriculum to train rural primary care practice teams in in MAT for OUD.

SETTING & PARTICIPANTS:
Primary care practice providers and staff in 24 rural counties in eastern Colorado and San Luis Valley.

METHODS:
Team training is delivered in-person by a Practice Facilitator through Shared Onsite kNowledge Dissemination (SOuND) Team Training or via web-based video conferencing from the ECHO Colorado program.

RESULTS:
Implementing Technology and Medication Assisted Treatment Team Training in Rural Colorado (IT MATTTRs Colorado) Practice Team Training is offered to everyone in the practice, in support of congruent, evidence-based patient care. The curriculum covers: 1) epidemiology and pharmacology of opioids, and MAT, 2) identifying, preparing, treating, and managing the patient, 3) preparing the practice, facility, and staff to offer MAT, and 4) care for special populations like adolescents and pregnant women. Learning objectives include: 1) identify and assess patients who are appropriate for MAT, 2) apply knowledge of buprenorphine to manage patients with OUD 3) discuss psychiatric and co-morbidities associated with OUD and 4) build a clinical team that has knowledge, skills, and resources to treat OUD. A toolkit that compiles multiple resources and tools, including screening tools and documentation/coding templates, is provided to participating practices. Onsite SOuND Team Training is delivered over four one-hour sessions. The web-based ECHO model is delivered over eight 30-60 minutes sessions. The IT MATTTRs Colorado curriculum also includes a six-session Behavior Health Team Training curriculum to cover: 1) What Behavioral Health Providers need to know about treatment for OUD with buprenorphine, 2) Impact of OUD, 3) Pharmacology of buprenorphine and opioids, 4) Detection and diagnosis, 5) Working with patients on buprenorphine, 6) Logistics of providing behavioral health services for OUD.

CONCLUSION:
A new comprehensive curriculum and resource toolkit has been developed that offers full primary care and behavioral health practice teams the essential components to incorporate MAT for OUD into everyday practice. This curriculum is relevant to practices with providers that have completed MAT waiver training and to practices without a waivered prescriber, since these practices still play a critical role in providing successful MAT. A comprehensive evaluation will assess implementation and clinical outcomes to determine impact of the curriculum. Practice team training began in July 2017.

RELEVANCE STATEMENT:
IT MATTTRs Practice team training is team-based care that encourages real-time, facilitated discussions among the entire practice team and thoughtful application of information to the specific practice setting about MAT for OUD, which had not been adequately available prior to the creation of this curricula.

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P43: Primary Care Practices' Knowledge and Attitudes Towards Opioid Use Disorder and Medication Assisted T

BACKGROUND:
The incidence of opioid use disorders (OUD) and harmful sequelae have reached epidemic levels and is particularly prevalent in rural areas. Research Network (HPRN) has identified OUD as a major concern for physicians, medical practices, and community members in rural Color harms and effective treatment, there is a lack of knowledge and resources regarding OUD and medication assisted treatment (MAT) in rural practices. Implementing Technology and Medication Assisted Team Training and Treatment in Rural Colorado (IT MATTTRs Colorado) stud implementing a training for full practice teams on MAT for OUD. This study assessed rural practice teams' knowledge, attitudes, and beliefs and MAT prior to the delivery of the primary care practice team training modules. IT MATTTRs Colorado created a new survey instrument, a survey existed for practice teams.

SETTING & PARTICIPANTS:
24 counties in rural eastern Colorado (HRPN) and San Luis Valley in south central Colorado (Colorado Research Network; CaReNet). All st roles are asked to complete the practice knowledge survey.

METHODS:
Validated survey questions from other instruments were selected and adapted for the purposes of this study to accurately measure the attitu and personal experiences of practice team members. Additional questions were created based on the content of the primary care practice te The IT MATTTRs Colorado Practice Knowledge Survey was distributed to all staff members at participating primary care practices prior to th The survey will be administered again following the conclusion of the practice team training to detect any changes in these markers over tim

RESULTS:
Baseline survey distribution began in July 2017 and continues as practices initiate participation in the IT MATTTRs Colorado study. To date distributed to eligible participants, and 336 have been completed and returned, which gives us a response rate of 76% from participating pra presented on practice staff knowledge of general OUD- and MAT-related facts, attitudes towards OUD and treatment, opinions of addiction v connection to opioids and OUD, beliefs of the practice's ability to treat and/or refer patients with OUD, and participant demographics.

CONCLUSION:
Baseline data about practice members' attitudes, knowledge, and beliefs of opioids, OUD, and MAT will be analyzed and reported.

RELEVANCE STATEMENT:
Understanding practice teams' knowledge of and attitudes towards MAT for OUD over time is essential to describing the impact of a practice devastating health issue. The IT MATTTRs Colorado study created a new Practice Knowledge Survey to detect these changes in knowledge practice staff members about opioids, opioid use disorder, and medication assisted treatment before and after the practice team training is d

https://s3.amazonaws.com/files.formstack.com/uploads/2223863/41260756/394900268/41260756_practice_knowledge_survey_it_matttrs_i

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P44: Why and How Primary Care Practices Engage in Practice Transformation Activities and Research: Findings from the EvidenceNOW Southwest Research Study

BACKGROUND:
EvidenceNOW Southwest (ENSW) is one of seven AHRQ-funded cooperatives in the United States currently working with primary care practices (PCPs) to improve implementation of cardiovascular disease screening and treatment guidelines. ENSW enrolled over 200 PCPs in Colorado and New Mexico who received nine months of practice facilitation and electronic health record support from practice transformation organizations (PTOs) contracted by the University of Colorado Denver and the University of New Mexico. Why PCPs joined the initiative and their level of engagement are the subjects of this poster presentation.

SETTING & PARTICIPANTS:
The study population was small and medium-sized (15 or fewer providers) practices in Colorado and New Mexico.

METHODS:
Both states leveraged existing relationships between eligible PCPs and the university and with contracted PTOs to recruit practices. Strategies utilized to engage practices in the intervention varied across states and among PCPs, including in-person visits by practice facilitators (PFs), clinical health information technology advisors (CHITAs), health extension staff (health extension regional officers [HEROs] in New Mexico; regional health connectors [RHCs] in Colorado); collaborative learning sessions (CLS, in CO)/peer learning workshops (PLWs, in NM); and eLearning offerings.
Strategies utilized to engage practices in implementing the research (i.e., to complete surveys and submit clinical quality measure [CQM] reports) also varied across states and PCPs. Strategies utilized by various combinations of PFs, CHITAs, HEROs, RHCs, and the two universities to collect research data included email, phone calls, faxing, and in-person visits.
Recruitment information was collected through the practice application and from recruiter reports. Engagement information was collected through documentation of contacts (field notes), conversations among the PFs, CHITAs, HEROs, RHCs, and research teams at the universities, and at CLSs/PLWs.

RESULTS:
Three hundred twelve practices were recruited; 210 enrolled. Of these, 52% were part of a system; 48% were clinician-owned practices. Twenty-nine percent were in rural areas; 71% were urban/suburban. Eleven (5%) of the enrolled practices dropped out before completing the 9-month intervention period. The main reasons PCPs chose to enroll in the study were: a sense of obligation based upon an existing relationship, the expectation that they would benefit from participating (receiving ongoing facilitation support, access to resources/materials, assistance with accessing and using clinical data, access to 3rd party registry), and a belief that participation would improve patient care, often due to positive past experiences with practice transformation activities. (Practices received up to $500 to complete surveys for research purposes.) Some of the reasons PCPs chose not to enroll include a lack of understanding of practice transformation, competing priorities, and a lack of relationship with the recruiter.
Successful engagement in the ENSW intervention was the result of multiple factors, including enthusiasm about practice facilitation/coaching (esp. practices that have a culture of continuous quality improvement); strong practice champions; competency of PFs, CHITAs, HEROs, and RHCs; and positive results from facilitation activities. Staff turnover (especially at the leadership level) hindered engagement, as did a lack of buy-in by all levels of staff and competing priorities.
Successful completion of surveys was the result of multiple factors, including number and type (via email or in-person) of requests and reminders, and relationship with the requestor. Submission of CQM reports was complex and often the result of intensive support by PFs and CHITAs.
Research activities are always a challenge in practices, but the high retention rate in ENSW indicates they were not overly burdensome to most practices. In some cases, however, pressure to complete the research activities threatened relationships between the practices, the PTOs and the universities because they were not a priority of the PCP.

CONCLUSION:
Convincing PCPs to participate and engage in practice improvement initiatives requires multiple, sustained strategies, many of which are unrelated to the intervention or the research. In some cases, a carefully managed relationship requires balancing research objectives with practice priorities and additional support is required to complete research activities.

RELEVANCE STATEMENT:
The experiences of the two states involved in ENSW can provide primary care research with valuable lessons on the factors related to practice engagement for future studies. Notably, the needs of the practices and the relationships between practices, researchers, contracted intervention partners, and funders need to be prioritized because the relationships need to persist after the grants conclude.

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P45: Southern Area Patient Oriented Research Organization's (SAPORO) Investigation into Our Patient Population's Health Literacy, Smartphone Health Application Use and Their Correlation with Weight Loss Over A One Year Period

BACKGROUND:

Smartphones and application use is widespread with
2.3 billion users worldwide, of whom half have downloaded a health application. Many are on the market and little research on their efficacy is available. This study examines the relationship between: 1. Health App use and health literacy; 2. the relationship between health app use, health literacy, and the ability to lose weight over one year and;
3. If weight loss is associated with Health App use and or, degree of health literacy, which apps, their frequency of use, and degree of literacy possibly enable weight loss.

SETTING & PARTICIPANTS:

383 patients from 8 SAPORO affiliated primary care clinics.

METHODS:

Patients meeting inclusion criteria (non-pregnant English speaking adults who use a Smartphone and have been seen in the clinic for at least one year) and willing to participate in this survey based retrospective cross-sectional descriptive data study will be consented then administered 2 validated surveys for health literacy and Smartphone Health App use. The patient's weight at that day's visit as well as the patient's weight and date of a prior visit nearest to and no less than 12 months before is recorded.

RESULTS:

*TBA. Data collection complete by 4/25/18.

CONCLUSION:

*TBA based on final data analysis, tentatively, no correlation was found between any specific Health App, its frequency of, or reason for use and successful weight loss over one year.

RELEVANCE STATEMENT:

Additional studies are needed to: 1. Guide recommendations to physicians/patients on which apps help provide: better self-management of health and assist with weight loss and 2. Direct health application programmers' design, based on good quality evidence which has shown which apps, features, and frequency of use are effective.

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P46: A Tailored Online Ethics Training Is a Valuable Tool for a Global PBRN

BACKGROUND:
As a global network, the Dietetics Practice Based Research Network (DPBRN) must remotely provide effective training on research topics. Registered Dietitian Nutritionists (RDNs) and Nutrition and Dietetic Technicians, Registered (NDTRs) often lack access to training in research ethics required to participate in DPBRN studies. Many available trainings on human subjects research are time consuming and are not specific to study designs and methods frequently used in DPBRN studies. In addition, more general training programs can lack clear relevance and applicability for RDNs/NDTRs.

SETTING & PARTICIPANTS:

METHODS:
To address these needs, nutrition practitioner-specific research ethics training modules were developed by staff at the Academy of Nutrition and Dietetics, the Case Western Reserve University (CWRU) Clinical and Translational Sciences Community Engagement Core, and volunteers from the DPBRN Oversight Committee. The modules are PowerPoint presentations with voiced narration and written captions. The modules were designed to align to standard human subjects protections topics (e.g., Collaborative Institutional Training Initiative (CITI) Social and Behavioral Research content). The four modules include information on the definition of research and human subjects, the history of ethics in research, research regulations, and assessing risk in research. The modules highlight numerous nutrition-specific examples and case studies. After completing the four modules, participants must take an online quiz and earn a minimum score of 80% to "pass" the training. Participants who successfully complete the training earn 1.5 Continuing Professional Education Units (CPEUs) towards maintenance of their credential.

RESULTS:
Since their original release in 2014, ~300 people have viewed the modules and completed the quiz. The average time to complete the modules and take the quiz is approximately 90 minutes. The modules have proved highly useful for study training purposes as they can be accessed by anyone with an internet connection, don't require emailing of documentation to research staff, and are appropriately matched to the level of practical knowledge required for nutrition practitioners to serve as on the research team. The current IRB used by the DPBRN is accepting completion of the modules in lieu of CITI training. Due to the added incentive of free CPEUs, the modules have also been popular among the general Academy of Nutrition and Dietetics membership. Based on this success, a full review and update of these modules was completed in 2018.

CONCLUSION:
Adequate training in research ethics is necessary for practitioners who are part of the practice-based research team. Creating tailored training resources for nutrition practitioners has proven to be a valuable, cost-effective tool that has also appealed to a broader general practitioner audience, serving to enhance the knowledge of RDNs and NDTRs on the importance of ethical human subjects research.

RELEVANCE STATEMENT:
For global PBRNs, offering remote ethics training that is relevant, simple to administer, and widely accessible can expedite the training process and better engage practitioners.

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P50: Adult ADHD Prevalence, Comorbidity and Treatment Utilization: A Secondary Data Analysis Study

BACKGROUND:
Attention-Deficit-Hyperactivity Disorder (ADHD) has traditionally been viewed as a condition affecting only children and adolescents. However, with the development of new diagnostic tools and practices, ADHD is now understood as a chronic disorder affecting adults (Adult ADHD). Adult ADHD causes low attention-span, poor impulsivity control, and difficulty controlling frustrations, which can negatively affect home- and work-life as well as relationships. Currently, the prevalence of Adult ADHD in the general population, in particular, the proportion of adults with a formal diagnosis of ADHD and rates of comorbidities and service utilization among adults is not well understood.

SETTING & PARTICIPANTS:
The American Academy of Family Physicians National Research Network (AAFP NRN). Clinical data extracted from the electronic health records of 254 health care clinics in the US was provided by the DartNET Institute.

METHODS:
This is a secondary data analysis study aimed to characterize the rates of diagnosis prevalence, comorbidity, and treatment and service utilization among adults diagnosed with ADHD. ICD-9 code of 314.00, 314.01 or 314.8 (or corresponding ICD-10 codes) were used to establish a presence of diagnosis.

RESULTS:
Electronic medical record data on 293,304 individuals 18 years of age and older were included in the analysis. Of these, 131,479 individuals (45%) were male and 161,825 (55%) individuals were female. The average age of the cohort was 50±18 years of age. The distribution by age brackets was as follows: 18-29 years: 45,195 (15.4%); 30-44 years: 72,108 (24.6%); 45-59 years: 79,349 (27.1%); 60+ years: 96,652 (33.0%).

ADHD Diagnosis Overall Prevalence: ADHD diagnosis was documented for 9,070 individuals, resulting in a pooled prevalence of 3.1%. Of these, 2,918 (32.2%) individuals had ADHD with hyperactivity.

ADHD Diagnosis Prevalence by Age Group: Of the 9,070 individuals with a diagnosis of ADHD, 3,944 (43.5%) were 18-29 years of age; 2,885 (31.8%) were 30-44 years of age; 1,653 (18.2%) were 45-59 years of age; and 588 (6.5%) were 60 years of age or older.

ADHD Diagnosis Prevalence by Gender: Of the individuals with a diagnosis of ADHD, 4,481 (49.4%) were male and 4,589 (50.6%) were female. That translated to 3.4% prevalence of adult ADHD for men and 2.8% prevalence for women in the study sample.

ADHD Comorbidity and Treatment Utilization: Of the individuals with a diagnosis of ADHD, 1,526 (16.8%) had a documented diagnosis of obesity or overweight; and 143 (1.6%) had documented sleep apnea. Treatment with a stimulant medication was documented in 5063 patient records (55.8%). Additional analyses are underway to include ADHD diagnosis in combination with other diagnoses (comorbidity) and treatment of ADHD by type of stimulant (long-acting or short-acting) as well as by individual drug names. These result will be presented in full at the poster presentation.

CONCLUSION:
The results of our study indicate that a diagnosis of ADHD in adults is common but below the reported prevalence rate for adults, thus ADHD in adults may be underdiagnosed or underreported in medical records. The results of our study indicate that ADHD affects individuals of all ages and gender, including older adults but most commonly diagnosed in young adults and males. ADHD may present differently in adults with the typical expectation of impulsivity being much less prevalent in adults than in children. More than a half of all adults with ADHD receive treatment with stimulants. The results of our study indicate that additional research, education and quality improvement interventions are needed to support health care providers in identifying and managing ADHD in adults.

RELEVANCE STATEMENT:
Attention Deficit Hyperactivity Disorder (ADHD) has been studied far less than ADHD in childhood, although more than 60% of children with ADHD maintain significant ADHD symptoms throughout adulthood. Adult ADHD negatively affects a person's quality of life. Limited research indicates that adult ADHD is a relatively common disorder that is expressed differently in adults. Our results indicate a potential of ADHD affecting about 3% of the adult population which is less than the current reported prevalence rates for adults and could indicate underdiagnosis. More than a half of these individuals require medication treatment for ADHD. The prevalence of other chronic diseases in adults with ADHD is not known. This is important because effective health-care delivery relies on an understanding of patient characteristics and complete medical history. The current study provides estimates for Adult ADHD prevalence, comorbidities, and service and treatment utilization rates in the largest cohort of individuals described to date.

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P51: The chronic care model for patients with chronic pain: A Cincinnati Area Research and Improvement Group survey.

BACKGROUND:
Chronic pain (CP) is a significant and common problem seen by primary care physicians (PCP). Approaches like the chronic care model (CCM) have been recommended for CP. The Assessment of Chronic Illness Care (ACIC) is a 25 item survey that measures the presence of 7 components of the CCM (organization, community linkages, self-management support, decision support, delivery systems, clinical information and integration). Each item is scored on a 0-11 scale and provides subscale scores for each of the 7 CCM components as well as a total. Scores from 0 to 2 represent "limited support," 3 to 5, "basic support," 6 to 8, "good support," and 9 to 11, "fully developed support." Previous studies of the ACIC for chronic conditions such as diabetes, congestive heart failure and asthma in primary care found that most subscale scores were in the basic and good support categories. It is unknown, however, if PCPs feel that their practices are supported to treat CP within the chronic care model.

SETTING & PARTICIPANTS:
As part of a larger clinical trial, we collected baseline data from 15 primary care practices in the Cincinnati Area Research and Improvement Group (CARInG) Practice Based Research Network. A practice manager and a lead physician at each practice completed the surveys together.

METHODS:
Practice Surveys with 1) A CP adapted ACIC and 2) practice and provider demographics

RESULTS:
The 15 practices all use EPIC electronic health records. They provide care to 87,555 patients via 16.1 Family and 21 Internal Medicine Full Time Equivalent (FTE) physicians and 4 physician extender FTEs. The practices have a mean of 12% Medicaid (range 1 to 35%) and 16% Medicare patients (range 8 - 27%). The overall ACIC mean score was 3.4, which is considered basic support for CP care within the CCM. Component scores ranged from limited support at mean 2.4 for both clinical information systems and community linkages and 2.6 for self-management support to basic support at a mean 5 for delivery systems, 3.7 for integration, 3.3 for organization and 3.1 for decision support. No components were felt to have even reasonably good support for CP care. There were no differences in the ACIC scores by practice size, percent of Medicaid or Medicare patients or by whether the practice was predominantly Family or Internal Medicine.

CONCLUSION:
PCPs in the CARInG network believe their practices have only limited or basic CCM support for chronic pain care, less than that reported by other primary care practices for other chronic diseases. More studies are needed to find ways to increase the capacity of primary care practices to provide the integrated and multidisciplinary care needed for patients with chronic pain.

RELEVANCE STATEMENT:
While the medical literature supports an integrated and multidisciplinary approach to patients with chronic pain, the 15 practices in the CARInG PBRN report only having limited to basic support for providing such care to their patients with chronic pain.

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P52: Interventions to Encourage Multivitamin Use, especially in Women not using Family Planning, through IMPLICIT Interconception Care

<u>BACKGROUND:</u>
The IMPLICIT Network developed an interconception care model (IMPLICIT ICC) to screen mothers for smoking, depression, family planning, and multivitamins (MVIs) during the 0-24 month well child visits (WCVs). In the United States, about 50% of pregnancies are unintended which can lead to poor birth outcomes. Using MVIs with folic acid prior to pregnancy decreases the rate of neural tube defects and using family planning can reduce the rate of unintended pregnancies. Addressing MVI and family planning state in women can lead to better birth outcomes.

<u>SETTING & PARTICIPANTS:</u>
17 participating sites implemented IMPLICIT ICC. At participating sites, mothers who attend WCVs with their children age 0-24 months were screened using IMPLICIT ICC.

<u>METHODS:</u>
From January 2015 to February 2018, 9,811 mothers were screened for IMPLICIT ICC, including MVI and family planning at 31,083 WCVs. Providers offered interventions to mothers not using MVIs by either advising use of MVIs or direct provision, including a script, voucher, or bottle of MVIs. IMPLICIT ICC data were documented in the child's medical record. Maternal demographic information was also collected for analysis.

<u>RESULTS:</u>
Demographic data indicates that 18.5% of mothers have less than high school education, 73.8% receive medical assistance, 48.8% are non-white and 23.9% are Hispanic. At 44.8% of WCVs, mothers were at risk for not using multivitamins. Mothers not using MVIs received advice at 47.0% and provision at 15.0% of WCVs. In sequential WCVs where MVI status was assessed and at the previous WCV the mother was not taking a MVI; 21.6% of mothers started MVI with no interventions; 32.8% started MVI with advice only, 48.0% started MVI with provision. Compared with mothers who were not taking a MVI and received no intervention; mothers had a higher odds (OR (95%CI) of taking a MVI at the next visit if they received advice 1.65 (1.41-1.94), had the MVI provided 3.22 (2.62-3.96), or were taking a MVI at the previous visit 6.72 (5.81-7.78). Contraception status also impacted a mothers MVI use in that, they had a higher odds of taking a MVI at the next visit 1.28 (1.17-1.40).

<u>CONCLUSION:</u>
The IMPLICIT ICC model is brief, innovative and sustainable, and it has the potential to address mothers' family planning and MVI status. Mothers not using family planning and MVIs have a higher risk of poor birth outcomes. Providing MVIs is more likely to result in mothers using MVI at the next visit. Additionally, if the mother was pregnant, trying to conceive, or not on contraception she was more likely to be using MVI at the next visit. Sites need to continue developing strategies to reinforce use of multivitamins, especially for women not using family planning. Mothers seeking care for their babies at sites that offer IMPLICIT ICC receive advice and other interventions to improve their health, family health, and health of future pregnancies.

<u>RELEVANCE STATEMENT:</u>
Mothers of child bearing age should consider family planning options and MVI supplementation to reduce chance of poor outcomes.

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P53: A Tale of Two Systems: Standardizing Primary Care Pain Management Across Two Physician Practice Groups

BACKGROUND:
At the primary care level, the lack of a coordinated approach to managing low back pain creates a serious gap for patients, especially for the indigent or Medicaid/Medicare patients in North Texas. Currently, there is no standardized way to manage low back pain in family medicine clinics. Low back pain is a cause of chronic pain and is associated with significant morbidity and healthcare utilization. This study examined the impact of a pain treatment algorithm and use of active biometric data obtained from fitness trackers to monitor outcomes in a pain condition.

SETTING & PARTICIPANTS:
Patients with low back pain at four family medicine clinics. The patients in two clinics were managed with a protocol of accepted treatment guidelines that are integrated into the EMR. Patients in the control clinics were managed without change to existing clinical procedures and without a set of defined treatment guidelines. A maximum of 200 patients were examined in each group. Inclusion criteria: Adults age ≥ 18; male and female; low back pain ≥ 12 months; with a smart phone. Exclusion criteria: pain management at another non-participating location or specialist; malignant related back pain, spinal infection or other myelopathic symptoms.

METHODS:
A prospective controlled study was conducted comparing outcomes of patients focused with low back pain with or without radicular pain or other neurological symptoms. There were two components to this study, clinical level and individual level. A new pain management protocol was developed and implemented at one family medicine clinic from two systems (UNTHSC and JPS). One other family medicine clinic served as a control site at each system by continuing with current treatment protocols. A subset of patients with low back pain at each of the clinics was recruited to wear an activity monitor for three months to assess sleep quality, heart rate, and physical activity. Information collected from the activity monitor was obtained through a phone app.

RESULTS:
Patient-level clinical data include initial and follow-up visit for UNTHSC patients who consented to participate in the activity monitor arm of the study. Therefore, only UNTHSC patients were included in these results; with 23 patients in the control clinic and 27 patients in the experiment clinic (n=50). 14.8% of pathway-managed patients requested a follow-up visit, while 52.2% of patients from the control clinic requested a follow-up. The number of prescription analgesics prescribed for low back pain in the experiment clinic fell 26.7% while the control clinic fell 19%. Patients at the experiment clinic took an average of 707.5 steps more than patients treated at the control clinic.

CONCLUSION:
Patients in the intervention clinic experienced improved patient engagement and reduced healthcare utilization. In three sample measures (patient requested follow-up visits, prescribed prescription analgesics, and average daily steps taken by patients) the data trended in the desired direction for patients receiving the pain management protocol.

RELEVANCE STATEMENT:
The use of a structured protocol to manage a pain condition leads to better patient outcomes, patient engagement and reduced healthcare utilization.

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P55: Knowledge, Attitudes and Practices of Mothers aged 18 and over regarding Neonatal Care at University Hospital of Mirebalais - Haiti, 2017

BACKGROUND:
Neonatal health is a major concern worldwide. In Haiti neonatal mortality rate has increased from 25‰ live births to 31‰ from 2006 to 2012. As a result, neonatal and child health programs were developed to educate mainly women on neonatal care. This study aims to assess knowledge, attitudes and practices of mothers aged 18 and over seen in the community health department at University Hospital of Mirebalais (HUM) about neonatal care.

SETTING & PARTICIPANTS:
The University Hospital of Mirebalais is a teaching hospital located in Mirebalais, a town in a rural region of Haiti. It seeks to give preventive and curative care of high quality. Its community health department composed by nurses, educators, community health workers and matrons give health education related to child, infant and neonate particularly to the women.
Five community health workers and five matrons, responsible of the 5 areas of the town were selected for the focus groups to determine attitudes and practices of mothers of Mirebalais regarding neonatal care. Mothers aged 18 and over, coming from Mirebalais, having at least one child between 0 and 6 months of age, attending the community health department of HUM between July and September 2017 were questioned to assess these attitudes and practices added to their level of knowledge. Sample size calculation showed that 232 respondent chosen consecutively were needed to have a confidence level of 90% on the results with an error margin of 5%.

METHODS:
This mixed method study was an exploratory sequential type. The qualitative part, phenomenological type, was done through focus group and the quantitative part, cross sectional analytic type, was done through face to face interviews. The questionnaire covered five themes from World Health Organization recommendations: breastfeeding, temperature, skin and umbilical cord, signs of severity, vaccination. Transcripts were analyzed with pre-existing codes. Epi Info was used to collect and analyze the survey data. Proportion measures and chi-square were generated.

RESULTS:
The two focus groups detailed attitudes and practices of mothers: as example applying powder to umbilical cord, trying to close the fontanels, excessive dressing and late bathing of the babies...; those helped adapt the questionnaire. Among 240 mothers surveyed 62.08% were 30 years old and under, 65.22% lived in urban area, 64.17% attended secondary school or higher, 39.17% were principally advised by medical staff. Globally 71.25% of them had good to moderate knowledge about neonatal care which was higher for those aged over 30 (p=0.008), leaving in urban area (p=0.01), attending secondary school or higher (p=0.03). Attitude was harmful for 59.17%, worse for rural based participants and those not attending secondary school or higher (p=0.03). Practice was appropriate for 59.41% of them, higher for those attending secondary school or higher (p=0.001), autodidacts and advised by medical staff (p<0.0004), directly associated with knowledge and attitude (p=0.003, p<0.0001).

CONCLUSION:
The majority of the mothers had good to moderate knowledge, harmful attitude and appropriate practice. Youth, rural area, low education level, unsatisfying knowledge level and harmful attitude were identified as risk factors. Sensitization of mothers, especially the young and the rural, taking into account their attitudes is essential to ensure better newborn care in Mirebalais.

RELEVANCE STATEMENT:
This study is among the first studies done in Haiti about this subject. It contributes to get a better understanding and quantification of different aspects of neonatal care among the mothers. It allows to target and adapt the information given to the mothers.

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P56: Visualizing and Understanding Primary Care Access and Community Health Outcomes in Virginia

BACKGROUND:
Access to primary care improves health outcomes and leads to more efficient use of limited healthcare resources. Successfully accessing care requires synchrony of several factors: availability (adequate supply) of accessible (local, affordable) health services, utilization of health services (by persons who need them), and high-quality care that can lead to improved outcomes. While primary care workforce shortages (availability) are well-documented, there are few studies that simultaneously examine accessibility and actual utilization of available primary care services, correlation between utilization and population outcomes, and factors contributing to disparities in access, utilization, and outcomes.

SETTING & PARTICIPANTS:
Clinical data represent all patients seen in the year 2015. Public health and census data represent residents from every ZCTA in the state of Virginia. Primary care workforce data represent all primary care clinicians currently practicing in Virginia.

METHODS:
(1) Creating Virginia Care, a comprehensive tool for mapping community-level primary care availability, actual use of primary care by patients, local health outcomes, and community characteristics: Virginia Care will be built by geocoding four data domains - clinical, public health, census, and workforce - into HealthLandscape (HL) for every ZIP Code Tabulation Area (ZCTA) in Virginia. Clinical data will include information on visit, patient, clinician, and service delivery from the 2015 Virginia all payer claims database (APCD). Public health data will include a combination of HL community profiles (chronic disease prevalence, rates of low birth-weight infants, usual source of care) and the Virginia Department of Health (VDH) (average life expectancy, health opportunity index, overdose-related deaths). Census data will include population size and characteristics. Primary care workforce data will include clinician and practice setting information from the Virginia Department of Health Professions (VDHP). (2) Using Virginia Care to identify pockets of poor primary care availability and use, visualize spatial disparities in community outcomes, and describe community characteristics and health care factors correlating with these findings: Availability of primary care will be described as the number of clinicians per ZCTA. Actual utilization of primary care will be represented as the proportion of individuals in each ZCTA who had a visit with a primary care clinician as recorded in the APCD, over the total population of the ZCTA in 2015. Community outcomes of interest will include the health outcomes data described above from HL community profiles and VDH as well as healthcare utilization data (e.g. rates of emergency room visits, hospitalizations) from the APCD. Hierarchical analysis will be used to understand the relative association of various person, community, and health care related factors on disparities in access, utilization, and outcomes.

RESULTS:
Preliminary results will describe the availability and utilization of primary care clinicians in each ZCTA and discrepancies between the two. Availability and utilization will be compared between ZCTAs and related to community characteristics as well as outcomes.

CONCLUSION:
In totality, Virginia Care will provide a multi-dimensional understanding of the interplay between community characteristics, availability of primary care clinicians, and disparities in actual utilization of primary care and community outcomes.

RELEVANCE STATEMENT:
By integrating clinical, public health, workforce, and census data, this study enables a more precise understanding of who is and who is not actually accessing primary care, how use of primary care relates with community health outcomes, and what factors contribute to disparities in use of primary care and health outcomes in different communities. These findings can be used by multiple stakeholders throughout the state to inform a range of service delivery analyses, guide quality improvement efforts, target mutable community-level factors, and support learning health care systems. This model can be generalized to other states as well.

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P57: Informing the Adoption of Point-of-Care Technologies: Development and Testing of the AdoptPOC Technology Assessment Program

BACKGROUND:
Point-of-care (POC) technologies have the potential to improve access to health care by increasing the diagnostic capacity of primary care practices. But determining which devices provide the necessary performance and value is challenging. Primary care professionals need access to comprehensive evidence and interpretation aids to make informed decisions when choosing to implement POC testing programs and purchase POC devices. The aim of this ongoing study is to develop and test an eLearning-based program and technology assessment framework designed to communicate evidence on point-of-care technologies. The study will evaluate the program's ability to organize information and make it accessible to decision makers with diverse professional roles and evidence needs.

SETTING & PARTICIPANTS:
Participants are from the West Virginia PBRN and represent a range of professional roles: physicians, non-physician practitioners, nurses, business managers, and clinician-managers.

METHODS:
The development of the AdoptPOC framework followed a "best fit" framework synthesis process. Thematic analysis was used to identify cross-cutting concepts from existing health technology assessment (HTA) frameworks developed for general program and device evaluations. Organizational elements were added using concepts from technology adoption and hospital-based HTA frameworks. Device-specific topics were further defined by incorporating guidance on evaluating the technical performance of POC technologies. A literature review of evidence-informed decision making guided the design of the evidence module, with a focus on sensemaking in interprofessional groups. A technology adoption scenario based on INR patient self-testing was developed to guide preliminary user testing. Usability data is being collected using a remote, unmoderated approach to track the information participants view as they use the evidence module to respond to a series of technology assessment questions. Each participant is additionally completing a user experience survey.

RESULTS:
The framework synthesis process identified eight domains of information important for the evaluation of point-of-care testing programs and devices: clinical background, device characteristics, clinical outcomes, practice characteristics, technology competitors, patient characteristics, organizational considerations, and costs/financial considerations. The AdoptPOC framework accommodated the evidence on patient INR self-testing with the addition of subdomains to aid organization. The literature review produced key design criteria for the eLearning-based evidence module, leading to the creation of a multi-format, layered structure with intuitive icons and interpretation aids to assist with the identification of information. Preliminary results from the usability study indicate that the framework provides comprehensive information that is logically organized. The interpretation aids assist users with understanding the program's structure and evidence types. The navigation was quick to learn and follow for some users but less clear for others.

CONCLUSION:
The AdoptPOC framework accommodates the heterogeneous and detailed evidence important to evaluate when making decisions to purchase POC devices or implement POC testing programs. Use of an eLearning-based platform allows for a layered, multi-format presentation to make information accessible to decision makers from different professional roles. It additionally provides opportunities to incorporate educational elements, such as tutorials and interpretation aids. Efficient navigation is critical to allow for easy movement between domains and layers for rapid retrieval of information. Addition of a "quick tour" video would improve usability.

RELEVANCE STATEMENT:
Communicating information on point-of-care technologies in a format that is accessible, relevant, and practical for primary care professionals can support comprehensive assessment of evidence by interprofessional teams. This can improve the quality of decisions to implement POC testing programs, and support selection of POC devices that provide value for practices and patients.

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P58: Creating a Real Time Data Tracking Model using MS Excel to Manage Large Datasets in Research Studies

BACKGROUND:
One significant challenge that practice based researchers face is the real-time data monitoring and reporting that is required by studies that involve prospective data collection. Often, a member of the research team must dedicate hours meticulously tracking data generated across the study and manually updating tables for stakeholder reporting and/or internal tracking of study progress. The American Academy of Family Physicians National Research Network (AAFP NRN) created a data management system to address this challenge. The model aims to significantly reduce the research personnel burden required to manually track and report patient and site participant enrollment and engagement metrics through the utilization of an automated data framework in MS Excel.

SETTING & PARTICIPANTS:
AAFP NRN is conducting this work as part of a large PCORI funded pragmatic clinical trial to improve asthma outcomes in African Americans and Hispanic adults, called "PREPARE" (Patient Empowered Strategy to Reduce Asthma Morbidity in Highly Impacted Populations). The AAFP NRN recruited 19 clinical-sites across the US and Puerto Rico for the trial. Data will be collected on individual patients (n=1,200) over a 15-month tracking period. Each enrolled patient has approximately 50 unique data elements that must be tracked over the life of the study. With a target enrollment of 1,200 individuals, ~60,000 data elements must be accounted for in internal and external stakeholder tracking/reporting.

METHODS:
An automated data framework was built in MS Excel using the functions of Data Modeling, Data Linking, Data Querying, and Power Pivot.

A web-based electronic data capture system is being utilized for collection of study data. These data are aggregated into a single Excel file (for ease of use) and exported out of the web-based system (this is referred to as the raw data). A live, queried connection is made between the raw data and a MS Excel workbook (this is referred to as the Reporting Workbook). Power Pivot and other syntax are then utilized by the user for customized table and report creation.

RESULTS:
The data collection using this model is ongoing. The study team is tracking, in an automated real-time fashion, various data elements at site- and patient-specific levels as well as cumulatively across all sites levels. Data being tracked and monitored include the following: total study and individual site enrollment, total study and individual site demographic information, monthly survey due dates and completion dates, missing or overdue information, and other information as needed.

This data automation is achieved by creating a connection between the raw data and the Reporting workbook in which Excel loads the raw data into the background in the data model. With data in the data model, Excel can handle millions of rows of data while supporting the use of Power Pivot. Power Pivot is a powerful function where Excel reads the data loaded into the data model and allows a user to create highly specific and customized tables rapidly. Using this model, a user is quickly and automatically able to track data collection and report current metrics to stakeholders by performing a simple refresh command.

CONCLUSION:
Real-time data monitoring and reporting are essential processes in successfully managing and overseeing research studies. The model developed by the AAFP NRN based on MS Excel's Data Model and Power Pivot functions has proven to be a powerful and cost-effective tool for real-time tracking of data collection and analysis of a large set of study data. This model also reduces personnel and project resources burden related to manual tasks for meticulously tracking data in real time.

RELEVANCE STATEMENT:
This data tracking model is a useful tool for research studies that require real-time tracking for large datasets. This is a cost-effective model that reduces the burden of manual tracking by introducing an automated data tracking (management) system.

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P59: Qualitative Program Evaluation Design for the Women's Enhanced Recruitment Process (WERP) of the VA Women's Health Practice-Based Research Network (WH-PBRN)

BACKGROUND:
Women are historically under-represented in Veterans Health Administration (VA) research; however, like other federal agencies, VA requires equitable inclusion of women in research. To overcome barriers related to women's minority status (7% of VA patients are women), enhanced recruitment techniques aimed at increasing participation of women Veterans in research may be necessary. The VA Women's Health Practice-Based Research Network (WH-PBRN) is addressing this need via a Women's Enhanced Recruitment Process (WERP) to increase recruitment of women for the VA Cooperative Studies Program (CSP) Study #591 (CSP #591): Comparative Effectiveness Research in Veterans with PTSD. WERP activities are conducted at 6 of the 17 CSP #591 study sites that are part of both CSP's Network of Dedicated Enrollment Sites (NODES) and the WH-PBRN. At these 6 sites, a part-time WERP Coordinator focused specifically on enhancing recruitment of women. As part of WERP, we are currently conducting an ongoing, formal evaluation to understand what is working well or not working well with efforts to recruit women into VA research.

SETTING & PARTICIPANTS:
Program evaluation activities are mainly focused on the 6 WERP sites; however, 4 non-WERP sites opted to implement the VFF Baseline, and 5 non-WERP sites opted to implement the VFF Follow-Up. As described above, qualitative interviewees include staff from all 17 CSP #591 sites nationally, including Local Site Investigators, Local Study/WERP Coordinators, NODES Directors/Managers, WH-PBRN Site Leads, and members of the national study team.

METHODS:
Two Veteran Feedback Forms (VFFs) are included in the study assessment forms: at pre-randomization ("VFF Baseline") and at the 6-month post-treatment study ("VFF Follow-up"). These surveys include closed- and open-ended questions, drawn from an Ohio State University instrument. VFF Baseline provides study participants the opportunity to explain why they participated in the study and reflect upon their perspectives about the recruitment process. VFF Follow-up obtains feedback about being a research participant, and reasons for having completed the entire study. Results of both VFFs will be linked to gender and other study elements, to analyze patient-level, facility-level, and NODES status predictors of participants' responses on the VFF, and whether VFF responses predict retention.

Semi-structured interviews with key research staff elicit experiences around recruitment and retention of women Veterans to the study. We identified 44 potential interviewees from the 6 study sites co-located with NODES and WH-PBRN (Sites Group 1), 7 co-located with WH-PBRN only (Sites Group 2), and 4 co-located with neither (Sites Group 3). Participants are asked about strategies employed at their site to increase women Veteran participation, including what worked and what has not. We also seek feedback about the WERP initiative, and how the collaboration between the WH-PBRN, NODES and the CSP #591 Study has worked.

Primary WERP/CSP #591 source documents will also be integrated into the analysis, including recruitment data, meeting minutes, and recruitment and retention monitoring forms.

RESULTS:
Preliminary VFF Baseline results are available, prior to linking data to gender. When asked why they took part in the study, 72% of participants reported they wanted to help other Veterans, 66% wanted to find out about their PTSD, 30% wanted to gain access to treatment, 26% said a VA provider encouraged them to participate, and 22% were encouraged by family, friend, or other Veterans. 63% report being "Very Satisfied" and 27% "Satisfied" with the way they were approached to be in the study.

At this time, 21 of the 44 interviews have been completed, with the remainder in process.

Innovations related to recruitment of women drawn from meetings of this collaboration include: familiarizing study staff with women's clinic structure and the portals of entry for women at each site; capitalizing on expertise of the local WH-PBRN Site Leads, who (along with Women Veteran Program Managers) are knowledgeable about the locations where women Veterans receive care; exploring potential solutions that reduce barriers to participation; and identifying recruitment materials that include photos of women Veterans.

CONCLUSION:
While the program evaluation is ongoing, research staff insights will inform approaches that may facilitate women's engagement in research; VFF data will complement staff interview data by providing patient-centered perspectives.

RELEVANCE STATEMENT:
Women Veterans are under-represented in VA research, yet the growing number of women Veterans necessitates that we understand the barriers associated with their participation in research so they can be equitably included in future research.

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P60: Case studies of projects funded by a network of primary care PBRNs: capturing impact in clinical practice and implications for collaborative research

BACKGROUND:
A series of case studies will be undertaken in Spring 2018 by a primary care network of PBRNs, to capture the impact of projects that the network has funded in its annual call for projects. The call for projects aims to facilitate researcher-clinician partnerships, the involvement of patient partners and decision-makers, and to generate impact on practice within a short timeframe. Four cohorts of small projects have been funded since 2013, but the diversity of their objectives and intended outcomes has meant that capturing and communicating their impact has been challenging. As a means of supporting the network's application for renewal by its major funder, case studies will be undertaken to document the projects' varied outcomes and impacts, and to examine the effectiveness of the call for projects to achieve its intended aims.

SETTING & PARTICIPANTS:
The vast majority of the projects took place within family medicine teaching clinics in Quebec (associated with at least 2 of the 4 network PBRNs). The projects were all co-led by a researcher and clinician, with the involvement of patient partners, decision-makers, health care managers and others, depending on the nature of the project.

METHODS:
First, relevant documentation (call for project documents, project proposals, etc.) will be reviewed in order to identify key cross-cutting themes. Secondly, a questionnaire will be sent to project leads (researchers and clinicians; n = 8), which will allow for a preliminary description of project impacts. Finally, semi-structured interviews will be conducted with project leads and co-leads (researchers, clinicians, patients, and decision-makers) to identify how and whether the call for projects facilitated an impact in clinical practice. Four projects will be the subject of in-depth interviews which will provide the basis for in-depth case histories.

RESULTS:
A summary report (Summer 2018) will highlight all the achievements of the projects (for example, published articles, additional funding secured, established research partnerships, changes in practice, and measured patient outcomes). The report will also incorporate case histories, written in the form of testimonials in order to describe the conditions that enabled or impeded the achievement of intended outcomes. The following questions will be addressed: Did the funded projects achieved their expected results? By what means? Did the calls for projects achieve their intended aim? How? The report will highlight the benefits for front-line collaborative research and will guide the future strategic directions of the network.

CONCLUSION:
The ultimate goal of this PBRN network of networks is to embed a collaborative culture in research and integrated primary care, in order to improve practice for patients. The case studies will demonstrate how and whether the network's call for projects contributes to achieving this goal.

RELEVANCE STATEMENT:
Capture and describe the impact of collaborative PBRN projects on clinical practice, for the benefit of patients.

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P61: Perspectives on a Patient-Provider Communication Tool to Talk about Chronic Pain

BACKGROUND:

The CDC ranks Kentucky fourth in the country for the number of opioid pain reliever prescriptions (128.4 per 100 persons; versus 87 nationally). To better care for patients with chronic pain, there is a critical need for enhanced communication and collaborative care. We conducted patient focus groups and administered surveys to primary care providers in order to gather feedback that would inform communication needs and assess variables important to the discussion between patients and their health care providers about pain treatment options, risks and benefits.

SETTING & PARTICIPANTS:

Two focus groups with 6 and 5 participants, respectively, were conducted. These individuals were identified through University of Kentucky AEHR to meet inclusion criterion (incl. patients of the Department of Family Medicine with chronic pain diagnosis for ≥ 3 months with or without opioids). Provider survey administration was ongoing at time of abstract submission.

METHODS:

A semi-structured interview guide was used to facilitate group discussions and elicit knowledge and attitudes regarding chronic pain and opioids. Participants were also asked about the types of information received and quality of conversations with their health providers regarding chronic pain and its treatment. Each group discussion was recorded and transcribed for independent content analysis. Provider surveys were administered to Family Medicine clinical faculty using an online data collection tool, with content derived from prior studies and from themes identified in the focus groups. All procedures were reviewed and approved by the University of Kentucky Institutional Review Board.

RESULTS:

All patients expressed that risks of opioids were known prior to beginning chronic pain treatment; addiction and misuse were the most commonly cited risks. Among reasons given for need of chronic pain management was taking better care of family and improved activities of daily living (walking, climbing stairs, bending). Factors identified as problematic in the clinic encounter were lack of time, a sense that a care plan was pre-determined and not sensitive to patient concerns, and concern for a lack of discussion about non-pharmacologic alternatives. The difference in treatment goals between patients and providers was a prominent theme in focus groups, and all patients agreed that a conversational tool would be helpful. These concerns were evaluated further in the provider survey questions, the results of which will be provided in this presentation.

CONCLUSION:

While pain assessment questionnaires and controlled substance contracts are used as standardized tools in the treatment of chronic pain patients, patient reported measures that can facilitate shared decision-making and guide bi-directional conversations is a desired outcome from our findings.

RELEVANCE STATEMENT:

We will describe the need for, and potential content of, a patient-provider communication tool for patients who present with chronic pain (and who are under consideration for, or currently on, opioid medication). Completed before each primary care visit, the tool would align with the findings from this study; namely, we envision an assessment of functional levels, pharmacologic and other alternatives tried/desired, and treatment goals.

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P62: Developing a PBRN system for health equity research

BACKGROUND:
PBRNs develop structural models based on individual circumstances; models must adapt as needs change. OCHIN PBRN started in 2007 among a small group of Oregon practices using OCHIN's shared electronic health record (EHR). As OCHIN's membership grew, the PBRN evolved into a dispersed collaborative of 618 practices across 18 states. OCHIN has developed the nation's largest research data warehouse for safety-net populations, but experienced challenges with maintaining meaningful practitioner engagement. We addressed this by rethinking the role of research in OCHIN's organizational structure. OCHIN is now conceived as a PBRN system comprising members and data to support health equity and disparities research in safety-net populations.

SETTING & PARTICIPANTS:
OCHIN is a non-profit founded to promote health information technologies in community health centers serving safety-net populations. Current membership includes 103 health organizations, over 5,500 primary care providers, and 1.1 million patients. OCHIN research centers on our diverse 'community laboratory' of member practices and unique data resources, enabling us to lead and partner on a wide range of studies to improve health, care delivery, and policy for underserved populations.

METHODS:
Periodic evaluation and declining participation in PBRN-specific workgroups indicated a need to integrate PBRN input as a centralized engagement process within OCHIN. OCHIN's research department subsequently established the Community Research Outreach and Dissemination (CROP-D) program under the PCORI-funded ADVANCE (Accelerating Data Value Across a National Community Health Center Network) infrastructure grant. CROP-D collaborated across OCHIN departments (e.g. Operational Excellence, Marketing and Communications, EHR product managers) to cultivate and facilitate opportunities   for integration of research development, outreach, and dissemination into an organization-wide engagement system.

RESULTS:
CROP-D identified numerous cross-departmental processes to support member engagement and participation in research. Four were defined as essential PBRN functions: 1) Development and review of proposed research for clinical priority, feasibility, alignment with EHR strategy, and likelihood of participation; 2) Development and review of OCHIN's research agenda, strategy, and priority areas; 3) Increased provider engagement and participation in research; 4) Research dissemination to members. Traditionally operationalized through OCHIN's PBRN workgroup, CROP-D facilitated broader member engagement by shifting these functions to established, organizational practitioner committees and workgroups including clinical operations and board-level strategy. More members now actively engage with research; contributing to infrastructure, proposal development, study implementation, interpretation, and dissemination. To maintain opportunities for research collaboration with external partners, OCHIN developed and leads a Health Disparities Collaborative Research Group (CRG). Practitioner participation in the CRG builds research capacity and provides essential inputs on the realities and priorities of care in vulnerable populations - keeping our efforts to promote health equity firmly grounded in safety-net practice.

CONCLUSION:
By integrating PBRN functions into existing structures, we improved our balance of engagement with development of a robust, safety-net-focused data warehouse for health equity research. Our Health Disparities CRG provides members complementary opportunities to collaborate with OCHIN research and external partners; contributing practical expertise and experience into meaningful evidence for safety-net providers.

RELEVANCE STATEMENT:
Our PBRN has changed over time as our organization has grown. We are committed to obtaining meaningful provider inputs and research participation while maintaining a large, robust data resource for studying the health of safety-net and vulnerable populations. We continue to learn how best to balance these needs and develop our PBRN as an integral, sustainable part of our broader organization.

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P63: One project, four PBRNs: How practice facilitation increases capacity

BACKGROUND:
The literature on facilitation of practice is growing, so much so that different definitions are used in several studies. The common idea is that facilitation of practice is an effective approach to support primary care practices through practice facilitators. The facilitators of practice, by their title, are facilitators and do not replace workers: they build capacity for sustainable change through more permanent skills transfer and organizational transformation (such as teaching to fish). The goal of the practice facilitation strategy is to improve: 1) the quality of primary care, 2) the financial sustainability of primary care, 3) the experience of primary care on the patient and practice, 4) the involvement of clinical settings to participate in research projects, and 5) the health of the population in practices and communities as an ultimate goal. This process, whose goal is improvement in all its aspects, cannot exist without the existence of a relationship of trust between the facilitator and the practice environment. In Quebec are four PBRNs, each affiliated with the Department of Family Medicine of the university of which it is named (University of Laval, McGill University, University of Montreal, University of Sherbrooke). They are federated and funded by the primary health care knowledge network (Réseau-1 Québec). Although the 4 PBRNs have been collaborating for a number of years in various kinds of initiatives, their full capacity in primary care research has not been realized because the resources at their disposal are too limited. To remedy the situation, a common project was born from the partnership of the SPOR support unit of Quebec, Réseau-1 Québec and the four PBRNs, whose objective is to define, deploy, and reinforce the approach of facilitation of the research focused on the patient inside the four PBRN

SETTING & PARTICIPANTS:

METHODS:
One clinic by PBRN was recruited to participate in the common project, whose main objective is to understand the process of adoption and use of a self-assessment tool by the clinics to promote a better implementation of the model of Family Medicine Center in their environment. It is a descriptive, exploratory, multicenter, mixed methodology study. Facilitators play a central role in this project by being a constant link between the research project team and the clinical staff. They have to complete each week a journal to mention the tasks performed within the framework of the common project, and every month another journal for all the tasks accomplished for the practice facilitation

RESULTS:
The data reported by the facilitators will be compiled and analyzed and will help to better define the approach of practice facilitation, hoping that it will be able to increase the capacity of the four Quebec RRAPPLs, mainly concerning the patient-oriented research

CONCLUSION:
Practice facilitation is undeniably an approach that helps build capacity in practice to achieve improvement goals, and facilitators are key of this success

RELEVANCE STATEMENT:

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P64: Capitalizing on the VA Women's Health PBRN to quickly gauge harassment prevalence for policy action

BACKGROUND:
With 1 in 4 women Veterans (WVs) experiencing harassment on VA grounds, VA developed an End Harassment Campaign, under the leadership of Women's Health Services (WHS) in VA Central Office - this campaign builds upon other WHS culture change initiatives. To inform future policy action, VA WHS requested that the VA Women's Health (WH) PBRN conduct a prospective, longitudinal evaluation of campaign impact, including a rapid turnaround baseline data collection just prior to the campaign launch; findings are described here.

SETTING & PARTICIPANTS:
1,303 WVs from 26 participating WH-PBRN sites in 18 states responded. Number of respondents per site ranged from 3 to 86 (mean 41, median 38). 79% of WVs visited the VA 3+ times in the past year (routine users); 41%, 49%, and 10% were 18-44, 45-64, and 65+ years old, respectively.

METHODS:
Brief anonymous surveys of sequential WV clinic patients were launched across multiple WH-PBRN sites. Information was collected on frequency of visits to the VA in the past year and age group. Then questions asked about the extent to which they felt safe/welcome at VA, and whether VA is working to address harassment. Next, they were asked whether they had experienced either of two types of harassment in the past 6 months -- public harassment (e.g. sexual remarks) or unwelcoming gender-based treatment (e.g. being told they were not Veterans because they were women). If "yes", they were asked to indicate all types of people that harassed them. Respondents were asked whether they noticed any posters at the VA about women's military service or ending harassment towards women, to measure baseline exposure to other initiatives. An open-ended question asked how to make the VA more welcoming to WVs. Over a 1-2-week period, clerks/nurses distributed forms and WVs deposited them in lockboxes. The WH-PBRN subsequently conducted descriptive analyses and generated site-specific reports with local results benchmarked against national summary findings.

RESULTS:
85% of WVs agreed (strongly or somewhat) that, "As a woman, I feel safe at the VA"; 86% agreed, "As a woman, I feel welcome at the VA"; and 52% agreed, "The VA is working to address harassment at the VA".

Overall, 25% of WVs reported either type of harassment in the past 6 months; 20% of WVs had experienced public harassment, and 11% had experienced unwelcoming treatment. Among WVs who had experienced harassment of either type, 78% reported harassment from male Veterans; 4%, female Veterans; 40%, male staff/volunteers; 11%, female staff/volunteers; and 8%, others. Rates of overall harassment ranged from 0-50% (median 27%) at participating sites.

WVs who reported public harassment compared to those who did not were significantly more likely to: have visited VA 3+ times in the past year (92% vs. 76%) and be younger (18-44 years old: 52% vs. 39%). They were also significantly less likely to feel welcome at the VA (73% vs. 89%); feel safe at the VA (67% vs. 90%); and feel that the VA is addressing harassment (42% vs. 55%) (all p < .05). A similar comparison for unwelcoming treatment showed the same trends in significant differences except by age group (i.e. WVs who experienced public sexual remarks and behaviors were younger, but WVs who received disparaging comments did not differ by age).

75% of WVs saw posters at the VA about WVs in service roles, and 41% noticed posters about reducing harassment. Qualitative analyses are underway to review WVs' suggestions for making the VA more welcoming.

CONCLUSION:
Via rapid data collection at a large cross-section of VA facilities nationally, a high baseline prevalence of harassment on VA grounds was confirmed just prior to launch of the End Harassment campaign. Based on previous research findings, such harassment could lead to delayed or missed health care and ensuing health disparities. Younger women may be at particular risk given their higher rates of experiencing public harassment. To address the problem immediately, each participating site received local results compared to national findings, and many have already acted, with guidance from the End Harassment Campaign; WHS also received results and is applying them to the ongoing campaign. Although the majority of WVs felt positive about the VA, the VA wants every WV to feel welcome and safe when walking through VA's doors.

RELEVANCE STATEMENT:
Since WVs experiencing harassment tend to delay or miss care, addressing harassment on VA grounds will likely result in improved utilization and health outcomes for WVs. The VA's ongoing work to eliminate this type of behavior is now capitalizing on the WH-PBRN to assist with longitudinal evaluation of the effectiveness of VA's End Harassment Campaign.

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P65: VA Women's Health Quality Improvement Collaborative: Spreading Practice Innovations in a Practice Based Research Network

BACKGROUND:
The 60-site Veterans Affairs (VA) Women's Health Practice Based Research Network (WH-PBRN) facilitates multi-site WH research and quality improvement (QI) projects through a network of partnered VA facilities, and fosters bi-directional partnership of clinicians and researchers to improve the health and health care of women Veterans (WVs). The WH-PBRN serves as an excellent platform for spreading innovations through evidence-based QI (EBQI), which involves engaging multilevel, inter-professional leaders and staff as stakeholders in reviewing evidence and setting and acting on QI priorities. We examined WH-PBRN local site priorities for QI topics and interest in participating in an inaugural multi-site QI Collaborative.

SETTING & PARTICIPANTS:

METHODS:
The Practice Priorities Questionnaire (PPQ), a 13-item survey that lists WH QI topic areas, was emailed to the WH-PBRN Site Leads. For each topic area, Site Leads were asked to rate (on a scale from "1" low-"5" high): How important is it to improve care of women Veterans in this domain, and how feasible is it to improve care for women Veterans in this domain. We then assessed site level interest in participating in the QI Collaborative for the topic areas that were rated mostly highly in terms of importance.

RESULTS:
The overall PPQ response rate was 87%. For the 13 QI topic areas, mean importance scores ranged from 3.3 to 4.6 and mean feasibility scores ranged from 3.6 to 4.1. The four topics areas most highly rated based on importance were: changing VA culture, teratogen prescribing in women of childbearing age, abnormal mammogram follow-up, and assignment of women patients to a WH Primary Care Provider. In response to a follow-up query, 24 sites indicated interest in participating in the QI Collaborative in at least one of the topic areas.

CONCLUSION:
Most Site Leads completed the survey, indicating a high level of activation across the WH-PBRN. Many WH-PBRN sites expressed interest in participating in the QI Collaborative, demonstrating readiness for innovation uptake.

RELEVANCE STATEMENT:
The WH-PBRN holds promise for spread of practice-based innovations using EBQI.

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P66: Implementation of a web-based tool to help patients prepare their primary care visits

BACKGROUND:
Engaged and informed patients participate more actively in discussions with their healthcare providers (HCP), enhancing the effectiveness of medical consultations. Let's Discuss Health/Discutons Santé (DS) is a freely accessible, unique French web-based tool, that provides patients with information about useful communication skills and helps them prepare for their medical visits. This study aimed to 1) evaluate the implementation of the use of DS in primary care (PC) clinical routines, 2) determine patient's awareness of DS, and 3) identify facilitators and barriers to its use.

SETTING & PARTICIPANTS:
Setting: Two Family Medicine Clinics (FMC) in Laval, Canada. Participants: Patients aged 18 years and older visiting the FMC.

METHODS:
Design: Observational study. Setting: Two Family Medicine Clinics (FMC) in Laval, Canada. Participants: Patients aged 18 years and older visiting the FMC. Intervention: Implementation of DS between March and June 2017. The implementation strategy was developed in collaboration with patients, clinic managers and volunteer organizations. Promotional materials included: 1) DS information added to the voice message and appointment confirmation e-mails; 2) video and posters displayed in the waiting rooms; 3) bookmarks distributed to patients by the receptionist or volunteers; 4) individual DS demonstrations by volunteers using electronic tablets. All HCP and clinic staff were invited to an information session. Volunteers were trained to present DS in the waiting rooms of the two FMC. Outcome variables and instruments: 1) website metrics measured by Google Analytics during the implementation; 2) patient's awareness of DS and their reaction to its use, measured in one of the two FMC by a questionnaire, distributed in the waiting room, six months post-implementation.

RESULTS:
During the implementation phase, the use of DS was promoted by 10 volunteers and 12 clinic staff. More than 1,550 patients were approached in the waiting rooms, 164 agreed to watch a demonstration on how to use DS and 22 opened a DS personal account while waiting to see their HCP. Only 48 (3.1%) patients declined receiving information about DS. The website traffic increased by 22.6% during this period of time, along with an increase of 8.3% of new visitors. The number of patient accounts created doubled (during implementation: 232, same period of time on the previous year: 114). Six months later, 495 patients visiting one of the FMC agreed to complete the post-implementation questionnaire while waiting to see their HCP. Close to a third of the respondents (28.6%) indicated that they had heard of DS. These patients were from all age groups (<20 years old: 0.9%, 20-29 years old: 14.0%, 30-39 years old: 28.1%, 40-49 years old: 10.5%, 50-59 years old: 16.7%, 60-69 years old: 14.0%, 70+ years old: 15.8%), mainly female (77.4%) and the majority had visited the FMC previously (97.6%). The distribution of patients amongst the age groups and the proportion of women were comparable to that of patients who reported not having heard of DS (p=0.52 and p=0.14, respectively). However, the proportion of new patients at the FMC was greater (not heard of DS: 11.1% vs heard of DS: 2.4%, p <0.01). Half of the patients who had heard of DS visited the website (50.8%), of which one-third (34.9%) opened a DS personal account. Profiles of patients' reactions to DS were different for patients who opened a personal account compared to those who only visited the site without opening an account (curiosity: 51.7% vs 54.7%, respectively, p<0.01; enthusiasm: 31.0% vs 25.9%, respectively, p=0.05; astonishment: 13.8% vs 9.3%, respectively, p=0.43; indifference: 3.4% vs 7.4%, respectively, p<0.001). The main barriers to using DS reported by patients were preference for other ways to prepare their medical visits (31.7%), lack of interest/irrelevant (19.5%), too complicated/too long/worries about sharing personal information (17.1%), difficulty navigating on the Internet/technical issues with the website (17.1%) and lack of time/task delayed (14.6%). As for facilitators, patients reported they would be more inclined to visit DS following recommendation by their physician (30.4%), by the clinic nurse (17.0%) and an appointment confirmation e-mail including information about DS (17.0%).

CONCLUSION:
DS was generally well received by patients. Still it remains a challenge to inform patients and get them involved in preparing their medical visit as shown in the multi-pronged approach used in this study. These results question the assumption that patients are « eager » to participate in PC encounters and they illustrate a discrepancy between HCP and patient perceptions as to the value of DS in promoting a sense of partnership and collaboration.

RELEVANCE STATEMENT:
Engaging patients to partner with their HCP is now recognized as central to effective PC delivery. Web-based tools are useful to achieve this partnership but physicians and nurses need to play an active role in informing patients about these tools.

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