Medicare and Medicaid beneficiaries, but not in the private insurance or uninsured patient population. Minority-serving hospitals had a significantly higher 30-day readmission rate (minority-serving: 29.2% vs. non-minority-serving: 24.3%, $P < 0.001$). **Conclusions:** Minority patients were admitted for CHF at much younger ages and experienced a higher 30-day readmission rate. Minority-serving hospitals served more vulnerable patients and had a significantly higher 30-day readmission rate. There is a need to provide multifaceted approaches to reduce disparities in CHF, particularly for minority and vulnerable populations.

Keywords: 30-day readmission; Racial disparities

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PS2-23:

Dual Purposing of Interpreters to Increase Colorectal Cancer Screening in Vietnamese-speaking Patients: Results from a Pilot Study

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Background/Aims: Colorectal cancer screening rates for Vietnamese-speaking patients are below national benchmarks. To address this disparity, an eight-hour training program was developed for interpreters to provide counseling to patients in Vietnamese on colorectal cancer screening at the time of a primary care visit. A culturally-tailored counseling script was developed, approved by clinical care leaders, and its delivery was integrated into routine clinic flow. Following each counseling session, patients were invited to complete a brief survey about their satisfaction with the counseling session. **Methods:** Twenty four Vietnamese-speaking patients needing colorectal cancer screening were enrolled in this pilot study and 19 completed a 26-item phone survey for a response rate of 76%. Survey non-response was due to two refusals, two non-working numbers and one unavailable. The survey was administered by a bi-cultural bilingual interviewer. On average, the survey took 15 minutes to complete. **Results:** The mean age of participants was 60 years (range: 51 to 72 years). Fifty two percent were female. All but one participant had 12 or less years of education. All participants were born in Vietnam, spoke Vietnamese at home, and all but one participant had limited English proficiency. The mean years in the US was 18 years (range: 6 to 38 years). Eighteen participants were very satisfied with their counseling session and one participant was somewhat satisfied. All 19 participants felt very confident with the information provided by the interpreters. All 19 participants were told about stool cards, 13 about were told about sigmoidoscopy and 14 were told about colonoscopy. Ten participants reported that the interpreters spent 10 or less minutes providing counseling and nine reported more than 10 minutes. Fifteen participants had no additional questions about colon cancer screening after counseling. **Conclusions:** These results suggest that culturally-tailored counseling on colorectal cancer provided by trained interpreters is well received by patients and may be effective in increasing screening rates in limited-English speaking patient populations. Interpreters working in health care systems may be able to serve multiple purposes, including promoting cancer screening, with training. With growing numbers of limited speaking patients and limited resources, interpreters may be an underutilized resource.

Keywords: Interpreters; Vietnamese

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PS2-24:

Determining Unmet Healthcare Needs of an Under-served Population Through the use of Health Assessment Forms: A Quality Improvement Project

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Background/Aims: The St. Vincent de Paul Free Clinic in Marshfield, WI, opened in 1998 to serve the unmet healthcare needs of local patients. The clinic serves approximately 500 patients per year at bimonthly primary care clinics and a monthly diabetes-specific clinic. The purpose of this project was

to identify unmet healthcare needs as targets for new program development.

Methods: Health assessment forms from regional healthcare providers and free clinics were used to develop a 45 question patient survey regarding demographics, healthcare seeking behaviors, preventative health, lifestyle, diabetes care, employment, and health insurance. The survey was approved by the free clinic board and administered by intake staff to all patients presenting from 11/21/2012–7/3/2013. Surveys were anonymous and participation was optional. Data were manually entered into an electronic form registered with Qualtrics.com for statistical analysis. **Results:** Surveys were completed by 107 patients (43% male), 63% of whom were ages 40-59. Results indicated a need for improved preventative health care, including vaccinations, comprehensive physical examinations, eye examinations, dental examinations, cancer screening, and diabetic foot exams. Sixty-four percent of respondents had answers suggestive of depression via the PHQ2 screening tool. In terms of healthy habits, 40% of respondents reported low physical activity levels, 67% felt they needed to lose weight, and 93% indicated low fruit/vegetable intake. However, nearly two-thirds of respondents indicated interest in improving physical activity or weight loss. Though 24% of respondents' employers offered health insurance, reasons for uninsured status were cost (49%), insufficient coverage (8%), or others (43%), including part-time employment status. **Conclusions:** Our patient-centered healthcare assessment identified several areas of need to be addressed, including soliciting volunteer services from area dental health professionals, exploring mechanisms to address mental health needs and compiling a pamphlet of local low or no-cost mental health services, and implementing a 12-week weight loss program with gym access, dietary counseling, and group support. Cost of insurance will likely continue to be an issue for many patients despite mandatory coverage, stressing the importance of free clinic services. Future healthcare assessments will be conducted to determine program success, identify additional areas of need, and inform the design of future programs.

Keywords: Health assessment; Free medical clinics

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HMORN Administrative and Technical

D1-1:

Processes that Accelerated Administrative and Regulatory Progress in Several Multi-site Institutional Research Studies

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Background/Aims: Multi-site collaborations offer opportunities to engage diverse research expertise to answer important public health questions. Many of these collaborations have, at their core, large, robust data sources that are critical to achieving research goals. Before scientific work can begin, however, there is a complex maze of administrative and regulatory requirements that must be efficiently navigated in order to avoid project delays. As funders' interest in comparative effective research (CER), research networks, and 'big data' increases, funding periods appear to be shrinking, making administrative and regulatory efficiencies more critical than ever. The current effort documents best practices in these areas. **Methods:** The study team examined best practices that addressed common challenges for successful project implementation in three large HMO Research Network (HMORN) studies that included 7-16 institutions. We identified three processes that significantly increased administrative and regulatory efficiencies: umbrella institutional review board (IRB) structure (with ceding), reciprocal data use agreement (DUA) and the HMORN subcontract template. **Results:** An umbrella IRB structure enabled researchers to submit pilot studies and new hypotheses as modifications using the same data source and processes for human subjects' protections. These study modifications underwent expedited review; often with determinations received in fewer than 10 business days. The HMORN DUA template was modified to make it reciprocal. This allowed limited data sets to be shared among data contributing sites and allowed investigators from any site to lead an analysis, thus, increasing the amount and pace of research that could be achieved. The HMORN subcontract template was "field tested" and results tracked over a 5-year period. Use of the template resulted in a decrease in the average number of days for initial subcontract execution from 215 days to less than 60. **Conclusions:** We demonstrated that developing new processes

and modifying existing ones can accelerate multi-site research. Standardization fosters collaboration, trust, and continued progress while meeting regulatory requirements that maintain human subjects' and institutional protections.

Keywords: Regulatory; Compliance

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D1-2:

A Novel Method for Calculating Aggregate Counts While Censoring Small Cells in Multi-site Studies

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Background/Aims: Healthcare research is often studied within small subgroups of a population where anonymity usually provided by aggregation breaks down due to small cell counts. In previous HMORN studies this problem has been handled by censoring counts if they are less than five, six or ten depending on the governing IRB or funding agency. Censoring small cells per site has the unintended effect of preventing calculation of the multi-site counts that are large enough to pose no reidentification risk. The proposed method censors small cells on a site-by-site basis while allowing the originating site to calculate aggregates unaffected by censoring. **Methods:** The proposed method splits data delivery into two steps. In the first step a small cell censored file is sent to the originating site as usual. Each site then also creates a file containing the non-censored datum along with four or more dummy values. In the second step a file with row numbers of the true data is sent to the coordinating center and the file with dummy values is sent by all sites to a third party for addition. The third party adds each permutation of records within the five-row dummy blocks received. The sum file is then sent to the coordinating center along with a column indicating which rows from each site contributed to the final total. The coordinating center can then use the address files received from each data site to identify which row total is made up of all real values as opposed to rows that include dummy values. This is the true aggregate value. **Results:** The proposed method allows discover true aggregate values while censoring small cell counts so as to preserve confidentiality of the members being represented. However, the anonymous third party handling does introduce logistical and privacy concerns that need to be managed carefully. **Conclusions:** This method increases investigators' ability to comply with the principle of releasing the minimum data necessary for medical research while not censoring more than needed. The approach also speaks to a growing concern about reidentification in nominally deidentified data.

Keywords: Informatics; Data collection

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D1-3:

Marshfield Dictionary of Clinical and Translational Science (MD-CTS): An Online Reference for Clinical and Translational Science Terminology

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Background/Aims: New terms are rapidly appearing in the literature and practice of clinical medicine and translational research. To catalog real-world usage of medical terms, we report the first construction of an online dictionary of clinical and translational medicinal terms, which are computationally generated in near real-time using a big data approach. This project is NIH CTSA-funded and developed by the Marshfield Clinic Research Foundation in conjunction with University of Wisconsin - Madison. Currently titled Marshfield Dictionary of Clinical and Translational Science (MD-CTS), this application is a Google-like word search tool. By entering a term into the search bar, MD-CTS will display that term's definition, usage examples, contextual terms, related images, and ontological information. A prototype is available for public viewing at <http://spellchecker.mfldclin.edu/>. **Methods:** We programmatically derived the lexicon for MD-CTS from scholarly communications by parsing through 15,156,745 MEDLINE abstracts and extracting all of the unique words found therein. We then ran

this list through several filters in order to remove words that were not relevant for searching, such as common English words and numeric expressions. We then loaded the resulting 1,795,769 terms into SQL tables. Each term is cross-referenced with every occurrence in all abstracts in which it was found. Additional information is aggregated from Wiktionary, Bioportal, and Wikipedia in real-time and displayed on-screen. From this lexicon we created a supplemental dictionary resource (updated quarterly) to be used in Microsoft Office® products. **Results:** We evaluated the utility of MD-CTS by creating a list of 100 words derived from recent clinical and translational medicine publications in the week of July 22, 2013. We then performed comparative searches for each term with Taber's Cyclopedic Medical Dictionary, Stedman's Medical Dictionary, Dorland's Illustrated Medical Dictionary, Medical Subject Headings (MeSH), and MD-CTS. We compared our supplemental dictionary resource to OpenMedSpell for effectiveness in accuracy of term recognition. **Conclusions:** In summary, we developed an online mobile and desktop reference, which comprehensively integrates Wiktionary (term information), Bioportal (ontological information), Wikipedia (related images), and Medline abstract information (term usage) for scientists and clinicians to browse in real-time. We also created a supplemental dictionary resource to be used in Microsoft Office® products.

Keywords: Ontology; Lexicon

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Mental Health/Chemical Dependency

C4-5:

Behavioral Activation Therapy for Perinatal Depression: Preliminary Results from a Multi-site Randomized Trial

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Background/Aims: Perinatal depression is both prevalent and associated with adverse correlates and consequences for women and offspring. Women and their health care providers often face complex choices regarding treatment of depression during pregnancy. Although studies suggest that pregnant women express a preference for psychotherapy over antidepressants, the latter is most frequently provided. These treatment patterns highlight the need for evidence-based psychotherapies with broad dissemination potential. We report preliminary results from a multi-site randomized trial comparing the effectiveness of brief Behavioral Activation (BA) therapy to usual care for women with elevated depressive symptoms during pregnancy. **Methods:** Women receiving prenatal care at Kaiser Permanente Colorado and Georgia, Group Health Cooperative, and HealthPartners (N = 163) were screened for depressive symptoms prior to or at their OB visit. Those with scores ≥ 10 on the PHQ-9 were recruited, consented, and randomized to receive 10 sessions of BA (N = 85) or usual care (N = 78). Obstetric nurses and behavioral health providers were trained to deliver BA by telephone, in the obstetrics clinics, or in patients' homes. Participants' mean age was 28, 37% (64/163) were pregnant with their first child, 47% (76/163) were non-White, and 15% (25/163) were Hispanic ethnicity. A majority (63%, or 102/163) reported receiving prior treatment for depression. There were no differences in demographic or clinical characteristics between the BA and usual care groups. The primary outcome measure was change in depression symptoms on the PHQ-9, obtained via a centralized web-based survey 10 weeks following randomization. **Results:** Mean baseline PHQ-9 scores for the BA and usual care groups were 14.9 (95% CI 14.1, 15.7) and 14.4 (95% CI 13.7, 15.2), respectively. Women randomly assigned to BA reported significantly greater improvement than women in usual care; mean PHQ-9 scores for the BA and control groups were 8.5 (95% CI 7.2, 9.8) and 10.3 (95% CI 9.1, 11.5), respectively ($P = .04$), and 46.5% (33/71) of the BA group had a 50% or greater reduction in PHQ-9 scores, vs. 30.4% (21/69) of the control group ($P = .05$). **Conclusions:** Behavioral activation may be an effective and feasible treatment for depressed pregnant women, with broad dissemination potential.

Keywords: Perinatal depression; Behavioral activation

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