TITLE	AIM	CHANGES IMPLEMENTED	MEASURES/RESULTS	SUSTAIN & SPREAD	TEAM MEMBERS
A Multidisciplinary Approach to the Prior Authorization Process Utilizing the Electronic Medical Record with a Focus on Patient Care and Financial Impact	Prior to the second quarter of 2013, the JFCI had no formalized or consistent process for obtaining prior authorizations before infusions and Injections. Aim 1: Develop a formalized, high-quality, multidisciplinary prior authorization process across all sites of the JFCI, creating a healthcare environment that is: Patient-centered: The prior authorization process is centered on the patient (diagnosis, treatment and insurance coverage). The JFCI, in collaboration with the departments of Social Work and Patient Care Management and Assistance, guide the underinsured and uninsured patients into programs that offer affordable health plans, payment plans, copay assistance, and drug replacement. Innovative: The Helios team electronically supports the prior authorization process through Epic and the oncology module Beacon. Much of this debt was attributed to insurance rejections from insured patients due to lack of authorization. Aim 2: The financial impact to both patients and the Henry Ford Health System. This was measured by the reduction in overall denials for the JFCI from 2013 to 2014. Additionally, other cost saving activities (retro-authorizations, claim rebills, appeals, patient/drug assistance) for the patient and health system were identified and quantified.	1. The JFCI established a multidisciplinary prior authorization team. 2. The authorization team recruited the Helios Ambulatory and Beacon groups to develop an electronic mechanism through Epic 3. Workflow aids were developed. 4. The initial stage of the process focused on obtaining prior authorization for all new patient treatments then extended to include all patient treatment regimens. 5. Additional changes included retaining retro-authorization, rebilling and appealing denied claims. 6. During insurance review or patient counseling sessions, uninsured/ underinsured are identified and referred to Social Work and Patient Care Mmgt. and Assistance. 7. Patients are involved in the process by providing personal documents, signing patient assistance forms and contributing in the appeal process. 8. Prior authorization numbers were not being properly submitted when claims were processed. Communication with Patient Financial Services and the Helios team resulted in assignment of referrals to patient appointments, facilitating prior authorization number attachment to claims. 9. HFHS developed a denial dashboard that, in the near future, will be utilized by the JFCI prior authorization team to track denied claims. *(More information was provided through the abstract - summarized here for print version)*	The Josephine Ford Cancer Institute (JFCI) treats an average of 400 patients per week (20,000/year) with infusions and injections across four sites (Detroit Campus-K13, Columbus center, Fairlane center and Downriver Center of Oncology – DCO).Reduction of JFCI overall and medication denied claims due to lack of prior authorization: Overall denied claims due to lack of prior authorization in 2013 = $1,593,531 Overall denied claims due to lack of prior authorization in 2014 = $163,977 Overall medication denied claims due to lack of prior authorization in 2013 = $1,428,573* *One patient contributed to $980,000. Overall medication denied claims due to lack of prior authorization in 2014 = $63,653 • 27 underinsured/uninsured patients were referred to Social Work and/or Patient Care Management and Assistance. Additional cost-savings activities that impacted 61 patients and the health system: ⬜ Insurance rebills: $1,022,890 ⬜ Retro-authorizations: $410,216 ⬜ Assistance programs: $76,800 ⬜ Insurance appeals: $74,261 ⬜ Other (Epic charge errors, inquiries): $56,883 o Amount of denials reclaimed (retro-authorizations, appeals, insurance rebills): $954,490 o Amount of cost avoidance due to the additional activities (insurance rebills, assistance programs, change/discontinuation of therapy): $686,560 o Total cost savings: $1,641,050	Sustaining the changes: • The JFCI prior authorization team will continue to meet monthly to evaluate the process, make quality improvement changes, and expand the growth of the initiative. • Financial barriers are addressed in real time and open communication exists between all departments involved. • Ongoing education for staff and patients will continue. Spreading of the process: • Members of the JFCI authorization team presented our process at the Revenue Officer Council meeting on April 8, 2014. This meeting consisted of administrators from multiple divisions of the medical group. • The electronic groundwork for prior authorization with Helios is established and can be extrapolated to other divisions. • The attachment of the prior authorization number to the claim will be further investigated through Helios and Patient Financial Services. • The JFCI prior authorization team plans to address not just medication prior authorizations but to extend to office visit, procedural, and laboratory prior authorizations.	Diana Kostoff Tammy Hankins Teresa Cunningham Shawn Ramseyer Deneen Ruiz Deanne Miller Robert Chapman Michelle Nelson Kathleen Yaremchuk Deborah Harrison Julie Wonsul Carlise Williams Kelly Ritchie Sharifa Alecendor Linda Kolos Kim Johnson Igor Rybkin Helios Ambulatory and Beacon Teams JFCI Social Work Team
Caring Conversations: A novel curriculum to improve resident communication with families in the ICU	Effective communication with families in the ICU decreases ICU length of stay, reduces family members' psychological distress, and reduces conflict between families and the medical team. Although residents at Henry Ford Hospital are frequently involved in family meetings during their ICU rotations, there was no formal curriculum to teach complex communication skills. Our project aims to improve resident communication skills in the ICU by providing opportunities to practice communicating with simulated patient family members using a novel curriculum.	All second-year internal medicine residents at Henry Ford Hospital participated in a series of three small group sessions during the 2013-2014 academic year focusing on discussing serious news and goals of care with families of ICU patients. Sessions were led by faculty trained in the "IntensiveTalk" method and included a short didactic component followed by structured practice with a simulated patient family member. Participants had the opportunity to "rewind" and "replay" segments of the interaction based on feedback from peers and faculty. Based on feedback from residents and faculty observations, improvements made for the 2014-2015 curriculum included recruitment and extensive training of new simulated patients, recruitment and ongoing training of faculty facilitators, and increasing session time from 90 to 120 minutes.	A questionnaire measured resident self-assessed preparedness and confidence before and immediately following the first small group session, as well as nine months post initial intervention. Data were analyzed using a Wilcoxon rank-sum analysis of residents' responses. There was significant improvement in self-assessed preparedness immediately following the intervention for all categories surveyed (pre-intervention mean score; post-intervention mean score; p-value), including discussing bad news (3.3; 4.2; p<0.01), conducting a family conference (3.1; 4.1; p<0.01), discussing treatment options (3.2; 3.9; p<0.01), discussing discontinuing ICU treatments (2.9; 3.6; p<0.01), and expressing empathy (3.9; 4.5; p<0.01). Scores for all items remained significantly higher than baseline at the nine-month follow up assessment except "expressing empathy." All participants rated the educational quality of this program either 4 or 5 on a 5-point Likert-type scale and recommended it to other residents.	As of July 2014, we expanded this simulation-based curriculum by implementing a 3-day workshop for critical care and palliative medicine fellows, a ½ day workshop for oncology fellows, and a full day workshop for ICU physician assistants and palliative medicine nurse practitioners. We have already conducted two of the three small group sessions for the 2014-2015 second-year residents and plan to hold a third session. We are continuing to collect written survey data and to obtain verbal feedback after each session to ensure constant improvement of our programs. With the assistance of the graduate medical education department, we are planning facilitator training programs at Henry Ford and developing a scholarship program to send faculty to national training programs as well as faculty development workshops in communication held at HFH. Our goal is to implement high quality simulation-based communication skills teaching for all trainees at Henry Ford and to continue developing workshops to improve communication skills for practicing physicians, advanced practice providers, and other health care professionals. We have also presented our work at national and regional conferences and plan to serve as a national and regional leader in communication skills training.	Kristen Chasteen Michael Mendez Rana Awdish Dana Buick Maria Kokas Abraham Markin Rebecca Bajoka Diego Cabrera Samantha Noll Sean Drake

TITLE	AIM	CHANGES IMPLEMENTED	MEASURES/RESULTS	SUSTAIN & SPREAD	TEAM MEMBERS
Centralized Business Office	Problem Statement: In the initial observations, the responsibility and expectations of Customer Service Representatives (CSRs) varied dramatically across the Medical Group. CSRs were deviating from the HFHS registration practices, scheduling processes were not being completed, and there were inconsistent patient conversations regarding financial obligations. These behaviors led to inconsistent patient experiences, sub-par cash collections, poor registration quality, and disappointing Press Ganey scores. These behaviors affect the following aims of quality: timely, effective, equitable, efficient, safety, and patient-centered. Improvement Goal Statement: To provide world class service while improving point of service (POS) cash collections, obtaining quality registrations, and improving Press Ganey scores.	Standardized front desk operations including registration and cash collections across HFMG front desk. The Department of Business Operations developed a time line for each individual desk displaying the expected date of conversion. Registrations were of low quality causing high levels of back end work before the encounter could be billed with the Medipac Legacy System. In addition, the following situations were identified and needed improvements immediately. Consistently poor Press Ganey scores, inconsistent registration/missing optical magnetic reader (OMR) forms, and inconsistent co-pay collection processes from clinic to clinic; resulting in inconsistent co-pay yields. The root cause was identified by poor patient interactions, non-existent POS cash collections, no point of service, and more than 40 clinical leaders managing 150 desk; 400 CSRs. Health care changes were coming rapidly and actions had not been communicated. The root cause was determined when the Department of Business Operations reviewed data from the Medipac Legacy system and the Epic work bench reports and analyzed the variety of errors and the locations of these errors. It was then determined that inconsistent communication and training were the root cause of the registration processes.	Upon finding the root cause of the issues with the front desk within HFMG, the Department created workgroups that developed resolutions to each individual issue such as: Chief First Impression Officer training and Mystery Shop programs to correct Press Ganey issues. Registration SWAT team for solving registration issues, and Leadership Reporting and Analytics meetings to evaluate performance on registration quality and cash collections. In 2014, all HFMG Supervisors and Coordinators-Business Office, and CSRs were moved to report to one centralized department-The Department of Business Operations. Team members have been coached to perform on one standardized registration process, including customer service and quality expectations. Weekly CSR performance dashboard distribution lead to implementing these changes: The creation of a Quality Review document to assure proper registrations are being completed, Standardized training and regular review of CSR work quality, the creation of the CSR Regional meeting assures that proper communication is being made to the CSRs. Metrics were distributed throughout the HFMG in the form of a "dashboard" to track and share improvements throughout the medical group, weekly team reporting meetings allows the Department to share information with one another and then provide the findings to the CSRs in huddle fashion.	The Department of Business Operations efforts comprises of four key steps that will strengthen the clinics financial performance, while improving the overall patient experience: creating the right organization structure, institutionalizing best practice processes, establishing the Right Operating Rhythm, and optimizing people, processes and technology. The Department has driven measurable changes in clinic performance and perceptible improvements to the patient experience. With reviewing the weekly dashboard, improvements towards the Medical Group goals are being made. Reviewing the number of errors that have been made and the percentage of POS cash collections obtained and addressing those improvements and errors on an individual basis with the CSRs, has displayed an upward progression towards our goals as well. Improvements in POS cash collections and registration errors per patient displays how the Department structure drives results. With the use of data metrics and the dashboards, the Department has been successful in displaying the progress and improvements of the CSRs allowing the clinics to share these changes and improvements with other business units. In addition, the creation of the Standard Operating Procedures (SOPs) for front desk operations and system modifications have been established and shared with other business units.	Kajon Franklin Cheryl Celeskey Latricia Miles Dave Kovach
Depression Care in Primary Care: The Power of IT Transformation to Drive Sustainability	To improve the detection and treatment of clinical depression in the Primary Care setting for high risk patients with chronic disease - Capitalize on IT Transformation to sustain integrated depression screening in Primary Care and expand capabilities to track referral management and care coordination	Screening Rates (as a measure of sustainment): In the first four months of launching EPIC, HFMG matched the number of screenings done in the first four years of the program. By the end of the first year of using EPIC, HFMG conducted 126,591 depression screenings. Approximately 30% of these screenings were patients with one or more of the targeted chronic conditions. Thus, 70% of screening efforts were with a broader patient population than initially anticipated and attributed to the ease of use. Engagement into treatment, measured by those who kept their appointment with BHS following a documented referral was 70% (n=386). Another 22 patients canceled and rescheduled their initial appointments, indicating that 74% (n=408) sought or planned to seek treatment. These rates far exceed what is expected based on the published literature.	Detection rate on the PHQ2 was 4% (n=4,929), with 100% compliance on following up with the full PHQ9 when the initial two-item screen was positive - Of the 4,929 patients receiving the PHQ9, 64% screened positive (n=3,136) for probable clinical depression. Referral management and care coordination Outcomes: - Data from the past 12 months (August 1, 2013 thru July 31, 2014) was reviewed to look at recent trends in referral management and treatment engagement for patients screening positive for depression - A sample of 3, 489 patients scoring >= 10 on the PHQ9 were analyzed. Majority were adults aged 18 + (96%), female (72%), Caucasian (51%), and mean age was 49.54 yrs. The average PHQ9 score was 16 (range 10-27), indicative of moderate major depression. - 30% of patients had a documented referral to BHS for further assessment and/or treatment (n=1,015) The majority of BHS referrals (85%, n=864) occurred same day or within 30 days of the screening; 4% within 60 days, 3% within 90 days, and 8% occurring more than 90 days after screening.	The current data suggest that the Depression Care Initiative in Primary Care is sustainable. - IT transformation which embedded simple screening tools and clinical decision making tools into existing workflow processes can improve the quality of care for medical patients with comorbid depression -Untreated depression can negatively impact healthcare outcomes and costs. Access to BHS services is critical to sustaining this work. Continued growth of integrated mental health services into the Primary Care setting will be important to spreading this work. - Last and perhaps most important to sustainability is the completion of the Depression Care outcomes dashboard to continue to understand our population of depressed patients, safety risks and outcomes related to sociality, and better gauge the efficacy of our referral management and treatment programs currently in place.	Terri Robertson Doree Ann Espiritu Carol Newton Kevin Frasier Ellen Portnoy Janet Karch Cara Seguin Carol Horn

TITLE	AIM	CHANGES IMPLEMENTED	MEASURES/RESULTS	SUSTAIN & SPREAD	TEAM MEMBERS
Developing a Language Access Clinic for Patients with Limited English Proficiency **COMPETITION WINNER**	The overall aim of the project was to explore the feasibility of establishing a LAC for Hispanic/ Latino patients with limited English proficiency (LEP) and patients who prefer to communicate about their healthcare in Spanish. Utilizing Interpretative Services the project was able to confirm a need for patients of limited English proficiency (LEP) in order to provide the highest quality care. This project is directly responsive to key requirements of multiple stakeholder business units. These business units were surveyed and felt it was important to use trained medical interpreters to provide language access. The project is relevant to HFHS Mission along with the Institute of Medicine's six aims of improvement because: 1) The focus of the Language Access Clinic (LAC) clinic offers patient-centered care for patients who are not bi-lingual. 2) Physicians and patient interaction are more efficient and effective because of better communication; 3) The LAC increases safety by having patients involved in their medical decision making and provides care that doesn't vary in quality because of patient's limited English proficiency.	The overall aim of the project was to explore the feasibility of establishing a LAC for Hispanic/Latino patients with limited English proficiency (LEP) and patients who prefer to communicate about their healthcare in Spanish. Our multidisciplinary team has established a Language Access Clinic (LAC) at HFHS in the General Internal Medicine clinic. Currently, patients with Limited English Proficiency (LEP) can have their entire clinical visit conducted in Spanish by a proficient bi-lingual medical staff. The clinic is for (1) patients who have already made a visit to the Internal Medicine clinic and report Spanish as their preferred language, (2) patients who have self-reported LEP, and (3) patients who are able to speak English but culturally feel more comfortable with a Spanish-speaking provider. Clinic appointments for the LAC are scheduled in advance and made by a Spanish-speaking patient navigator. If educational materials in Spanish are needed, the MA will give the materials to the patient (made available through the Department of General Internal Medicine). Over the study period, the LAC was conducted for 24 four-hour sessions and saw a total of 78 patients. Of the 78 patients, 67 were LEP or preferred communicating about their health care in Spanish.	LAC Patients: Comparisons were made between LAC and non-LAC Patients. A total of 63 mailed surveys were completed and returned. The majority of the patients (71%) indicated LEP or a preference to communicate in Spanish. Overall, 63% of respondents (LAC + Non-LAC combined) reported a usual physician, 40% reported using an interpreter during a clinic visit (not shown), and 47% reported using a family member to help communicate. For the combined group, 9% overall reported having trouble in the past understanding medical instructions or advice and 13% reported having some confusion with prescriptions on previous occasions. A comparison of LAC patients to non-LAC patients is divided into "Previous" experiences and the "Most Recent" experience, which for LAC patients would include visits to the LAC. Assessing "Previous" experiences, LAC patients were significantly more likely to have had trouble understanding medical instructions/advice. LAC patients were more likely than non-LAC patients to report illness/bad reaction to a prescription due to LEP. LAC users were less likely to report a usual physician and were less likely to report using a family member to help with communication during a clinic visit. Assessing the "Most Recent" visit, more LAC patients had positive reports about comfort level, ability to understand materials provided and ability to communicate in their preferred language.	Sustaining and expanding the LAC at HFHS is feasible. Required are bilingual providers and support staff. Approximate cost of each clinic (4 hour time slot) was $97.40. Approximate revenue generated is $291 per 4 hour clinic slots ($7000/24 clinics @ 4 hours each), for a financial gain of $193.42. More patients will generate more revenue. In addition, LAC patient navigator and nurse assistant were hired on a contingent basis. By hiring and utilizing staff that would be working fulltime for General Internal Medicine, perhaps a cost savings could be realized. Increasing the number of bilingual staff at HFHS could make our healthcare system more attractive to patients in SE Michigan and beyond.	Lucera Chueca Anton Chastang Christine Joseph Cheryl Miree Andrea Jamarillo Candido Condori Meredith Mahan Brittany McKinnon Tara Andrews Stephen Hathaway Dr. Joseph Daniel Bitman Jennifer Flowers Janel Goike-Lyons Chrystal Holmes Paul Szilagyi Norine Howie Lorraine Purcell-Connole Prasad Rao Amigos ERG at HFHS HFHS Health Disparities Research Collaboratiave (HDRC) Institute on Multicultural Health (IOMH)
Gift for All **COMPETITION WINNER**	Dialysis patients and dialysis staff are unaware that organ donation is an option for chronically ill patients; specifically, dialysis patients. They believe, due to chronic illness, they have nothing viable to give. As a result, there is a disparity between dialysis patients who do not sign up to be organ donors compared to those who sign up, who are not on dialysis. The aim of the "Gift for All, Everyone has Something to Give" study was to remove this disparity by providing the dialysis community, both patients and staff, equal access to factual information regarding organ donation. As a result, dialysis patients can have the opportunity to make an informed decision regarding their right to donate organs and tissues. Another important focus of this study was to assess, with the help of MOTTEP (Minority Organ Tissue and Transplant Education Program) the disparity that exists between the number of African Americans listed for transplant as opposed to the number of those who donate. This is crucial as those who are waiting for transplant are most likely to match with a donor from their same ethnic group. This study rigorously evaluated the effectiveness of using lay health advisors, known as Peer Mentors, to remove potential barriers, dispel myths, and to increase the number of patients to become organ donors.	The use of Peer Mentors as part of the health care team is an innovative approach in offering peer-delivered service along with conventional care to help serve our patients more effectively, efficiently, and successfully. The Peer Mentors, in this study, were either dialysis patients or transplant recipients. In addition to the basic Peer Mentor training, they received an additional 8 hours of training on issues related to tissue and organ donation along with advanced communication strategies; including reflective listening, open-ended questions, and rolling with resistance. Training was provided by National Kidney Foundation of Michigan and Gift of Life Michigan. This was a four year, multi-center study consisting of 12 Greenfield Health Systems dialysis units. The 12 units were matched on census and racial composition; then randomized into intervention and comparison groups. The intervention group received trained Peer Mentors who were paired with eligible and willing participants. In contrast the comparison group only received four brochure mailings from Gift of Life Michigan. Both groups completed baseline surveys, prior to intervention, and follow-up surveys, once the intervention was completed. Unit social workers shared dynamics of the unit and how to best in-service staff in order to be most effective.	The success of this study was based on whether participants actually signed up to be organ donors. Primary outcome measure used was mail-in and on-line registrations to the donor registry that were coded by dialysis unit for tracking purposes. Secondary outcome measures used were self-reported registrations to the donor registry, as well as pre and post surveys for participant knowledge, attitudes and behavior as well as feelings about interactions with Peer Mentors. Two sub-scales with good psychometric properties were identified: A General Benefits Scale and a General Barriers Scale. Findings from the General Benefits Scale: (Association with demographics) - Individuals aged 45 and older had significantly higher perceived benefits as compared to all other age groups. - Mean scores did not differ significantly by gender. - Whites had significantly higher perceived benefits than African Americans/Blacks as well as Hispanic/Latinos. - African American/Blacks had higher perceived benefits than Hispanic/Latinos. Findings from the General Barriers Scale: (Association with demographics) - Mean scores did not differ significantly by age. - Mean scores did not differ significantly by gender. - There were significant contrasts in mean scores between White patients and African American/Black patients, with Whites reporting lower perceived barriers to donation.	With the success of the Gift for All: Everyone has Something to Give project, much is being done to spread and sustain the results... - The team is currently sharing study results with patients and staff. - Bulletin board presentations, with study results, to be displayed in all dialysis units. - Submit results for publication in renal specific journals. - Conduct periodic educational Lobby Days in dialysis units to continue to dispel myths and spread the message about organ donation amongst the dialysis community; including patients, caretakers, and staff. - A direct outcome of this study was the advent of the Greenfield Health Systems Peer Mentor Community. Greenfield Health Systems recognizes the positive impact that Peer Mentors can have on improving the health and well-being of dialysis patients. The GHS Peer Mentor Community will be able to sustain and spread the message about organ donation in the dialysis population. However, their value is recognized well beyond. The GHS Peer Mentor Community is a structured program offering on-going support to Peer Mentors as well as routine education in areas that can positively impact patient outcomes, such as, diet tips, consequences of missed treatments, and benefits transplantation. Information gathered from survey results regarding African-American attitudes and feelings relating to perceived benefits and barriers will be used to help plan future programming.	Holly Jenkins-Riley Sheri Stav Jerry Yee

TITLE	AIM	CHANGES IMPLEMENTED	MEASURES/RESULTS	SUSTAIN & SPREAD	TEAM MEMBERS
Impact of a Physician Assistant Directed Antimicrobial Stewardship Consultation Service	Antimicrobial stewardship is an important role for ID providers Effective expansion of stewardship programs will require innovative interprofessional models within health systems The HFHS stewardship program expanded in 2012 by creating a PA-directed consultation service supervised by ID physician staff, dedicated to "stewardship consults" The aims of this project were: • To improve antibiotic management in patients receiving restricted antimicrobials • To improve the transition of care of patients discharged on intravenous antimicrobials	The existing antimicrobial stewardship program (ASP) at Henry Ford Hospital Detroit Campus was expanded in 2012 to include a formal consult service dedicated to antimicrobial stewardship. • Consults are generated several ways: Automatic when restricted antimicrobials ordered or as needed for antimicrobial use policy criteria Required for outpatient parenteral antimicrobial therapy PA triages ID pager to distribute consults to primary (ID fellows) or stewardship teams • Daily rounding Stewardship consults are seen by PA and staffed by ID attending • ID fellows stewardship experiences Responsible for restricted drug approvals and consults in ICU and weekends • Clinic follow-up Patients requiring ID follow up have visits scheduled with stewardship PA in clinic	We evaluated a cohort of 335 patients seen by the PA-managed stewardship consult service between November 2012 and December 2013. • Patient characteristics: median age 67 years, 52% male. • Comorbidies: 42% diabetes, 26% COPD, 25% CHF, 23% malignancy, 13% BPH, 5% dialysis. • Reason for consult: 186 (56%) request PICC for home infusion; 44% request antibiotic management. • PA-AMS diagnosis: 28% lower respiratory tract, 22% urinary tract infection, 15% skin infection, 15% bloodstream, 5% osteomyelitis; 24% no infection, 16% asymptomatic bacteriuria. Interventions: • Change in diagnosis for 109 (33%). Most common diagnosis changes were for UTI (49/109, 45%), lower respiratory tract (36/109, 33%). • 71/186 (38%) PICC avoided • 128/335 (38%) IV to PO switch • 28% discontinue antibiotics, 13% de-escalate, 10% simplify, 5% broaden spectrum • 16% additional diagnostics suggested • 13% extend duration of therapy Outcomes: • Clinical success was observed in 95% of patients. 20% of patients were readmitted within 30 days, 2% readmission for index infection, 1.5% new onset C. difficile infection. 15% had outpatient clinic follow-up scheduled with PA. 36/50 (72%) attended the clinic visit.	The PA-directed stewardship consult service effectively managed antimicrobial stewardship consults and reduced unnecessary PICC placement and antimicrobial use. Patient outcomes were favorable. This interprofessional model for antimicrobial stewardship with a mid-level provider is a reasonable approach to expanding antimicrobial stewardship programs in settings with limited infectious diseases resources.	Susan Davis Jenny Grunwald Rachel Kenney Allison Weinmann Laura Johnson Marcus Zervos
IRB No. 8070 Caring Science Study: Implementing the Relationship-Based Care RBC Model and Creating a Flexible and Efficient Workforce at Henry Ford Wyandotte Hospital	There are multiple aims of this study. The first is to extend and test an existing scientific model in Caring Science that has been tailored to include current outcome measures related to the Quality & Safety and People Pillars within HFHS. The second aim is contribution to the findings of 12 international concurrent RBC studies that are testing very similar models. The third is to generate data from the Caring Science model that can be used at the unit/department level as an organizational refinement role level which will assist with proficiency and flexibility as well as initiate a baseline measure in the concepts of job satisfaction, caring for self and others, and organizational outcomes. This data will be used in a longitudinal study to understand the impact of implementing Relationship Based Care (RBC). The research questions and long-term goal of this 4-year research study will be used to examine the change in outcome scores over time. This baseline study will focus on descriptive statistics which will examine the relationships in the proposed model.	Cycle 1 developed a research proposal using the Relationship Based Care (RBC) cultural transformation I2E2 model; Cycle 2 Residents were added to Therapeutic Relationships (TR) workshops and use caring work in their PI project; Cycle 3 Develop house wide Results Council (RC) and Cycle 4 The next wave of units and departments starting the re-design. The I2E2 model is: (Inspiration (shared vision), Infrastructure, Education and Evidence); the Shared Governance structure is being revived. The Unit Governance Council of each unit is where implementation of RBC is designed. • RBC concepts are connected to HFHS Mission, Vision and Values. Initial implementation started with three days: Strategic design day, Orientation of key leadership stakeholders and a Kick off day. "Get Smarter" Material was assigned to enhance knowledge of the RBC framework and the I2E2 cultural transformation model. • A RC was formed to partner with the Unit Governance Council Members to develop an action plan to enhance caring, healing and safety in the hospital environment. • Every employee in the ED attended TR Workshop to learn the following four relational skills - attunement, wondering, following and holding.	During this 4-year longitudinal study results and measure will be reported as follows: • Patients, Physicians and employees will be surveyed before and after each wave using the following Caring Science Surveys (approximately every 6 months): o Caring Factor Survey (CFS) o Caring Factor Survey – Care Provider Version (CFS – CPV) o Caring Factor Survey – Caring for Self (CFS-CS) o Healthcare Environment Survey • One year after the units have implemented their RBC implementation plan the following outcome measures: o Patient Satisfaction PG • Nurse and Employee 1 year turnover o Employee Engagement will be compared to pre and post RBC implementation metrics and analyzed as outlined in the research questions. Each UGC and the RC will have the opportunity to select additional outcome measures to analyze.	1. Action items for consideration as the RBC implementation plan moves into the next wave of units: Reinforce concepts taught in the Therapeutic Relationship classes; Evaluate with employees who are attending classes or expanding knowledge how the new knowledge might be applied within current role; Evaluate with leadership who attend the workshop how the concepts are (or are not) being integrated within their respective role and setting; Identify a variety of ways to care for self; Focus on self-care strategies that can be done easily during work or even on the way to work. Action for consideration for key findings 8-9: Ensure there is an adequate dissemination of system resources available for doing the role as this enhances job satisfaction at HFWH. Action for consideration for key findings 10-12: Reinforce concepts taught in the Therapeutic Relationship classes as these classes center on the concept of caring relationships. Action for consideration for key findings 10-12: Add more outcomes of caring in next two measures as it will deepen research into the benefits of implementing RBC. Action for consideration for key findings 13-14: Data suggests employees who attend classes and workshops are not able to integrate new learnings into role. Explore how new concepts can be integrated into existing roles in organization.	Josephine Wahl Tara Nichols Dennis Lemanski John Nelson Shawn Dowling Sherry Johnson Melina Custovic Russell Pieper Mohamed Rezik Brian McManus Lee Poston Edwin Lui Melissa Clark Jason Setsuda Purtuc Radu Jessica McCracken Alex Grimaldi Rebecca Steele HFWH Employees HFWH Patients (Sample Population)

TITLE	AIM	CHANGES IMPLEMENTED	MEASURES/RESULTS	SUSTAIN & SPREAD	TEAM MEMBERS
Maximizing Current Resources (Finding the Waste)	To transfer slow moving inventory (medications), to sites that currently have active patients on these medications. In turn, utilizing already purchased medications thus realizing financial benefit sooner than previous practices that would wait for product to expire and be sent back to credit that could take up to 18 months. The selling of this slow moving inventory allows for faster capture of revenue and minimizes loss on product(s). An added benefit is to decrease medication inventory on hand and increase overall inventory turn ratios. This will result in leaner more on time inventory. We expect to transfer two million dollars' worth of product which if expired; we would only receive 50% of its value. With the use of the Supplylogix software for transferring slow moving medications we than would expect to keep 90% of this value. Thus resulting in an additional 40% of revenue to our bottom line.	*Review, interface, and implement Supplylogix software into current pharmacy software. (October 2013) *Piloted store-to-store transfers of select medications identified as a slow mover status. (December 2013) *Implemented system wide store-to-store generated transfer of select medications with the exception of Class II medications (narcotics). (January 2014) *Implemented computer generated logarithm for product specific minimum and maximum inventory levels based on usage. (January 2014) *Piloted Class II medications (narcotics) store-to-store transfer. (February 2014) *Implemented Class II medications (narcotics) store-to-store transfer. (March 2014)	1. Inventory: Success. Results show a decrease of inventory on shelves with an increase of inventory turns. 2. Medication Sell-Through: Success. Achieving desired projections of sell-through percentage (90%). 3. Reverse Distributor returns: Currently ongoing, full benefit and tabulated results will not be fully appreciated until 2015. Current Results: Transferred 2.4 million dollars of slow moving medications between pharmacy locations. Resulting currently in 83.7% sell-through rate, thus adding 1 million dollars of additional savings compared to previous practices. If current trends hold we expect to see 3.7 million dollars of transfers, with a resulting sell-through rate above 90% showing 1.6 million of additional savings. Secondary, we have seen a decrease of 2.4 million dollars in overall inventory valuation and a increase in inventory turns from 6.5 to 9.5.	One constant in pharmacy is the continued shifting of one medication to another by: therapy changes, seasonal needs, and pharmacoeconomic changes. This results in products that show decrease of usage in the pharmacy leaving unused product(s) in the inventory. With the use of Supplylogix, these products can be identified and moved to a location that regularly and consistently dispenses them thus decreasing stagnant inventory. Investigate feasibility of moving product from outpatient sites to inpatient and home infusion pharmacies. Become a best practice for redistribution of pharmacy related products that demonstrate savings and control of inventory. Serve as a model for inventory management and redistribution of other health care products (e.g., syringes, needles, gauze pads, I.V. tubing, etc.).	Michael Zajac Douglas Smaojedny Steven Duda Alexander Mansour Samer Youssef Anna Marcantonio
Novel Daily Management and Focused Employee Training Leads to Improved Patient Safety by Reducing Delays in Critical Result Reporting to Henry Ford Hospital and Medical Centers Providers **COMPETITION WINNER**	AIM: The Core Laboratory (located on floor K6 at Henry Ford Hospital) reports over 6 million test results every year. Of these, on average 150 test results per day are of critical nature, i.e. they are significantly outside the reference range and reflect an immediate life-threatening situation. The ordering provider must be immediately notified so prompt clinical intervention can be initiated for the patient. Further, these results must be released and documented according to the requirements of National Patient Safety Goals (NPSG). Our objective is to communicate and document these results in a timely and consistent manner. Any deviation from this defined and standardized process is considered a defect. We designed, implemented and improved on a system of visual daily management that focused on tracking and trending defects related to critical values, while also focusing on employee education. Daily management is a visual tool to monitor critical processes on a daily basis in order to adjust and manage your work in real time. Both actions were aimed at reducing critical value defects and improving patient safety system wide. (More information was provided through the abstract - summarized here for print version)	Current Condition: Our target condition for critical value notification is to have zero defects. In the beginning (December 2012), an average of 0.8 calls per day were defective. A detailed evaluation of defects revealed multiple root causes including: difficulty in getting to contact with the correct healthcare provider, lacking standard work for critical value reporting process and knowledge of the escalation procedures. Change and Implementation A multidisciplinary team of medical technologists, laboratory management and pathologist focused on streamlining the critical value reporting process using daily performance metrics. Each day, delays in critical value reporting are reviewed for the root causes and were addressed by daily metric management, education, standard work and a standard processes. These metrics were delivered on a visual daily management board that can be viewed by all technologists in the laboratory. PDCA Cycles 1. Obtained a comprehensive profile of defects and educated employees individually 2. Provided education to groups through laboratory meetings 3. Developed a one page flowchart/ standard work to eliminate process variation 4. Focused training on new tools to employees.	Measures and Results Number of defective critical values is tracked and trended. Through refining our process to include standard work and minimizing variation we were able to reduce the defective rate. Number of defective critical value calls per day improved from Dec. 2012 at 0.8 defective per day, to 0.3 defective per day in Aug 2103, to 0.013 defective per day in Jan 14 and finally 0.006 defective per day in Aug 2014. Efficacy of training on the escalation of critical value procedure was tested. Before training, a 5 question scenario based quiz was conducted. Pre- educational training resulted in 75% (3.7/5 = 75%). After training and the installation of a job aid the post quiz resulted in 27% improvement (4.85/5 = 97 %) One critical value defect costs 30 minutes of supervisory time and 15 minutes of Medical Technologist time. In December of 2012 this resulted in 12.5 hours supervisor time and 6.25 hours of Medical Technologist time per month spent to resolve defective critical value calls. As of August 2014 this has reduced to 1.5 hours supervisor time and 45 minutes of Medical Technologist time per month.	Sustain and Spread: Information was delivered across all workstations and technologists within the main campus core laboratories. Communication of the progress of this process improvement is still tracked, trended and managed visually on a daily basis (as the metrics threshold remains at zero). Lessons Learned: - The involvement of differently level of management and employees for measurable gains fosters team sprit - Use of the same approach to daily metric monitoring such as stat value call back - Being a successful project this has be showcased a national and international level and had been seen as an excellent initiative for patient safety across the pathology service line - We have been able to sustain the change as evident by the steadily decreasing defect rate.	Jacqueline Jabczenski Jaclyn Valanty Denise M. Smith Michelle Woodrow John Zajechowski Aditi Vidholia Carolyn Feldkamp John L. Carey Guarav Sharma Richard J. Zarbo Medical Technologists of Core and Stat Lab at HFH

TITLE	AIM	CHANGES IMPLEMENTED	MEASURES/RESULTS	SUSTAIN & SPREAD	TEAM MEMBERS
Psychosocial Factors Influencing Readmission Rates in Patients with Heart Disease **COMPETITION WINNER**	1. To identify correlates of past-year admissions, and 30 day re-admissions, of patients admitted with Heart Failure and Acute Myocardial Infarction. Correlates include various behavioral risk factors, such as depression and cognitive impairment. 2. To pilot strategies that may assist in decreasing 30-day readmission rates in this patient population.	Using the P-D-C-A process, the following changes were implemented: The first cycle of change was the development and pilot test of a semi-structured interview using the Patient's Health Questionnaire – 9, Generalized Anxiety Disorder – 7, the Spiritual Index of Well-Being and components of the Mini-Mental State Exam. The interviews were conducted by behavioral health and advanced practice nurses on the cardiac telemetry units on patients admitted with heart failure during Q1 2013. Chart review obtained demographics, psychiatric and substance abuse history, comorbid medical conditions, last available BNP and EF (as indices of disease severity) and past-year admissions/ 30 day readmissions. Based on the initial pilot, notably CI was prevalent and significantly related to readmissions, the second cycle of change, occurred in Q3 2013. Changes included: interview tools were slightly redesigned, a behavioral health intern was assigned to the unit, and nursing staff were educated on the concept of CI, and the prevalence of CI in patients with HF. The screening determined whether CI was delirium versus dementia, as well as if depression/ anxiety were organic versus transient. The intern collaborated with the team to assist in education, counseling and follow up with the patient and family.	Change Cycle #1: In patients with HF, • 20% displayed moderate-severe depression • 24% acknowledged a history of psychiatric treatment, but an additional 12% had chart evidence of psychiatric treatment, most commonly use of an SSRI • 54% displayed either disorientation for one or more of current month, current year or hospital, or a score 0-1 on the three item Short Term Memory task. Only 1 in 10 patients had been previously recognized as such by chart review. • Borderline significant effects were found relating past year admissions to the PHQ9, a History of Substance Abuse and History of Chronic Kidney Disease. • Immediate Memory was significant, and all measures of cognitive function trended towards worse performance in patients who were admitted within 30 days: Orientation, Concentration, Short Term Memory as well as overall Moderate-Severe. • Psychiatric History (either a PHQ9 score of 10 or better, or chart confirmation of psychiatric treatment) was also associated with 30 day readmission rates. • BNP prior to discharge and recent ejection fraction failed to covary with past year or 30 day readmissions • These results suggest that both depression and CI are possible determinants of early readmission, and are in agreement with prior studies that found an adverse impact of depression on admission/readmission rates.	• The survey tools are being utilized in other patient populations in the hospital, including chronic kidney disease and surgical services • Efforts are underway to develop viable financial support that would allow for billable visits by BHS • There continues to be improvement identifying patients at high-risk for readmission • Further evaluation is needed to determine what support would be the most beneficial for patients with CI in both the home and community • CI may be considered a "hidden comorbidity" that can impede the ability to make self-care decisions, therefore, incorporating a CI evaluation as part of the admission assessment may prove beneficial in establishing an appropriate plan of care • The team is preparing a proposal for submission to the Patient Centered Outcomes Research Institute" that would allow us to expand this effort to other units • Identifying psychosocial factors of CI, depression, and anxiety may have reduced symptom burden and increased compliance, as evidenced by the sustained decreased readmission rates • Early identification in the admission process of patients with CI and psychosocial issues has allowed more time to get the diagnosis right, gain rapport with the patient and family, and thereby work more effectively with the patient and team.	Catherine Draus Crystal Abro Angela Budai Gale Camper Debra Checkler Isabel Cole Robin Griffith Cynthia Hamet Jackie Hope Michael Hudson Mark Ketter Toshia Kole-James Jona LeKura Maria Paraschiv-Buican Diane Pomorski Matt Saval Pamela Walker Renee Willis
Reducing Rates of Indeterminate Results in the Quantiferon®-TB Gold Interferon Gamma Release Assay	Henry Ford Hospital was experiencing unacceptably high rates of indeterminate results in the Quantiferon Gold Interferon Gamma Release Assay (QFT-GIT) for detection of Mycobacterium tuberculosis infection. In October 2013, the rate of indeterminate results was 58% systemwide, and at Henry Ford Main Campus, the rates were even higher at 71%. The situation was further complicated by a concurrent nationwide shortage of PPD used for tuberculosis screening. The QFT-GIT Assay has benefit over traditional means of latent tuberculosis testing because results are achieved with a single hospital or clinical encounter. However, this benefit is negated when rampant indeterminate results necessitate patient redraws. In some cases, multiple specimens were collected before a valid result could be obtained resulting in significant patient and clinician dissatisfaction. In addition, due to lack of an alternative testing mechanism, patients had to endure unnecessary follow up including potentially chest X-rays and repeat clinician visits. Our aim was to reduce these rates, thereby reducing the need for unnecessary redraws and patient call back.	We formed a multidisciplinary task-force comprised of laboratory and nursing leadership to disassemble the problem. Our analysis yielded multiple possible etiologies for the high rates of indeterminate results. While some of these issues were intrinsic to the assay, pre-analytical factors could be negatively impacting downstream test results. This included problems related to specimen collection, transport and processing. We implemented several waves of data collection, process changes and educational initiatives. Educational materials emphasizing the necessity for timely processing of specimens were distributed to core lab staff. Nursing staff rolled out education on specimen collection, including video clips and mandatory online training. In addition, routine monitoring of specimen transport and processing times was initiated. Finally, a document describing the standard work protocol was prepared for phlebotomy staff at lab draw sites. Indeterminate rates for individual phlebotomists were also separately tracked. We implemented these measures in a stepwise fashion, and continuously monitored the results to analyze the potential trends in indeterminate results.	Using the methods described, we were able to decrease the hospital system wide and main campus rate of indeterminate results from 58% and 71% respectively in October 2013 to 5% and 7% respectively in February 2014. Laboratory cost of indeterminate test results during the period in question was approximately $9840. However, this does not include the cost of patient repeat visits, redraws, unnecessary follow up and procedures performed due to lack of valid QFT-GIT test results. This improvement would also reduce patient dissatisfaction due to the need to return for specimen recollection which is some cases occurred several times.	We continue to monitor the indeterminate results. Since March 2014, the rate of indeterminate results has averaged 8.82% per month, with an overall average of 8.36%. At Henry Ford Main Campus, the indeterminate rate per month has averaged 11.70%, with an overall average of 10.72%.	Brie Kezlarian Linoj Samuel Ralph Benitez Cheryl Stone Sue Ruediger

TITLE	AIM	CHANGES IMPLEMENTED	MEASURES/RESULTS	SUSTAIN & SPREAD	TEAM MEMBERS
Sometimes Less is More: LEAN microbiology reporting improves antimicrobial use in urinary tract infections	Enterococci are the 2nd leading cause of urinary tract infection (UTI) in hospitalized patients. These bacteria are frequently resistant to commonly used antibiotics. The aminopenicillins (ampicillin and amoxicillin) are a group of antibiotics that achieve very high concentrations in the urine, and can therefore be used to treat enterococcal UTI that appear to be resistant to ampicillin in vitro. The HFHS Clinical Microbiology Laboratory receives a high volume of urinary specimens; therefore LEAN process improvements are of great interest. The aims of this project were: • To determine the impact of laboratory workflow for susceptibility testing of Enterococcus species isolated from urinary cultures on the treatment and outcomes of patients with enterococcal UTI • To improve antibiotic use in enterococcal UTIs by reducing unnecessary broad-spectrum antimicrobial use	Prior to this process change: Speciation and full susceptibility testing was completed on Enterococcus sp isolated from urinary cultures using automated susceptibility testing methods (Vitek II) After 2012: • Microbiological evaluation of Enterococcus species in urinary isolates was limited to screening for vancomycin resistance. • Additional susceptibilities were completed and reported to providers on request • Laboratory results for these cultures was reported as "Enterococcus species" along with a statement encouraging narrow spectrum antibiotic use: "ampicillin IV or amoxicillin oral are predictably reliable for treatment of uncomplicated enterococcal UTI"	We conducted a retrospective cohort study of inpatients at Henry Ford Hospital Detroit Campus following the laboratory reporting change. The study population included patients with symptomatic UTI and isolation of vancomycin-resistant Enterococcus species (VRE) from a urinary specimen. • 61 patients met inclusion criteria: 31 treated with aminopenicillin, 30 with a non-beta-lactam antibiotic (e.g. linezolid, daptomycin or nitrofurantion) • Patient characteristics (infection characteristics, comorbid conditions) were similar between groups • Clinical cure was 84% among patients treated with an aminopenicillin, and 73% in those treated with a non-beta-lactam agent. No difference in clinical cure was detected in relevant subgroups, including patients in the intensive care units, those with chronic kidney diseases, or those with diabetes mellitus. • Following implementation of this laboratory change, use of high-cost non-beta-lactam agents (e.g. linezolid) was reduced, resulting in a significant cost savings.	The use of aminopenicillin therapy for enterococcal UTI regardless of ampicillin susceptibility resulted in positive clinical outcomes and reduced antibiotic expenditures. This strongly supports the streamlined testing and reporting procedure implemented in the microbiology laboratory.	Susan Davis Rachel Kenney Linoj Samuel Robert Tibbetts Kelli Coe Marcus Zervos Mary Beth Perri
Standardization of the Hospital Medication Formulary Across Henry Ford Health System	The aim of this project was to develop a standardized medication formulary across all hospitals of Henry Ford Health System. A standardized medication formulary was a key requirement of the Project Helios team as they built the new electronic health record to be used across the system. Standardization of the medications used at each hospital would reduce the complexity of the electronic health record build and maintenance, and allow for the creation of standardized order sets to drive high quality patient care across the system. A standardized medication formulary would also contribute to a consistent Henry Ford Experience for all patients, as well as staff members who may practice at more than one business unit. Medications selected for inclusion in the standardized formulary would be evaluated based upon safety, efficacy, and cost. Efficiency would be improved by eliminating the purchase and storage of unnecessary medications.	Historically, each hospital in the system has maintained a separate medication formulary through a local, hospital-specific Pharmacy and Therapeutics Committee. In March 2012, a consolidated formulary file by drug class was created by the Helios team, which listed all of the medications on formulary at the system hospitals. Drug classes were divided and prioritized into four tiers based on utilization and anticipated order set development. Each drug class underwent a thorough review of safety, efficacy, cost, and utilization by a clinical pharmacist or pharmacy resident, followed by a second review by a member of the Henry Ford Hospital Drug Information Center. The review included recommendations for medications and dosage forms to be added or removed at each hospital. These recommendations were shared with pharmacy representatives at each hospital for review and feedback. Feedback was consolidated by the Drug Information Center and final decisions were made accordingly. All medications added or removed from a specific hospital formulary were approved by the hospital Pharmacy and Therapeutics Committee prior to implementation. If consensus among the hospitals was not achieved, the system-wide Medication Management Committee (MMC) made a final decision on formulary status.	Left blank at time of entry	This process has significant impact on the management structure of the Henry Ford Health System hospital formulary. There is now a system-wide Medication Management Committee (MMC) that reviews all medication related policies and procedures. One of the sub-committees of the MMC is a formulary committee which reviews the safety, efficacy, and cost of all new formulary requests and the impact it would have on each hospital, as well as the system as a whole. This process could be expanded to other departments/areas within HFHS where system unification is desired or needed. A paper is also being developed that describes this process, as very little is in the literature on how health systems should approach such a large undertaking as standardizing all of the medications on the health system formulary. The development of electronic order sets using a standardized formulary has spread evidence-based best practices across the system for many disease states and conditions. Finally, this process enhanced collaboration amongst all system hospital pharmacy departments.	Megan Winegardner Sara Lanfear Nicole Jakubowski Abe Charara Norm Buss Nicole Toth Ed Szandzik Marty Ratusznik

TITLE	AIM	CHANGES IMPLEMENTED	MEASURES/RESULTS	SUSTAIN & SPREAD	TEAM MEMBERS
System wide Surgical Specimen Hand-Off Standardization from Operating Room to Frozen Section Room in Pathology to Enhance Patient Safety after EPIC Implementation **COMPETITION WINNER**	The surgical pathology at Henry Ford Hospital [HFH] is an integrated core service line for four hospitals and processes over 80,000 specimens annually. Surgical specimens from HFH operating room [OR] are submitted to frozen section room in pathology for timely processing and resulting. Implementation of the new EMR (Epic) to HFH OR's was a significant work flow change from a manual to an electronic process for specimen hand-off to pathology. Prior to Epic implementation, elements of the surgical requisition were hand written for submission and post Epic, they were computerized and mandatory. This meant, for every surgical specimen submission to pathology OR staff was required to generate Epic labels for the requisition and specimen containers. In order to print labels firstly, the description of the tissue had to be identified from a drop down menu in "Optima". The name of tissue then printed on the labels for the OR staff. This identity confirmed the accuracy of specimen type for pathology and complied with national regulatory standards for patient safety. Unfamiliarity with navigation in Optima menu created an enormous challenge for OR staff, delays in pathology results and compromised patient safety standards. Our goal is to eliminate result delays, work flow challenges, create best practices [model line] for surgical specimen hand-off to pathology at HFH and implement system wide to improve patient safety and comply with regulatory standards.	To understand the magnitude of the challenges at HFH, data was collected for six months starting in January, on the number of the surgical requisitions and container labels submitted with a generic description as "tissue", as compared with specified descriptions. All 31 rooms of HFH OR's were included in the study to determine if any organ type was more difficult than the other. Each submission of generic description of "tissue" was captured and trended for six months. In April the data was presented by pathology to a team of OR nurse leaders and discussed in detail to develop a plan of action. An immediate action plan was developed to be piloted in the OR's at HFH. This complex process involved multiple departments [OR, Surgical Pathology, Helios], leadership teams [Surgeons, Pathologists, Quality Division of Pathology, OR administration, Affiliate hospital Division Heads, Site administrators], and operational teams from OR and surgical pathology.	Implemented at HFWB and the results were, January-47, February-37, March-31, April-18, May-4, June-0. Implemented at HFWH and the results were, January-21, February- 7, March-15, April-2, May-6, June-1, Implemented at HFMCT and results were, May-15, June-1. HFMCT were the last Epic roll out in May.	Implementation of the Best Practice model has reduced the OR Optima defects from Jan to June for HFH by 97% [187-5], for HFWB by 100% [47-0], for HFWH by 95% [21-20] and for HFMCT by 93% [15-1] from May to June. The process of implementing a system wide, standardization of OR specimen hand-off to pathology has been very successful and eliminated the risk to patient safety. 1. Developing customer-supplier relationships with OR department system wide to discuss defective internal processes and ultimately improving potential safety risks for surgical patients 2. Use of a visual management tool, a daily management board to monitor and identify root causes for corrective/preventive action and continuous improvements 3. Use of a deviation management form as a tool to record data has been useful in tracking and trending Epic related order defects 4. Developing a standardized specimen hand-off process for HFH OR, as a best practices and implementing system wide	Ruan Varney Richard J. Zarbo Mike Dib Nelson Main Beverly Mahar Chris Keller Cheryl Neuman Mark Tuthill Paul Gunnels Victoria Nichols O.R. Team Helios Team for O.R.
Transforming from Flash to IUSS: Reducing the Rate of Immediate Use Steam Sterilization in the Operating Room at Henry Ford Macomb Hospital **COMPETITION WINNER**	Although AORN, CDC and AAMI have discouraged "Flash" Sterilization for many years, it has been historically an accepted practice. In 2010 The Joint Commission began focusing on acceptable standards to perform flash sterilization. Thus began the transformational journey of operating rooms from flash to Immediate Use Steam Sterilization (IUSS). Current AORN recommended practice states that IUSS should only be used in select clinical situations and in a controlled manner. Although previous changes had been implemented which were aimed at reducing IUSS and improving quality when IUSS was necessary, opportunity still existed in the Operating Room at HFMH. Therefore the AIM of this project was: 1. Decrease the overall rate of IUSS in the operating room from a baseline of 21.3% to 5% or less. 2. Develop and implement policy and practice that promotes appropriate and safe use of instrument sterilization in the operating room. Measured and demonstrated by increasing compliance with documentation.	1. Established a team to meet regularly and review data, identify and discuss opportunities and develop and implement change. 2. Developed long term monthly reporting measures that are reviewed on a regular basis for opportunities. 3. On a monthly basis the team reviews the instruments and circumstances related to every instance of IUSS and determines if changes can be made to avoid future IUSS. 4. Revised the Policy and Procedure along with log form. 5. Conducted staff education and implemented use of new log. 6. Worked with key surgeons. 7. Eliminate terminal sterilization. 8. Improved staffing levels. 9. Engaged the Service Line Coordinators to reinforce loaner policy with sales reps. 10. Development of Turnover Sheet. 11. Created and trialed real time tracking form to be signed off by charge RN and SPD Manager for deeper dive of reason and instrument availability. 12. Implemented charge RN to sign off on all IUSS. 13. Review and update Attest log – educated staff . 14. Eliminate use of 2 autoclaves in 1st Floor OR reducing time and costs associated with daily testing and maintenance. 15. Standardize the IUSS containers. 16. Increase SPD sterilizers and instrument washers. 17.Implemented standard process for scanning of log sheets. 18. Analysis of reasons for educational opportunities related to improper handling of sets.	At Start - IUSS measures (IUSS rate is total # of IUSS in a month as compared to number of surgeries): • Overall IUSS Rate - 21.3% (100% IUSS data used for June 2012 as baseline for current state) • Documentation complete according to policy – 50% Results - IUSS Rates – as of July 2014: • Overall IUSS Rate - 4.6% - In addition the team has been at or below the 5% goal for 9 of the last 12 months. • Documentation complete according to policy – 96% Monitoring and improvement ongoing - see separate graphs and dashboards	In addition to ongoing review by this team, the dashboards, action items and barriers to success are shared with the following groups on a regular basis in order to maintain / gain support and continue to implement any changes necessary (i.e. instrument inventory, surgeon and staff compliance issues, adjustments to the log etc.): • Surgical Services and Anesthesia Leadership • Surgical Services and Anesthesia Staff' • OR Committee • Infection Control Committee Recently, the System CSR Work Group has begun discussing and sharing information related to IUSS.	Bev Lazar-Fox Mary Velasco Karen Pekar Judy Caretti-Rourke Annette Bronikowski Katy Badovinac Carole Backman Janina Rusnak Jean Walkowski Karen Rouleau Sue Check

TITLE	AIM	CHANGES IMPLEMENTED	MEASURES/RESULTS	SUSTAIN & SPREAD	TEAM MEMBERS
Using Diabetes Trained Community Health Workers to Reach Northwest Detroit Clinic Patients	When our group first began examining diabetes disparities in 2011, we found that there were differences that existed in HbA1c testing between African-American and non-African American patients. Specifically at Detroit Northwest (DNW), there were significantly more patients with poor diabetes control than there were within the HFMG in the 3rdQ of 2011, or when compared to the National standard. A funded pilot intervention to address diabetes disparities was developed with the following aims: increase utilization of HFHS diabetes care center programs and services at DNW, increase the percentage of patients with diabetes who have HbA1c measures < 8% and LDL measures < 100 (in control), increase the percentage of patients with diabetes who show improvement in their HbA1c measures and LDL measures (in control), demonstrate improved HbA1c and LDL measures who interact with the Community Health Worker (CHW) as compared with those who did not. The patient referral engagement was approximately 50%. Therefore, we were looking at ways in which to bridge the gap and help the patients become connected to the clinic and engage in diabetes self-management. In order to achieve these aims, we incorporated a CHW into our diabetes care team in order to engage this special population of patients and assist us in understanding the barriers that they faced living with diabetes.	The following process changes were put in place during the implementation of this project: • The CHW contacted patients who failed to engage DCC program through normal process or failed to complete programs started • The CHW informed patient about programs and assisted in enrolling in DCC program. • After obtaining consent , the CHW asked patient to complete "barriers to engagement" survey. • The CHW contacted patients two weeks after initial contact in order to ascertain whether referrals were completed and if follow-up on additional barriers was needed. During the implementation of this project, the system was transitioning from CPNG to EPIC, which completely changed our patient referral process.	We measured the Patient's A1C before intervention and after intervention Dose response/dosage. We definitely consider our project to be a success. The CHW followed up with patients (after initial contact), on appointments, scheduling and solving barrier related issues. Barriers were divided into three categories, financial, structural and organizational. Patients reported the following regarding barriers to care: Financial •cost of service •no medical insurance Structural •difficulty with transportation •difficulty walking or you easily get tired when you walk Organizational •afraid of what the doctor might find •felt that you don't need to see a doctor DCC staff felt that the CHW played an integral part to the care team by assisting patients to overcome barriers i.e. making appointments, arranging transportation, locating food pantries, providing information on exercise programs and support groups, as well as, providing health education in laymen's terms and that the CHW was able to work effectively with the care team at DNW. Clinical outcomes for the project were the following: • (30%) patients who had some type of contact with the CHW, lowered their HbA1Cs • (50%) patients who made and kept appointments for DCC services improved their HbA1Cs • (27%) patients who were followed up with by the CHW, lowered their HbA1Cs	We feel that our project's process will endure over time if we are able to integrate the CHW into our patient-centered care team and integrate this model of care into clinical practice. HFHS is involved with statewide CHW initiatives, including MiCHWA (Michigan Community Health Worker Alliance) who is working to advance the position of CHWs in the state of Michigan through expanding policy implications, improving educational and training opportunities and incorporating national standards of practice. This includes American Association of Diabetes Educators (AADE), which has Career Path Program Training for CHWs and National Standards for Diabetes Self-Management Education & Support. AADE supports "lay health and community workers and peer counselors or educators" contributing to the provision of DMSE instruction given that they are supervised by diabetes educators or other health professionals. We've also shared our outcomes with other departments which are looking for ways in which to serve and assist with barriers to care for their patient populations. We were especially proud of being able to present our findings to the Primary Care Leadership Forum and to Dr. Dryer. In the coming months, we will be producing a poster which we will be able to present during conferences and we foresee publishing manuscripts in journals.	Monica White Deloris Berrien-Jones Denise White-Perkins Pamela Milan Patricia Durham-Scott
WBH Inpatient Influenza Vaccination Improvement Project	The aims of this Quality Improvement Project were: to improve patient care and safety, to improve the Influenza Vaccine Core Measure compliance with CMS Regulations and standards, , and to make our internal processes more effective. All of this was accomplished via a collaboration of Nursing, Inpatient Pharmacy and our teammates at Helios. We performed multiple PDCA cycles within a short timeframe, invested in our operating and communication system, EPIC, in order to achieve high performance.	We recognized that since the system had decided to give the options to order vaccines PRN or scheduled, it might result in "misses" upon discharge, if the PRN option was selected. We were able to work with EPIC/Helios and build a BPA (best practice alert) that would fire to the nurse if she tried to print the discharge instructions and had NOT administered the vaccine. a. At WB, we place a 7 day expiration on our vaccines, due to the variance in temperature that can occur in our fridges throughout the institution. b. Technicians were asked to look at vaccines each and every day. They would bring back the vaccines dispensed to patients that had been discharged or if the vaccine had expired. c. Every time a vaccine was brought back, I would contact the Nursing Manager, ACM and CNS to investigate if we had actually "missed" giving the vaccine, whether or not the patient refused and was it documented at all AND in the correct location, did the BPA fire at all, and if so, was it ignored, etc. I also started adding up the total cost that was occurring in wasted vaccines. Placing that information in front of leaders, etc., helped put some teeth behind the initiative. I. Based upon that feedback, we rallied more education around assessing and giving the vaccine; proper documentation.	Flu Vaccine Core Measure Compliance included coordinating with Helios/EPIC to improve the accuracy of the BPA firing. d. After a couple of months, as we continued to work through the Core Measure data, we still saw a sub-par percentage at our location, despite seeing fewer vaccines returned to pharmacy. Instead, the data revealed that the biggest culprit was that the assessments weren't being done at all. So, I worked again with EPIC/Helios to build another BPA. This one fires to the nurse if a patient has been admitted and has not had their vaccine assessment completed 8 hours after admission. I. This allows us to be pro-active and catch these potential misses, while the patient is still here. ii. Nursing Leadership can also review these BPAs on a regular basis and hold their staff accountable	1. Communication of the lessons learned and improvement in compliance using both of the BPAs in EPIC was sent to all of nursing. 2. The real time Inpatient Pharmacy to Nurse Manager communication regarding a potential "miss" was implemented house-wide. 3. The improvement in compliance was reported not just to the West Bloomfield Campus, but to the other BUs as a part of the System Core Measure review. 4. The utilization of the BPAs was spread to all BUs.	Nicole Toth Sherry Schembri Cynthia Blasses Tanya Larocque Krista McIntosh Lois Eagal Sharon Harpootlian