



# HMS

MICHIGAN HOSPITAL  
MEDICINE SAFETY  
CONSORTIUM



## NEWSLETTER



DECEMBER 2022



### MESSAGE FROM THE DIRECTOR

It has been an exciting year for HMS! We started in-person meetings again in July where we all met in Grand Rapids with our health system leaders to discuss our collective QI efforts. We are again able to visit our participating hospitals, learn about and share best practices, and help accelerate improvement activities across HMS. We are making great progress on our PICC and antimicrobial measures and are rolling out sepsis data abstraction in all 69 HMS hospitals this January.

Yet, despite that exciting news, many of our hospitals are struggling. Costs are rising, we have labor shortages, and high rates of burnout, and in many hospitals, volumes have not rebounded after COVID. Managing the financial impact of those issues will be a top priority for hospitals in Michigan in the coming year.

How does the work of HMS help? First, reducing complications and improving clinical outcomes will always be important to our hospitals. But the work of HMS also helps financially. Our PICC value analysis showed that HMS helped save over \$30 million across HMS hospitals, and similar analyses are underway for the antimicrobial project. Our work in sepsis will target hospital complications, length of stay, costly readmissions, and the morbidity and mortality we see after discharge. And we are developing “one-pagers” and communication tools for you to share these messages with your hospital leaders to help remove barriers to your efforts.

The work you all do is never easy, and if anything, is becoming more challenging in the current environment. But HMS is here to help! Together we believe we can make a positive difference in the lives of our patients while simultaneously helping our many struggling hospitals. We are optimistic that 2023 will be an impactful year for HMS!

Sincerely,

Scott Flanders, MD



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@HMS MI

[www.mi-hms.org](http://www.mi-hms.org)

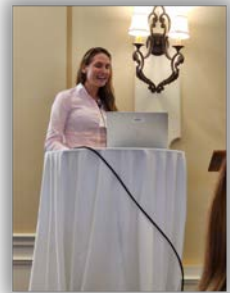
# RECENT HIGHLIGHTS

## **November 2022 Collaborative-Wide Meeting**

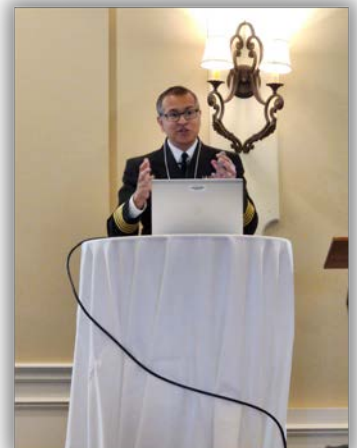
HMS held its November Collaborative Wide Meeting on November 2, 2022, at Eagle Eye Golf and Conference Center in Bath, Michigan. Our Program Manager, Elizabeth McLaughlin, MS, RN, kicked off the meeting by reviewing the new 2023 performance index measures while highlighting our new stratified PICC quality improvement strategy for legacy hospitals (prior to 2020). These PICC measures will focus on reducing triple lumens and short-term use, along with determining appropriate vascular access device use in the oncology and critical care populations. Elizabeth also introduced the new 2024 value-based reimbursement measure.



Dr. Stephanie Burdick, Medical Director of Clinical Pathways at Corewell Health, gave an antimicrobial hospital partner presentation focusing on growing a culture of stewardship. Dr. Burdick described how her team was able to improve the treatment of community-acquired pneumonia in their patients by leveraging clinical standardization.



Our expert guest, Dr. Arjun, Srinivasan (CAPT, USPHS), Associate Director for healthcare-associated infection prevention programs in the Division of Healthcare Quality Promotion at the Centers for Disease Control and Prevention (CDC) provided updates from the CDC regarding antibiotic stewardship and sepsis. Dr. Srinivasan reviewed the core elements of antibiotic stewardship programs and discussed why taking a similar approach to sepsis management is key. He addressed new questions on sepsis practices and infrastructure that were added and will be released in the January 2023 National Healthcare Safety Network annual hospital survey. Dr. Srinivasan reviewed how assessing the current landscape will provide useful input in guiding the development of sepsis core elements.



Lastly, Dr. Namita Jayaprakash, Associate Medical Director and quality, emergency medicine, and physician lead for the Henry Ford Health Sepsis Program, gave a sepsis hospital partner presentation focusing on clinical quality for sepsis programs. Dr. Jayaprakash introduced the Henry Ford Health Sepsis Program, described key building blocks for building a sepsis program, and illustrated the relationship of CQIs with their sepsis program.



# RECENT HIGHLIGHTS

## **New Value-Based Reimbursement (VBR) Program**

Starting in 2023, HMS will have 2 incentive programs. The first incentive program is our Performance Index or Pay for Performance (P4P). The second incentive program (new for 2023) is an optional value-based reimbursement (or VBR) program for specialty physicians. The VBR funding is separate and goes to specific physician specialties who meet quality goals determined by our Collaborative. In 2023, we will be offering VBR measures for hospitalists, infectious diseases physicians who are involved in antimicrobial stewardship, interventional radiologists, and critical care physicians. The measurement period will take place during 2023 and, if eligible, the incentive will be distributed in 2024. HMS is excited to offer this new optional VBR program to our collaborative members. You can find more information on the Blue Cross Blue Shield of Michigan (BCBSM) VBR Program [here](#). Please contact Program Manager, Elizabeth McLaughlin ([emcnair@umich.edu](mailto:emcnair@umich.edu)), if you would like further information.

## **HMS @ AVA 2022!**

HMS members attended the Association for Vascular Access (AVA) 2022 Annual Scientific Meeting held in Minneapolis, Minnesota from September 30th to October 3rd, 2022. See below for highlights.



Dr. David Paje, HMS PICC/Midline QI Consultant & Expert, sharing an analysis of catheter to vein ratio showing CVR >45% was not associated with increased risk of VTE in our population



HMS Program Manager, Elizabeth McLaughlin, sharing an analysis we did on vasopressor delivery through midline devices vs. PICCs in critically ill patients



The HMS Coordinating Center members meeting up with the leaders of AVATAR



# RECENT HIGHLIGHTS

## **HMS @ ID Week 2022!**

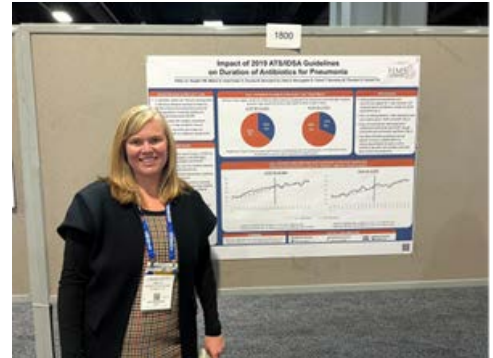
HMS members attended ID Week 2022 held in Washington, D. C., from October 19th to October 23rd, 2022. See below for highlights.



SHEA Featured Abstract presented by Dr. Valerie Vaughn related to Reducing ASB Treatment



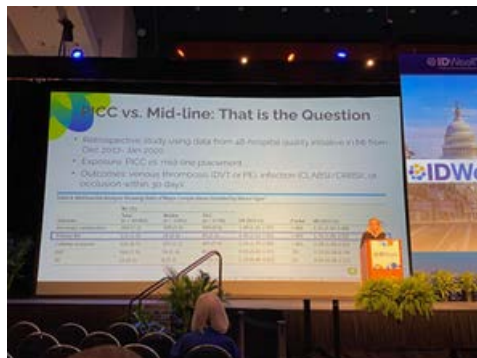
Meet-the-Professor Session presented by Dr. Valerie Vaughn on Overdiagnosis of Infection



Poster session presented by Dr. Lindsay Petty related to the Impact of Guideline Updates on Duration of ABX for PNA



Shout out to HMS from Lisa Dumkow! Stewardship Pharmacist Trinity Grand Rapids



Publication of work led by Dr. Lakshmi Swaminathan (Trinity Health – St. Joe's Ann Arbor) was recognized as an Influential Publication in Infection Prevention!



Networking and gathering tools for our Antimicrobial Toolkit!

## **Now Offering Pharmacy Continuing Education Credits at Meetings!**

HMS has collaborated with the Michigan Pharmacy Association to be able to offer pharmacy continuing education credits for pharmacists that attend our Collaborative Wide Meetings.

## **2023 Performance Indexes are Available**

The final 2023 performance indexes approved by BCBSM are now available on the HMS website. Click [HERE](#) to access each index. The three indexes are for cohorts 2022, 2021/2020, and prior to 2020.

# RECENT HIGHLIGHTS



## **July 2022 Collaborative-Wide Meeting**

HMS held our July Collaborative Wide meeting on July 27, 2022, at Frederik Meijer Gardens in Grand Rapids, Michigan. We kicked off the meeting with an Abstractor appreciation breakfast (see above picture) to thank them for all the hard work they do to further HMS' mission of improving patient safety and quality improvement at their hospitals. Our expert guest speaker was Derek Angus, MD, MPH, FRCP, Chair of the Department of Critical Care Medicine, UPMC, and the University of Pittsburgh School of Medicine. Dr. Angus presented a talk titled, "Improving Sepsis Care". During his talk, he discussed challenges with the diagnosis and treatment of sepsis, "system" efforts to improve sepsis care, and lessons learned along with recommendations for sepsis care. This segued into our panel session focused on leveraging the health system to improve sepsis care.



Below are the panelists that participated in this session:

- Rosalie Tocco-Bradley, MD, Ph.D., MHS – Chief Clinical Officer, SJMHS & Mercy Health of Trinity
- Jeff Desmond, MD – Chief Medical Officer, Michigan Medicine
- Joe Santangelo, MD – Chief Quality and Safety Officer, Munson Healthcare
- Betty Chu, MD, MBA – Associate Chief Clinical Officer and Chief Quality Officer, Henry Ford Health
- Derek Angus, MD, MPH, FRCP – Chair of the Department of Critical Care Medicine, UPMC and University of Pittsburgh School of Medicine



# RECENT HIGHLIGHTS

## **Sepsis Initiative Launches Collaborative Wide**

The HMS Sepsis Initiative has officially launched collaborative-wide! We are doing a two-year rollout of this initiative for our participating hospitals. Our Pilot Sites and Cohort A participating this year consists of 31 of our 69 hospitals, and Cohort B, beginning in January 2023 will consist of the remaining 38 hospitals. To make this launch possible, our 12 volunteer pilot hospitals for this initiative helped us refine our data collection and identify areas for improvement. HUGE THANKS to these hospitals for their efforts in getting this initiative off the ground!



*\*May 2022 Sepsis Abstractor Training*

## **HMS & National Quality Foundation (NQF) Update**

The HMS Coordinating Center received additional funding through the Gordon and Betty Moore Foundation to further analyze opportunities of misdiagnosis within our antimicrobial registry. Over the last 1-2 years, we have conducted in-depth case reviews with physician members from across the Collaborative to confirm our HMS measures for assessing the diagnosis of pneumonia and asymptomatic bacteriuria/urinary tract infection. In October 2021, a technical expert panel was conducted and consisted of representatives from the following societies: American College of Emergency Medicine, Centers for Disease Control and Prevention, Infectious Diseases Society of America, Pew Research Center, Society for Healthcare Epidemiology of America, Society to Improve Diagnosis in Medicine, Association for Professionals in Infection Control and Epidemiology, Society of Infectious Diseases Pharmacists, The Joint Commission, American Academy of Emergency Medicine, Society of Hospital Medicine, American College of Radiology, American College of Chest Physicians, American Thoracic Society, American Urological Association. A patient panel was conducted in December 2021. The HMS leadership team submitted the antimicrobial measures for assessing the diagnosis of pneumonia and asymptomatic bacteriuria/urinary tract infection to the National Quality Forum (NQF) in April 2022. If these measures get adopted by NQF, hospitals around the country will be able to utilize the tools we have created to improve how they diagnose pneumonia and asymptomatic bacteriuria/urinary tract infection.

## **HMS Antimicrobial System Reports are LIVE!**

At the July Collaborative-wide Meeting, HMS announced the launch of a new live antimicrobial system-level data report to assist in quality improvement efforts across participating health systems. To request access to this antimicrobial system-level report, please contact Jennifer Minock ([cjennife@umich.edu](mailto:cjennife@umich.edu))



## PICC/Midline & ABX Abstractor Spotlight



Lori Leman, BSN, RN  
Henry Ford Macomb Hospital

Lori Leman is a Registered Nurse at Henry Ford Macomb Hospital and represents the HMS Abstractors on the [Data, Design, and Publication Committee](#). Prior to joining the HMS Team, Lori worked within other CQIs and spent several years as a bedside nurse. She attended nursing school at The University of Detroit Mercy. Prior to nursing school, she earned a Bachelor of Science in Counseling Psychology.

*We asked Lori if she has any tips or suggestions for increased efficiency and quality of data abstraction and what she enjoys most about being part of HMS.*

When Lori is completing chart abstraction using EPIC, she finds that a systematic approach works best. Lori uses a template to capture targeted chart information prior to abstracting patient information into the registry. In her opinion, this document is a critical step for increased speed. Capturing in this manner results in less chart clicks. For example, she is able to capture Braden Scores, urinary symptoms, and mobility on one screen. Additionally, the hard copy is helpful during audits. When an audit discrepancy arises, she can see the specific reason she captured something. Lori also systematically captures antibiotics given prior to reading chart notes. In doing so, she is able to tune in for physician phrases related to prescription and discontinuation on days critical to data abstraction. If she is unable to find a specific condition in the chart, she frequently uses the search box. She views efficiency as key to the job.

Lori enjoys all process improvement work, but specifically those initiatives that reduce hospital-acquired risks. HMS has proven to be a natural fit for her. Having 2 small children at home, this job is able to fulfill her career aspirations while giving her flexibility in her home life.

## Sepsis Abstractor Spotlight



Errin Couck, BSN, RN  
Henry Ford Macomb Hospital

Errin is the Sepsis Abstractor for Henry Ford Macomb Hospital. Prior to joining HMS, Errin worked as a Registered Nurse on Henry Ford Macomb's medical telemetry unit for 12 years. Her clinical background includes direct patient care for acutely ill medical patients with various diagnoses that require continuous cardiac monitoring. Errin received her BSN from Oakland University's School of Nursing.

*We asked Errin if she has any tips or suggestions for increased efficiency and quality of data abstraction and what she enjoys most about being part of HMS.*

Errin recommends that you develop your own process of abstracting the data to increase the efficiency and quality of the data abstracted. Currently, she uses a paper template that she has found useful. This limits the number of times that she needs to go in and out of the EMR while inputting patient information into the database.

Errin appreciates the autonomy and networking that HMS provides. She is excited to participate in a brand-new initiative that will help define best practice for sepsis by collaborating with the other abstractors and health systems within HMS.

## Hospital Spotlight

### **Henry Ford Macomb Hospital (HFM)**

Henry Ford Macomb Hospital in Clinton Township, MI is a 361-bed acute care facility with Level 2 Trauma Center, Primary Stroke Center, and nationally recognized Cardiovascular Center designations. Their current expansion project will expand their multi-specialty ICU from 48 beds to 60 beds. Henry Ford Macomb is affiliated with Michigan State University offering 9 graduate medical education residency programs. They celebrate their pleuritic model with many private and employed provider groups on Medical Staff offering high-quality care to their growing community.

#### **TEAM STRUCTURE**

Lori Leman, RN, BSN	PICC/Midline/ABX Abstractor
Errin Couck, RN, BSN	Sepsis Abstractor
Megan Cahill, DO, FACOEP	HMS Physician Champion, Division Chief of Medicine
Melissa Jackson, BHSA, MA	Director, Performance Excellence & Quality
Rose, Emily, Jackie, Rob	PICC Team RNs
Shaina Kwiatkowski, PharmD, BCIDP	ID Pharmacy Specialist
S. Nasir Husain, MD	Director, Infection Prevention



#### **HFM 2022 Priorities**

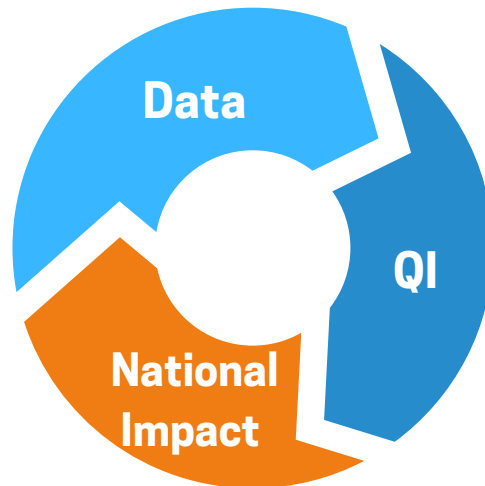
- Accomplish sustainable, replicable processes that support scrutinizing PICC appropriateness and safety
- Ingrain a culture where central line necessity is a daily discussion
- Understand barriers, educate, and engage physicians to support antimicrobial stewardship

#### **HFM 2023 Priorities**

- Continue the success in PICC line safety
- Fine-tune their peer-to-peer physician feedback on CAP and ASB measures
- Improve broader antimicrobial and diagnostic stewardship as it relates to CAP and ASB



# INFLUENCE OF QUALITY



## Data

HMS launched a new Antimicrobial stewardship report comparing live hospital-specific performance across our participating health systems at the July 2022 Collaborative Wide Meeting.

### Available Data:

#### **Compare performance in HMS antimicrobial measures across the hospital system**

- Treatment durations for Community-Acquired Pneumonia (CAP)
- Reducing unnecessary fluoroquinolone use
- Reducing testing and treatment for Asymptomatic Bacteriuria (ASB)

#### **Compare hospital-specific performance on targeted care opportunities for each measure**

- Examples: duration documentation, reducing prescribing at hospital discharge, ordering provider types

We reached out to HMS members that have accessed these reports to see how they've utilized them. Below are their responses.

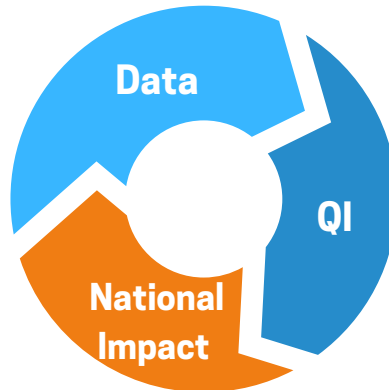
Robert Neetz, PharmD, BCPS, Lead Antimicrobial Stewardship Pharmacist, MyMichigan Health

*"Here at MyMichigan, we have used the live database to quickly access the most up-to-date reports for our system Stewardship Program and Infection Prevention meetings, system Stewardship educational newsletters, The Joint Commission surveys, executive updates, and other presentations highlighting our work both internally and externally. We are very thankful for the support HMS provides through these Antimicrobial Reports, our program does not have near the resources to produce these ourselves!"*

Chelsea Branch, PharmD, Clinical Manager of Inpatient Pharmacy, McLaren Health Care

*"We have used the system reports to drive targeted initiatives both corporately and locally. Locally we looked at the sites within our system that are top performers or those that had drastic improvements and reached out to see what they implemented. We have put at least one new process in place based on this input. We have also been able to show our provider groups how we compare to the other facilities in our system to help drive engagement for improvement opportunities."*

# INFLUENCE OF QUALITY



## Data

### MyMichigan Health

Robert Neetz, PharmD, BCPS, combined their HMS system-level data with an educational newsletter discussing CAP for 5 days and shared it with his team. He highlighted comparisons across his health system for the CAP 5-Day measure. He provided resources and references using the HMS Antimicrobial Toolkit. See below for an example of the educational newsletter.

## ASP UPDATE

CAP 5-day Duration Data

September 2022

### Quick Win: Discharge Durations!

In a study published in 2019 using HMS data for patients receiving abx for pneumonia, results showed that antibiotics prescribed at discharge accounted for 93.2% of excess duration. <sup>1</sup>

Quick win: Make sure you add up inpatient days correctly to determine discharge duration!

Use the "Show Antimicrobial Summary" button at the top of your discharge antibiotic order window to see ALL inpatient days of therapy.

Who induced this *Enterobacter cloacae* ampC  $\beta$ -lactamase?

Ceftriaxone:



### CAP 5-DAY DURATION DATA UPDATE (TABLES ON PAGE 2)

-Table 1 (Midland highlighted) shows the adjusted rate of using a CAP 5-day duration of therapy for patients meeting CAP 5-day duration criteria<sup>\*\*</sup>. The adjusted rate takes into account the previous quarter's performance and trend.

-Table 2 (Midland only) shows the raw rate, with the numerator being cases that CAP 5-day duration was correct, and the denominator being total cases reviewed.

-Data provided by [Michigan Hospital Safety Consortium \(HMS\)](#)

### Who should receive 5 days of therapy? Who needs longer?

#### 5 days duration

Recommended for patients who are afebrile for 48 hours and no more than 1 sign of clinical instability (below) by day 5 of treatment.

Signs of clinical instability:

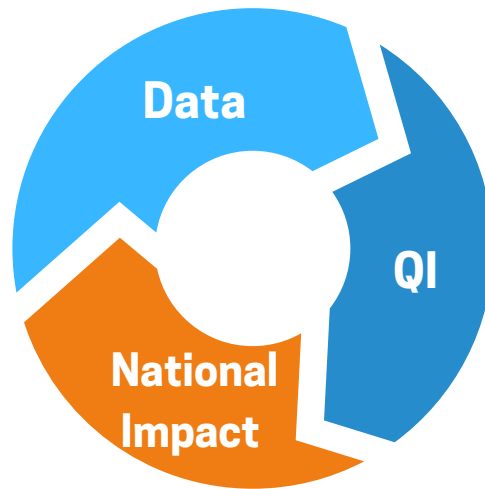
- O<sub>2</sub> sat <90% or new O<sub>2</sub> requirement
- HR > 100bpm
- RR >24 Breaths/min
- SBP < 90 mmHg
- altered mental status different than baseline

#### Longer!

Patients not clinically stable at 5 days (defined above), or patients with:

- Structural lung disease (e.g. bronchiectasis, pulmonary fibrosis, interstitial lung disease)
- Moderate/severe COPD (excluding COPD exacerbation without pneumonia/mild COPD),
- Documented pneumonia with MRSA, MSSA, or pseudomonas (or other non-fermenting gram negative pneumonia), or immunosuppressed.

# INFLUENCE OF QUALITY

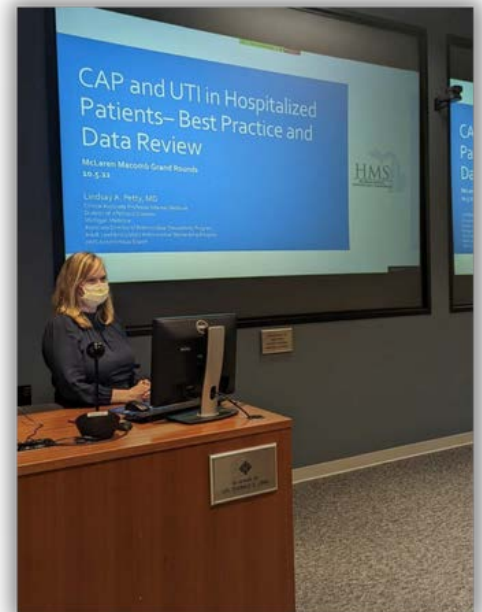


## Quality Improvement

Dr. Lindsay Petty, an HMS physician lead on our Antimicrobial Initiative, recently completed an antimicrobial-focused Grand Rounds presentation at McLaren Macomb hospital.

The goals and objectives of the presentation were to:

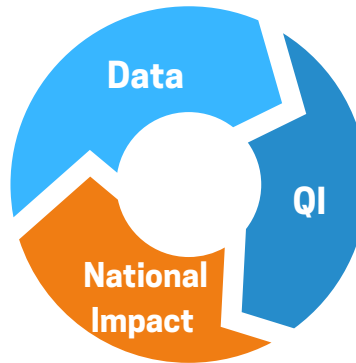
- Discuss the diagnosis and management of asymptomatic bacteriuria (ASB) and urinary tract infections (UTI) in hospitalized patients
  - Discuss strategies to reduce the unnecessary testing and treatment of ASB
  - Review the importance of decreasing inappropriate fluoroquinolone (FQ) use in ASB/UTI when safer alternatives are available
- Review appropriate treatment selection/duration for patients with Community-Acquired Pneumonia (CAP)
  - Discuss strategies to improve appropriate treatment durations for patients with CAP
  - Review the importance of decreasing inappropriate FQ use in ASB/UTI when safer alternatives are available
  - Review new ATS/IDSA CAP Guidelines and appropriate empiric antibiotic use for CAP
- Examine this hospital's performance in specific measures related to patients with CAP and UTI compared to the rest of the HMS collaborative.



*If you or someone on your HMS team would like to present at an upcoming Collaborative-wide Meeting or be featured in our newsletter, click [HERE](#).*



# INFLUENCE OF QUALITY





## Quality Improvement

Dr. Petty highlighted the resources available to our members to improve healthcare quality and performance in our HMS measures, such as site-specific data reports, and the antimicrobial use toolkit.

*"Dr. Petty gave an informative and relevant discussion to our hospital on antimicrobial stewardship as it relates to CAP and UTI. She was able to tailor the information and data uniquely to our facility in order to help facilitate our quality improvement initiatives. We were able to better realize our goals after her lecture and begin to take steps forward in our efforts. Her time was greatly appreciated."*

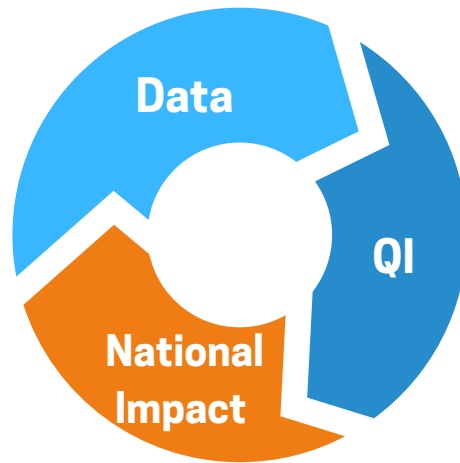
*-Dr. Georgette Cooke, HMS Physician Champion, McLaren Macomb Hospital*



To view the HMS Antimicrobial Toolkit, click [HERE](#).

HMS ANTIMICROBIAL INITIATIVE TIER 1 TOOLKIT: QUICK REFERENCE GUIDE	
<p>This reference document provides a summary of the Tier 1 Toolkit for the HMS Antimicrobial Initiative that aims to implement global strategies to improve antimicrobial use</p> <p><b>Convene a Workgroup to Focus on Tier 1 Strategies</b></p> <p>The workgroup will likely be a new subgroup of your antimicrobial stewardship team. For maximum impact, the workgroup should consist of a multidisciplinary team that includes (but is not limited to) key stakeholders, such as a hospitalist, infectious disease physician and/or pharmacist, emergency medicine physician, house officers, IT personnel, microbiology lab representative, and nursing</p> <p><b>Tools and Resources:</b></p> <ul style="list-style-type: none"><li>HMS site reports (hard copy distributed at collaborative wide meetings and live reports available daily via the HMS data entry system)</li><li>CDC Core Elements of Hospital Antibiotic Stewardship Programs</li></ul>	
<p><b>Develop and Share Institutional Guidelines for UTI and CAP</b></p> <p>Develop institutional guidelines, locally-adapted from national and HMS guidelines. If institution specific guidelines already exist, they should comply with the following:</p> <p><b>CAP</b></p> <p>Institutional guidelines should:</p> <ul style="list-style-type: none"><li>Recommend 5-day antibiotic treatment duration for uncomplicated CAP</li><li>Review the risk factors for Multi-Drug Resistant Organisms (MDRO) and/or HIs</li><li>Provide recommendations for transition to oral therapy</li><li>De-emphasize fluorquinolones</li></ul> <p><b>UTI</b></p> <p>Institutional guidelines should:</p> <ul style="list-style-type: none"><li>Recommend against sending urine cultures in the absence of urinary symptom</li><li>Recommend against treating a positive urine culture in the absence of urinary</li><li>De-emphasize fluorquinolones</li><li>Provide recommendations for transition to oral therapy</li></ul> <p><b>Tools and Resources:</b></p> <ul style="list-style-type: none"><li>IDSA, HMS, and Institutional Guidelines:</li><li>CAP</li><li>UTI</li><li>HMS Pocket Card Examples:</li><li>CAP</li><li>UTI</li></ul>	<p><b>Reduce Duration of Antibiotic Treatment for Uncomplicated CAP to 5 Days</b></p> <ul style="list-style-type: none"><li>Educate providers on the justification for 5 days of therapy for uncomplicated CAP</li><li>Review CAP cases identified by HMS to implement high-yield interventions for recurrent problems</li><li>Evaluate and understand differences in provider groups (e.g., hospitalists, emergency medicine providers). Target interventions to specific provider groups as necessary.</li><li>Evaluate existing order sets to ensure antibiotic preferred options, doses, and durations are consistent with institutional pneumonia guidelines.</li><li>Require documentation of dose and indication of antibiotics prescribed in the antibiotic order.</li><li>Encourage documentation of dose, indication, and duration of antibiotics in the progress note.</li><li>Require a 72-hour Antibiotic Time Out, during which total duration should be discussed.</li><li>Focus efforts on discharge prescribing, as HMS data shows that discharge prescriptions account for 80% of inappropriate antibiotic treatment for uncomplicated CAP.</li><li>Require documentation of the total duration of antibiotics in the discharge summary, potentially incorporating an area for antibiotic duration to be filled out in an automated discharge process.</li><li>Incorporate nursing and pharmacy into review of the discharge antibiotic.</li><li>Provide audit and feedback directly to providers regarding the duration of antibiotics they use for patients with uncomplicated CAP.</li><li>Consider incorporating compliance with treatment duration for uncomplicated CAP as part of hospitalists' performance targets (for compensation).</li></ul>
<p><b>Integrate and Operationalize Institutional</b></p> <p>Integrate recommendations into key processes within the healthcare system such as planning/processes, required yearly education for staff, etc.</p> <p>Educate providers, including hospitalists, internal medicine, family medicine, emergency professionals (AFPPs), and nursing staff about antibiotic resistance and appropriate antibiotic use.</p> <p>Educate patients and families about antibiotic resistance and appropriate antibiotic use.</p> <p>After 3 months of guideline use, obtain provider feedback from multiple groups (include etc.), and modify accordingly.</p> <p><b>Tools and Resources:</b></p> <ul style="list-style-type: none"><li>CAP Order Set Example</li><li>Patient Education Handout Example</li><li>Patients: What you need to know when you are prescribed an antibiotic</li></ul>	<p><b>Resources &amp; Tools:</b></p> <ul style="list-style-type: none"><li>HMS Document: <a href="#">Treatment duration for uncomplicated community-acquired pneumonia: the evidence in support of 5 days</a></li><li>Review HMS site reports (hard copy distributed at collaborative wide meetings and live reports available daily via the HMS data entry system) for the following:<ul style="list-style-type: none"><li>Uncomplicated CAP treated with 5 days of antibiotics</li><li>Types of reports available via HMS Registrar: Hospital Specific, Provider Group Specific (i.e. hospitalist v. emergency room physician), or Provider Specific</li></ul></li><li>HMS Guideline:<ul style="list-style-type: none"><li>CAP</li></ul></li><li>CAP Pocket Card (Appendix C)<ul style="list-style-type: none"><li>Consider modifying to poster size for posting in workrooms</li></ul></li><li>Factsheet: <a href="#">Emphasizing Focus on Discharge Prescriptions</a> (Appendix I)</li><li>Educational Video:<ul style="list-style-type: none"><li>Vaughn V. <a href="#">Antibiotic Stewardship: Community-Acquired Pneumonia for Providers</a></li><li>72-hour Antibiotic Time Out Checklist (Appendix I)</li><li>Example of hospital newsletter incorporating HMS data (Appendix K)</li><li>Example of email feedback on provider performance for duration of CAP treatment (Appendix L)</li></ul></li></ul> <p><b>References:</b></p> <ul style="list-style-type: none"><li>Audic E et al. <a href="#">Impact of an Antimicrobial Stewardship Intervention on Shortening the Duration of Therapy for Community-acquired Pneumonia</a>. Clin Infect Dis 2012;<ul style="list-style-type: none"><li>Reduced treatment duration of CAP with educational lectures based on survey results, and post prescription pharmacy review with verbal feedback</li></ul></li><li>Yogo N et al. <a href="#">Intervention to Reduce Broad-Spectrum Antibiotics and Treatment Duration Prescribed at the Time of Hospital Discharge: A Novel Stewardship Approach</a>. Infect Control Hosp Epidemiol 2014;<ul style="list-style-type: none"><li>Reduced antibiotic duration prescribed at discharge by developing a guideline for antibiotic selection and</li></ul></li></ul>

# INFLUENCE OF QUALITY



## Driving HMS Quality Efforts Nationally

Three HMS abstracts were highlighted at the 2022 Association of Vascular Access Annual Scientific Meeting in October. One poster and two oral presentations.

**Presentation Title:** *Does a Catheter-to-Vein Ratio >45% Increase Peripherally Inserted Central Catheter-Related Major Complications?*

- Dr. David Paje, HMS PICC physician lead, shared an analysis that determined that catheter-to-vein ratio >45% was not associated with peripherally inserted central catheter-related venous thromboembolism, central line-associated bloodstream infection, or catheter occlusion. However, increasing catheter size was associated with a higher risk of venous thromboembolism, central line-associated bloodstream infection, and catheter occlusion.

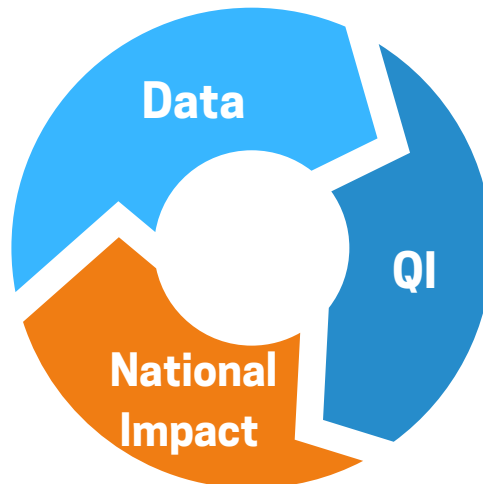


**Presentation Title:** *Association of Vasopressor Administration Through a Midline with Complications in Critically Ill Patients*

- Elizabeth McLaughlin, MS, RN, HMS Program Manager, shared an analysis showing rates of catheter-related complications vary by catheter type. Delivery of vasopressors through midlines was not associated with the composite outcome of catheter-related complications. However, vasopressor delivery via midline was associated with an increased risk of venous thromboembolism compared to vasopressor delivery via PICC and vasopressor delivery via other catheters.



# INFLUENCE OF QUALITY



"Thank you to @HMS\_MI for supporting & leading stewardship best practices for common infectious syndromes across Michigan! A great way to incentivize prescribers that puts the focus on the patient (not the drug budget). A model I hope other states & payers will follow!"

- Lisa Dumkow, PharmD @ Trinity Health St. Mary's

## Driving HMS Quality Efforts Nationally

Two HMS abstracts were highlighted at ID Week 2022 in October.

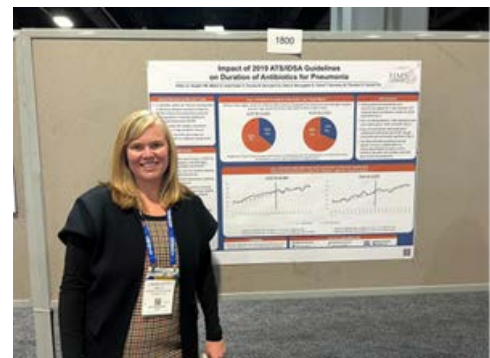
**Presentation Title:** *Reducing Unnecessary Antibiotic Treatment for Asymptomatic Bacteriuria: A Statewide Collaborative Quality Initiative*

- Dr. Valerie Vaughn, HMS ABX physician expert, shared an analysis looking at diagnostic and antibiotic stewardship for ASB. Across 46 hospitals, there was a decrease over time in unnecessary antibiotic treatment for ASB with independent hospitals seeing the most improvement. Diagnostic stewardship appeared responsible for all improvement. Click [HERE](#) for this talk's feature.



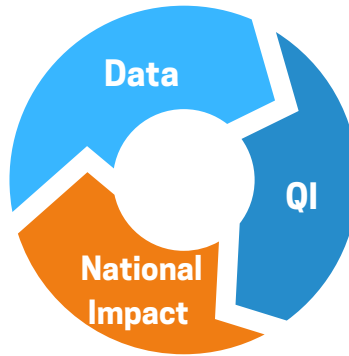
**Poster Title:** *Impact of 2019 ATS/IDSA Guidelines on Duration of Antibiotics for Pneumonia*

- Dr. Lindsay Petty, HMS ABX physician expert, shared an analysis to quantify the impact of removing HCAP on the antibiotic duration for CAP. It was found that among patients hospitalized with pneumonia eligible for a 5-day duration, 2/3 received excess antibiotics; similar to pCAP and HCAP. Prior to the 2019 guideline, the 5-day treatment rate was improving for HCAP and pCAP. The rate of improvement decreased after 10/2019 for both pCAP and HCAP, though only pCAP was statistically significant. The 2019 ATS/IDSA guidelines did not appear to have an added effect on improving antibiotic duration; rather, antibiotic duration was already improving prior to the new guidelines.





# INFLUENCE OF QUALITY



## Driving HMS Quality Efforts Nationally

### HMS Publications since July 2022

Ray-Barruel, G., Horowitz, J., McLaughlin, E., Flanders, S.A., & Chopra, V. (2022). Barriers and facilitators for implementing peripherally inserted central catheter (PICC) appropriateness guidelines: A longitudinal survey study from 34 Michigan hospitals. PloS one, 17(11), e0277302. doi:10.1371/journal.pone.0277302.

- [Abstract](#)
- [Visual Abstract](#)
- [Metrics](#)

Mitbander, U.B., Geer, M.J., Taxbro, K., Horowitz, J.K., Zhang, Q., O'Malley, M.E., Ramnath, N. & Chopra, V. (2022). Patterns of Use and Outcomes of Peripherally Inserted Central Catheters in Hospitalized Patients with Solid Tumors: A Multicenter Study. Cancer. doi:10.1002/cncr.34410.

- [Abstract](#)
- [Visual Abstract](#)
- [Altmetric Score](#)

Govindan, S., O'Malley, M. E., Flanders, S. A., & Chopra, V. (2022). The MI-PICC Score: A Risk-Prediction Model for PICC-associated Complications in the ICU. American journal of respiratory and critical care medicine, 206(10), 1286-1289. doi:/10.1164/rccm.202204-0760LE.

- [Abstract](#)
- [Visual Abstract](#)
- [Altmetric Score](#)



[Altmetric](#) tracks where published research is mentioned online, and provides tools and services to institutions, publishers, researchers, funders, and other organizations to monitor this activity.

# IMPORTANT DATES

## **HMS Specific Dates**

*\*Dates subject to change*

<b>January</b>	12/24/22-1/6/23	Stay of Abstraction - No abstraction required due to aligning abstraction dates for the PICC/ABX and Sepsis projects
	1/13/23	Case Volumes and Case Abstraction for the 2022 Performance Year Due
	1/23-1/25/23	Sepsis Cohort B Abstractor Training
	Late January	MiShare Reports Distributed (Q4 2022 Data)
<b>February</b>	Mid-late February	2022 Performance Indexes sent to abstractors and administrators for review before submissions to BCBSM
<b>March</b>	3/4/23	Sepsis Cohort B - Data Collection Start
	3/15/23	March 2023 Collaborative Wide Meeting - Virtual (PICC Oncology/Critical Care Workgroup Kick-off Sessions)
	Mid-March	Case Volume Predictions
<b>April</b>	Early April	Spring QI Survey Distributed
	4/10/23	Q1 2023 Data Pull Date
	Late April	MiShare Reports Distributed (Q1 2023 Data)
<b>June</b>	6/12/23	Q2 2023 Data Pull Date
	Late June	Mid-year 2023 Performance Indexes sent to abstractors and administrator for awareness purposes
<b>July</b>	7/12/23	July 2023 Collaborative Wide Meeting - In-person (PICC Oncology/Critical Care Workgroups Meeting #2)
<b>September</b>	9/25/23	Q3 2023 Data Pull Date
<b>October</b>	Early October	Fall QI Survey Distributed
<b>November</b>	11/1/2023	November 2023 Collaborative Wide Meeting - In-person (PICC Oncology/Critical Care Workgroups Meeting #3)

Check [HERE](#) for updates to our HMS Calendar !

# IMPORTANT DATES

If you have someone that is in need of Clinical Data Abstractor Training on any one of these dates, the deadline for requesting enrollment in a training date is one week prior to the training date. Please reach out to your site's Quality Assurance Coordinator for more information.

2023 HMS Abstractor Training Dates		
1/5/23	4/27/23	8/17/23
1/19/23	5/11/23	9/14/23
2/2/23	5/25/23	9/28/23
2/16/23	6/8/23	10/12/23
3/2/23	6/22/23	10/27/23
3/16/23	7/6/23	11/9/23
3/30/23	7/20/23	11/30/23
4/13/23	8/3/23	12/14/23

## **2023 National Conferences**

- To view the 2023 national conferences HMS members attend and present at, click [HERE](#).
- If you would like your presentation or poster highlighted on our list of 2023 national conferences, click [HERE](#).





# HMS

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## Contact Us!



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