The New Hampshire Antimicrobial Stewardship Award is intended to foster the sharing of ideas through the recognition of the innovative, adaptive, and effective stewardship work being done across the healthcare spectrum. The NH Antimicrobial Stewardship Symposium planning committee reviewed all nominated projects for unique strategies and demonstrated improvement in antimicrobial use in New Hampshire within five categories including the acute care setting, long term care, outpatient facilities, veterinary medicine, and multiple settings. Five winning initiatives along with five runners up were selected from the nominations, as described below. Please join us in congratulating all of the teams nominated for the great work being done in antimicrobial stewardship.

**Award Winner - Outpatient Facility**

**Team Name:** FMH Provider Practices - Outpatient Antibiotic Stewardship Team  
**Organization:** Frisbie Memorial Hospital  
**Initiative/Project Title:** Wellness Bags for Viral Cough - Bronchitis - URI  
**Nominated by:** Tracey Collins, Sr. Director, Quality Improvement - Frisbie Memorial Hospital

The FMH Provider Practices, Outpatient Antibiotic Stewardship Team is being recognized for their antimicrobial stewardship efforts to provide education to families and patient, with bronchitis, upper respiratory infections, and cough with no other bacterial diagnosis present, through the production and distribution of “Wellness Bags.” The contents of the “Wellness Bags” include a combination of pocket tissues, hand sanitizers, lip balm, nasal bulb, and thermometers, based on the age and needs of the patient. Materials for the bags were purchased with funding from the medical staff. Educational posters were hung in the lobby as well as patient examine rooms. While brochures along with the CDC’s “What is Watchful Waiting?” handouts were provided to patients. Clinical and provider staff were given information as well, through emails, posters, and face-to-face conversations. To measure the impacts of the initiative the number of antibiotics prescribed for bronchitis, upper respiratory infections, and cough were examined and found to decrease over time.

The FMH Provider Practices, Outpatient Antibiotic Stewardship Team was also recognized in January 2019 by the Quality Improvement Organizations (QIO) for meeting all four Centers for Disease Control and Prevention (CDC) Core Elements of Outpatient Antibiotic Stewardship.

**To learn more about this project contact:** Tracey Collins, Sr. Director, Quality Improvement - Frisbie Memorial Hospital t.collins@fmhospital.com
NH Antimicrobial Stewardship Award

Award Winner - Outpatient Facility

Team Name: Dartmouth Hitchcock Community Group Practice
Organization: Dartmouth Hitchcock
Initiative/Project Title: Antibiotic Use for Urinary Tract Infections (UTI)
Nominated by: Danielle Ferreira, Senior Quality and Safety Specialist, RN - Dartmouth Hitchcock Community Group Practice

The Dartmouth Hitchcock Community Group Practice is receiving the NH Antimicrobial Stewardship Award for their work developing 4x6 pocket cards for the treatment of uncomplicated urinary tract infections (UTIs) in females between the ages of 18-65 years’ old. The development of the stewardship tool was the result of collaborations with the NH QIN-QIO as well as the internal improvement team, comprised of physicians and medical leadership from DHMC Nashua and Manchester Urgent Care clinics, an ambulatory care pharmacist, a data analyst, and an improvement coach. The evidence-based contents of the pocket cards were created in part using the NH Division of Public Health Services 2017 and 2018 NH Statewide Antibiogram publication, updating the cards as new data became available. Following implementation of the cards a decrease in the percentage of women 18-65 years old diagnosed with a UTI that received an antibiotic was noted, while an increase in the number of patients receiving the appropriate antibiotic and those prescribed the appropriate antibiotic, dose, and duration was seen. The team also plans on creating pocket guides for other conditions such as acute bronchitis, community acquired pneumonia, and sinusitis in the future.

To learn more about this project contact: Danielle Ferreira, Senior Quality and Safety Specialist, RN - Dartmouth Hitchcock Community Group Practice Danielle.N.Ferreira@hitchcock.org
The NH Antimicrobial Stewardship Symposium Planning committee has selected the Portsmouth Regional Hospital Antimicrobial Stewardship Team for their progress working on the de-escalation of antibiotics. Alerts were made in their clinical monitoring system to identify patients receiving broad spectrum antibiotics for daily review, allowing pharmacists to review why patients are on antibiotics and provide recommendations more efficiently. Interdisciplinary rounds are also an important component of the initiative improving communication and proving education among staff, patients, and families on antibiotics and laboratory tests which can assist in making antibiotic de-escalation decisions. In addition to the education provided during rounds, newsletters, webinars, and flyers encouraging the switch from IV to oral antibiotics were distributed. Metrics used to assess the process improvement included the recording of the number of opportunities for patients to have antibiotics de-escalated, the percent de-escalated, the average time to de-escalation, IV to oral administration conversions, percent of urinary tract infections treated with fluoroquinolones, percent of vancomycin trough values in the proper range, as well as days of therapy (DOT).

To learn more about this project contact: Karen Michaud, Clinical Pharmacy Manager – Portsmouth Regional Hospital Karen.Michaud@hcahealthcare.com
Team Name: Exeter Hospital Pharmacy
Organization: Exeter Hospital
Initiative/Project Title: Antibiotic Stewardship and C. difficile Visual Surveillance Board Nominated by: Apara Dave, Hospital Epidemiologist – Exeter Hospital/Core Physicians

The Exeter Hospital Pharmacy team is being recognized for their Antibiotic Stewardship and C. difficile Visual Surveillance Board (VSB) Project. The visual board project was developed with the goal of focusing on patients receiving broad Gram-negative therapy, and identify opportunities to narrow these antibiotics, while concurrently identifying patients at highest risk for C. difficile infections. The VSB displays all inpatients on select antibiotics along with indication for the antibiotic, if the patient had a C. difficile infection in the past, and if a probiotic, or proton pump inhibitor was being administered. The VSB was trialed by the pharmacy team from April to May 2018, and was used during daily rounding by the pharmacists and during pharmacy/ID ASP rounds. Following the implementation of the project Exeter Hospital saw a decline in hospital onset C. difficile infections. The team plans to move forward with an antibiotic stewardship VSB for each patient, organized by unit and including antibiotics, indication, end date (if applicable), link to microbiology data, serum creatinine, fever curve for last 24hrs, WBC, lactate, procalcitonin, as well as stewardship interventions, such as antibiotic de-escalation, narrowing antibiotic spectrum choices, stopping vancomycin, and changing from IV to oral antibiotic administration.

To learn more about this project contact:
Apara Dave, Hospital Epidemiologist – Exeter Hospital/Core Physicians ApDave@ehr.org
and/or
Lindsay Brooks, Pharmacy Clinical Coordinator/Critical Care Pharmacist – Exeter Hospital lbrooks@ehr.org
**NH Antimicrobial Stewardship Award**

**Award Winner - Veterinary Medicine**

**Team Name:** Robert Gibson, BS, MPH - Managing Director/New Hampshire Veterinary Diagnostic Laboratory  
**Organization:** New Hampshire Veterinary Diagnostic Laboratory  
**Initiative/Project Title:** Laboratory Diagnostic Stewardship  
**Nominated by:** A. Rachel Roemer, Veterinarian/NHVMA President - Great Bay Equine/NHVMA, Steve Crawford, State Veterinarian, NH Department of Agriculture, Markets, and Food, & Nathan Harvey Assistant State Veterinarian, NH Department of Agriculture, Markets, and Food.

Robert Gibson along with his team at the New Hampshire Veterinary Diagnostic Laboratory (NH VDL) is being award the NH Antimicrobial Stewardship Award for their dedication and laboratory work focused on providing accurate and timely microbiology culture along with other diagnostic services. In an effort to provide accurate and rapid identification of microbial agents to clients at an affordable price, Robert Gibson, the lab’s managing director and veterinary microbiologist, organized the purchase of a Matrix Assisted Laser Desorption Ionization Time of Flight Mass Spectrometry (MALDI-TOF) instrument by the NH VDL in 2017. The unit uses mass spectrometry to identify infectious agents in minutes rather than days. The information is then quickly passed on to veterinary practitioners allowing for well-informed decisions to be made for animal patients regarding antimicrobial use. In addition, the NH VDL is leading the development of a veterinary antibiogram from their sample library. Both Rob Gibson and Dr. David Needle have been driving this endeavor in hopes an antibiogram developed with common animal pathogens will be used as a tool in veterinary antimicrobial stewardship in New Hampshire.

**To learn more about this project contact:** Robert Gibson, BS, MPH - Managing Director at the New Hampshire Veterinary Diagnostic Laboratory Robert.Gibson@unh.edu
Team Name: APDMH’s Antibiotic Stewardship Committee
Organization: Alice Peck Day Memorial Hospital
Initiative/Project Title: Using Cross-Functional Collaboration and Data Sharing as Tools to Better Understand the Drivers of Outpatient Provider Prescribing Patterns for Sinusitis, Bronchitis, and URI at Alice Peck Day Memorial Hospital
Category: Outpatient
Nominated by: Morgan Kassabian, Quality Improvement Data Analyst - Alice Peck Day Memorial Hospital

In the summer of 2017, APDMH’s Antibiotic Stewardship Committee launched a project to better understand primary care providers’ coding and prescribing patterns for three commonly over prescribed diagnoses: sinusitis, bronchitis, and URI. The committee created both 1.) clinic aggregate and 2.) de-identified, personalized provider-level reports which contained detailed information around which ICD-10 codes had been used and which antibiotics had been prescribed for visits that had one of these primary diagnoses. The data was refined, excluding visits in which complicating co-morbidity was present. Metrics around the effectiveness of providing provider level reports on the prescribing practices of said providers revealed a 20.9% decrease in inappropriate prescriptions written over the one-year project period (from 46.3% in FY17 to 36.6% in FY18). The team plans to focus on providing education regarding the choosing of antibiotics and improving documentation regarding medical reasons for prescribing in the future.

To learn more about this project contact: Morgan Kassabian, Quality Improvement Data Analyst - Alice Peck Day Memorial Hospital mcglassonm@apdmh.org
NH Antimicrobial Stewardship Award

Runner Up

Team Name: Milford Medical Center-Urgent Care

Organization: St. Joseph Hospital

Initiative/Project Title: CDC Core Elements of Outpatient Antibiotic Stewardship

Category: Outpatient

Nominated by: Andrea Harper, Infection Preventionist – St. Joseph Hospital

Dr. James Martin, the antibiotic stewardship leader at Milford Urgent Care, worked closely with St. Joseph Hospital infection preventionist, and Gloria Thorington from Quality Improvement Organizations (QIO), to implement the CDC’s Core Elements of Outpatient Antibiotic Stewardship. Dr. Martin sent a memo to the clinic staff and providers to set patient expectations, including information on delayed prescribing practices or watchful waiting for prescribers, when appropriate as well as requiring explicit written justification in the medical record for when writing scripts for non-recommended antibiotic. Reports were provided by the QIO regarding provider-level prescribing practices as related to the overall number of antibiotic prescriptions written as well as the number of antibiotic prescriptions written for specifically for respiratory infections and otitis.

Education for patients and staff was provided through verbal communication as well as signage and handouts displayed in patient exam rooms, waiting areas, and in provider areas on the “ABCs of Prescribing Antibiotics” from APIC and CDC. The Milford Medical Care, Urgent Care Team recently received a “Certificate of Completion” from the QIO for implementation of all of the CDC Core Elements of Outpatient Antibiotic Stewardship.

To learn more about this project contact:

Andrea Harper, Infection Preventionist – St. Joseph Hospital aharpersjnh.org

and/or

Dr. James Martin, Medical Director at Milford Medical Center JAmartin@sjnh.org
Team Name: ConvenientMD Urgent Care
Organization: ConvenientMD Urgent Care
Initiative/Project Title: Microbe Monday
Category: Outpatient
Nominated by: Caitlin Laughton, Director of QA & Compliance – ConvenientMD

On August 6, 2018, Dr. Margolis started “Microbe Monday”, a weekly intranet post for all of ConvenientMD members. Topics have included definition of fever, salmonella in pet lizards, and the risks of eating raw cookie dough, while other topics of public and world health concern have also been included such as measles outbreaks, multi-drug resistant gonorrhea as well as treatment guidelines for UTI, Sinusitis and Pneumonia. Dr. Margolis has added fun facts on the history of antibiotics, quizzes, and TED talks on the topic to promote conversation regarding this exciting initiative. Team members are able to add to the discussion with comments and information. Non-provider team members are able to ask great questions and now understand the bigger picture of antimicrobial stewardship, not only for our patients, but for their families and friends. Helping providers, in an on-demand industry, understand high patient satisfaction scores can be maintained without giving in to demands for unnecessary antibiotics.

To learn more about this project contact: Debra Margolis, Regional Medical Director - ConvenientMD dmargolis@convenientmd.com
NH Antimicrobial Stewardship Award

Runners Up

Team Name: Dr. Joshua White
Organization: Concord Hospital
Initiative/Project Title: Daily Antimicrobial Stewardship Rounds
Category: Acute Care
Nominated by: Ashley Pinkham, Infectious Disease Nurse Practitioner – Concord Hospital

Dr. Joshua White was nominated for his work on the antimicrobial stewardship rounding program at Concord Hospital established in January 2018. The program is a collaborative effort along with the pharmacy team to help monitor the use of broad spectrum antimicrobials at Concord Hospital through an alert system. Dr. White and a member of the pharmacy team meet periodically to address such alerts by reviewing cases and providing education along with recommendations in regards to the appropriateness of selection and/or de-escalation. The team had their best month yet in January of 2019, in terms of recommendations, with 143 alerts leading to 94 interventions with an overall provider acceptance of 92.2%. Dr. White along with his team look forward to expanding antimicrobial stewardship efforts at Concord Hospital.

To learn more about this project contact: Dr. Joshua White, Infectious Disease Physician – Concord Hospital jowhite@crhc.org

Team Name: Cottage Hospital Antibiotic Stewardship Committee
Organization: Cottage Hospital
Initiative/Project Title: Antibiotic Stewardship Implementation
Category: Acute Care
Nominated by: Kelly Hussey, Director of Quality & Risk Management – Cottage Hospital

The Cottage Hospital Antibiotic Stewardship Committee was nominated for their work to implement hospital wide antibiotic stewardship program through collaboration with the Agency for Healthcare Research and Quality (AHRQ). Current processes and protocols were reviewed and available stewardship tools were utilized to identify areas of improvement. One particular intervention initiated was the inclusion of antibiotic stewardship discussions in morning huddles to engage staff. The team looks forward to future projects and outcome measures.

To learn more about this project contact: Kelly Hussey, Director of Quality & Risk Management – Cottage Hospital khussey@cottagehospital.org