AMGA

Advancing High Performance Health

AMGA Foundation

Adult Immunization (AI) Best Practices Learning Collaborative, Group 3: Case Study

Ballad Health (Wellmont Medical Associates)

Kingsport, TN

Organizational Profile

Ballad Health's Legacy Wellmont Medical Associates (WMA), created in early 2012, is a 250+ provider multispecialty group serving Northeast Tennessee and Southwest Virginia. The system encompasses 27 active primary care practices, 22 specialty practices, and ten urgent care facilities. The patient population is aligned to the organization's approximately 71 nurse practitioners and 64 MD/DO primary care practitioners. The active adult patient population is approximately 57,600 members.

This past year, WMA has been involved in a merger that combined its system with the other large system in the referral area: Mountain States Health Alliance (MSHA). These two systems collectively are now Ballad Health. Because of the merger, they have experienced some of the same issues as other organizations in a similar position, such as technology slow-downs and priority shifting. As a result of the merger, the system will be combining electronic medical records (EMRs), utilizing Epic overall. This move will allow for much more coordination of care, unity of a single record, and the ability to improve communication with the various healthcare providers in the community.

Executive Summary

Over the past year, the experience with the AMGA Adult Immunization Best Practices Collaborative (AI Collaborative) has been extremely positive with regard to lessons learned, shared ideas, and evaluating immunization methods and data.

As a result of the participation, WMA found large discrepancies in its ability to represent a complete data set and show a realistic reflection of results. The organization found that a very large portion of patients are employees of the system and their flu immunizations are not reflected in the numbers. Having a 99% employee flu vaccine rate does not translate to improved numbers in the EMR reports unless they have been manually reported, updated, and placed in the appropriate fields. This was a challenge as it was found that information was not uniformly documented. Relatedly, the main interventions have been on the side of education regarding placing external immunization results in the correct place within Epic and allowing the reports to pick up the numbers; however, the results have not demonstrated adequate changes.

The issue of bidirectional data feeds also complicated the reporting process. The EMR accepts bidirectional data feeds, but both Tennessee and Virginia lack that capability at this time. Once that is in place, there will be more information shared. Another lesson learned was that the organization as a whole is not as efficient as it could be in immunizing high-risk/lower-aged patients with the pneumonia vaccine—or, at least, if the vaccine is not given in the office, which leads to difficulty in demonstrating compliance. Currently, the immunization rate for high-risk patients is showing a very slow rate of improvement and this needs to be advanced.

Acronym Legend

ACIP: Advisory Committee on Immunization Practices

AI Collaborative: AMGA's Adult Immunization Best Practices Collaborative

CDC: Centers for Disease Control and Prevention

EMR: Electronic Medical Record

HP2020: Healthy People 2020

MSHA: Mountain States Health Alliance

WMA: Ballad Health's Legacy Wellmont Medical Associates

Program Goals and Measures of Success

AI Collaborative Goals

Collaborative goals were set for the Adult Immunization Collaborative (Groups 2 and 3 participants). The collaborative goals were set based on reviewing the Healthy People 2020 goals from the federal office of Disease Prevention and Health Promotion (HP2020),[1] baseline data for each group, and with input from the AI Collaborative advisors (see Appendix).

WMA Goals

Initial goals were to develop a training program to improve proper documentation of the immunizations, provide education on the provider and staff side to improve immunizations, improve education of patients, and to have flu clinics at the practices. Education-related actions included the placement of posters in offices to improve vaccine awareness and provider/staff education measures, which were rolled out in the newsletter and practice manager meetings.

Another initial move was to turn off the ability to enter information regarding immunizations into the Health Maintenance section of Epic. Because this would not

update the immunization section and would not populate the bidirectional feeds once they were in place with the states, the process was discontinued and the practices were educated on the appropriate way to enter outside information via the immunization process. This did not translate into the practices doing this regularly, and it was found that the offices actually did not have improvement once this was in place. After reaching out to practices as their numbers went down or remained stagnant, they were found to enter the info into their notes rather than go through with the other steps. The lesson learned here was that by correcting a process for a future need, the current need was adversely affected. More education utilizing Centers for Disease Control and Prevention (CDC) and Advisory Committee on Immunization Practices (ACIP) guidelines and regular touch bases are required to move to the new process and start improving results.

Flu clinics and open office visits for the flu vaccine have been successful in that they moved organization results above the AI Collaborative goal; however, employees are still unable to be counted among those numbers. The plan is to ask for Employee Health to obtain permission to share the employee health information to the system for reporting purposes. For patients, flu vaccine education is sent out via MyChart for those that have an account. Reminders were placed in the offices and each office was also reminded to vaccinate. The problem is again in documenting this appropriately and getting credit for those completed outside the organization.

A Health Maintenance modifier in Epic is now turned on automatically for those high-risk patients that need the pneumonia vaccine. This reminder is good but the documentation process needs to be followed.

Another issue is that some provider practices do not stock the vaccine. They may order it but it's been found that they do not always follow up to get the results entered for the patient. Again, WMA feels that such documentation issues contribute to the low numbers, but also that the providers/clinical staff need continuous education and reminders regarding the vaccine for high-risk patients. The next goal and measurement of success will be to implement a smartset that will prompt providers for specific Health Maintenance topics, such as pneumonia vaccines. This will save a "click" to view another screen and assist in outcomes. Also, allowing for the rooming nurse to ask about pneumonia vaccine and proper documentation or putting an order in the chart for the provider to review and approve will allow for further efficiencies. These are being worked on currently and are hoped to be in place during the next year.

Data Documentation and Standardization

The Epic data analytics team used the AI Collaborative measure specifications to develop and test data extraction queries. Immunization data is stored in multiple locations in the EMR and data warehouse (e.g., claims, data from external sources, locally documented immunizations). While the quality review process confirmed that the measure calculation included all available data, as stated before, results that were not available through bidirectional feeds or employee health are not included.

Population Identification

With the potential to utilize all primary care and some specialty sites, there are over 27 sites available to provide immunization services. The population resides in two states—Southwest Virginia and Northeast Tennessee. This is a mostly rural area in Appalachia with a modest income average. A portion of the population has difficulty traveling or getting rides to appointments so it is important to make the most of any appointments they attend.

WMA providers can adhere to best practice for immunizations via the built-in Health Maintenance module within the Epic. This allows for improved tracking and documentation of immunizations. Protocols for both influenza and pneumococcal vaccines within the medical group are matched to CDC guidelines for immunization of the general population and for those at risk. Protocols are updated annually, thereby allowing WMA to track the appropriate populations.

The last volumes for immunization follow:

Metric	Population
Influenza over 18yr	36,321
Pneumococcal Older Adults	14,871
Pneumococcal High Risk	11,155

Outcomes and Results

WMA's outcomes demonstrate a very slow forward movement in most areas, with much room for improvement. If the organization were to continue to measure after the end of this initiative, the current quarter would show a 52% rate, as opposed to ending with the fifth quarter, which demonstrated

a 12.2% rate. The current quarter's rate shows WMA rates as drastically improved with a focus on the flu vaccine, education, reminders, and flu vaccine events. But, even at 52%, WMA feels the numbers would be considerably higher with the employees included who had their vaccines at employee health.

The Measure 1 results regarding pneumococcal (any immunization over age 65) demonstrate an improvement in the fifth quarter, and WMA will watch to see that it continues to move forward. With a start of 62%—moving to 68% and a larger population—this metric is moving in the right direction.

The biggest challenge has been Measure 2. While WMA started at a very low percentage and did move up at least 5%, this needs more improvement. The hope is that education, the Health Maintenance modifier now showing up in the EMR, and the continued emphasis on this metric will move the rate further up within the next year. Again, documentation may be a problem, since most of these vaccinations are given out of the system and have to be documented appropriately in order to be counted. A significant boost in numbers could occur once all of the staff and providers are correctly documented.

Lessons Learned and Ongoing Activities

One significant lesson the organization learned was that a prolonged merger situation diverted manpower away from focused projects and contributed to delays in implementation. However, working through the delays, WMA continues to improve teaching and education techniques. As well, work on the best documentation process is underway again. This will continue going forward into the future.

Another lesson learned was understanding that while WMA's provider offices are very good at giving the flu vaccines, due to cost some did not keep the pneumococcal vaccines at the office. Changing this mindset as well as allowing for better follow-up and documentation for those patients who receive it elsewhere must be a priority.

Future plans now include utilizing work that is currently being done on annual physicals and wellness visits to boost results. The organization does very well in performing annual wellness exams. The rates are around 80% of the Medicare population and the organization is improving rates on commercial and adolescent exams as well. During the fall AI Collaborative meeting, one ambulatory practice in particular mentioned a boost to immunizations when they combined them with annual wellness visits and with their flu clinics. Going forward in the 2019 calendar year, for those patients that currently do not show evidence of having received the vaccines, the plan is to utilize the annual wellness visits and annual physicals as a time to review and give pneumococcal vaccines for the patients that are below age 65 and at high-risk.

Moving forward, additional ongoing activities will be in place to measure, evaluate, and improve immunizations overall, as the merged organization is very focused on community health and immunizations are a key part of that focus. Patient education, improved attention to immunizations, and continued reporting and outcomes measurement down to the practice level will be in place in the future.

References

1. Office of Disease Prevention and Health Promotion (ODPHP). Healthy People 2020. healthypeople.gov.

Appendix

Collaborative Goals

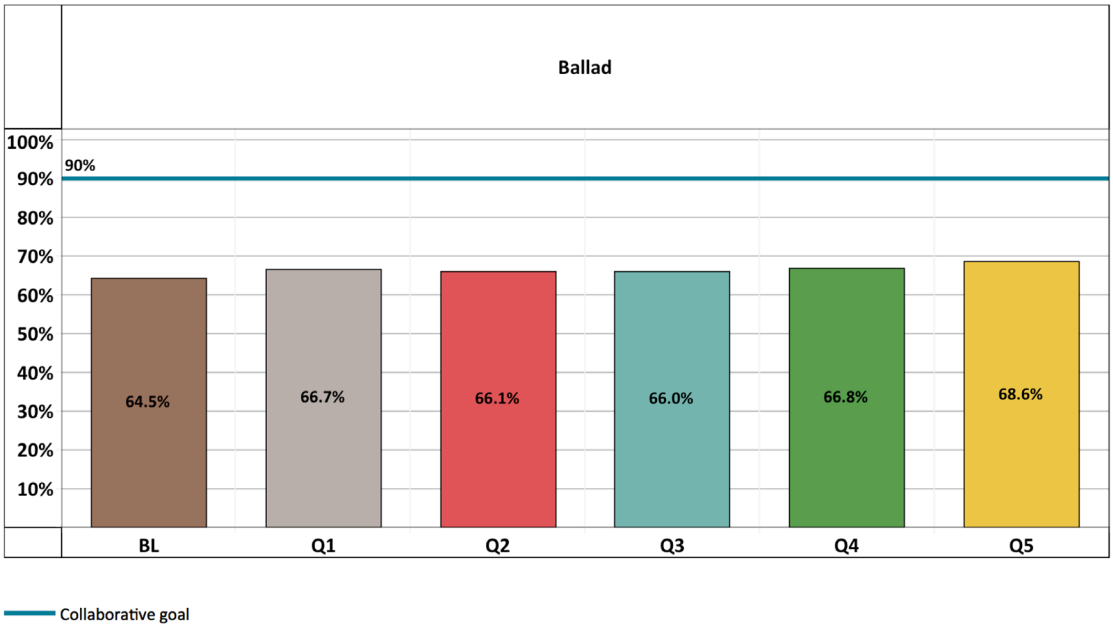
Measure	Healthy People 2020	Collaborative Goal
Measure 1 (65+) Any	90%	90%
Measure 1 (65+) Both PPSV and PCV*	90%	60%
Measure 2 (High-Risk)	60%	45%
Optional Measure 2a (At-Risk)**		
Measure 3 (Flu)	70%/90%***	45%

* Increasing "Both" is a good goal for Groups which are already doing well on "Any"

** According to CDC guidelines, it is not currently recommended that the at-risk population receive PCV. Therefore, "PPSV" or "Unknown pneumococcal vaccination" are numerator options for Measure 2a.

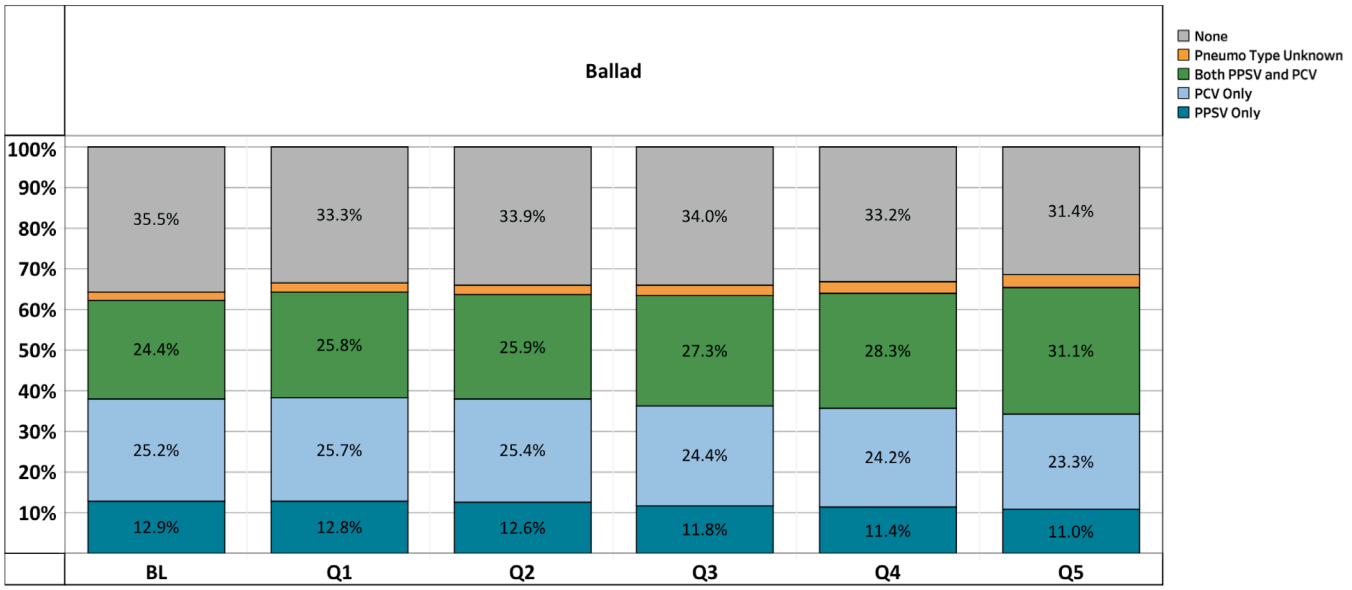
*** 70% for all patients, 90% for Medicare patients

Measure 1 – Pneumococcal (Any) Immunization for Adults Ages ≥ 65

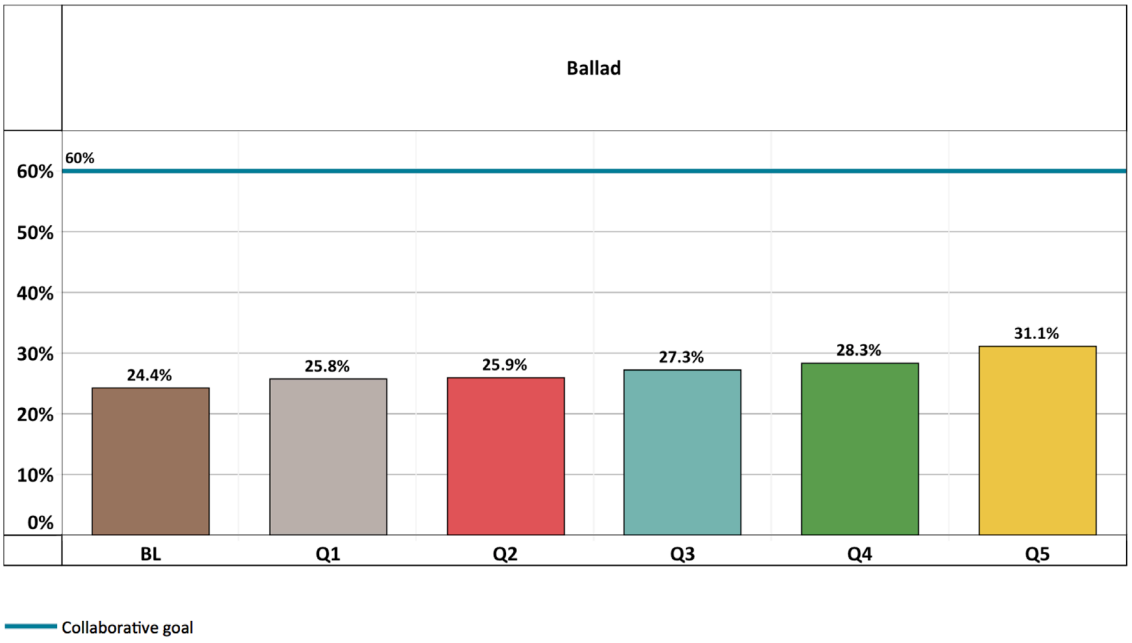


Appendix

Measure 1 – Pneumococcal (Any) Immunization for Adults Ages ≥ 65



Measure 1 – Both PPSV and PCV Immunization for Adults Ages ≥ 65



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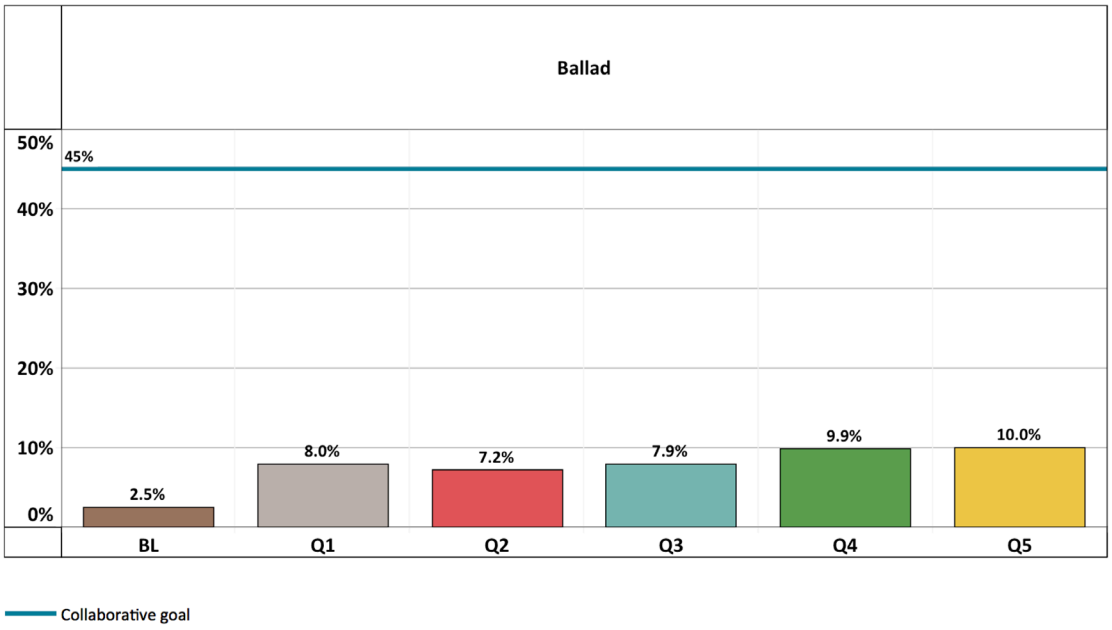
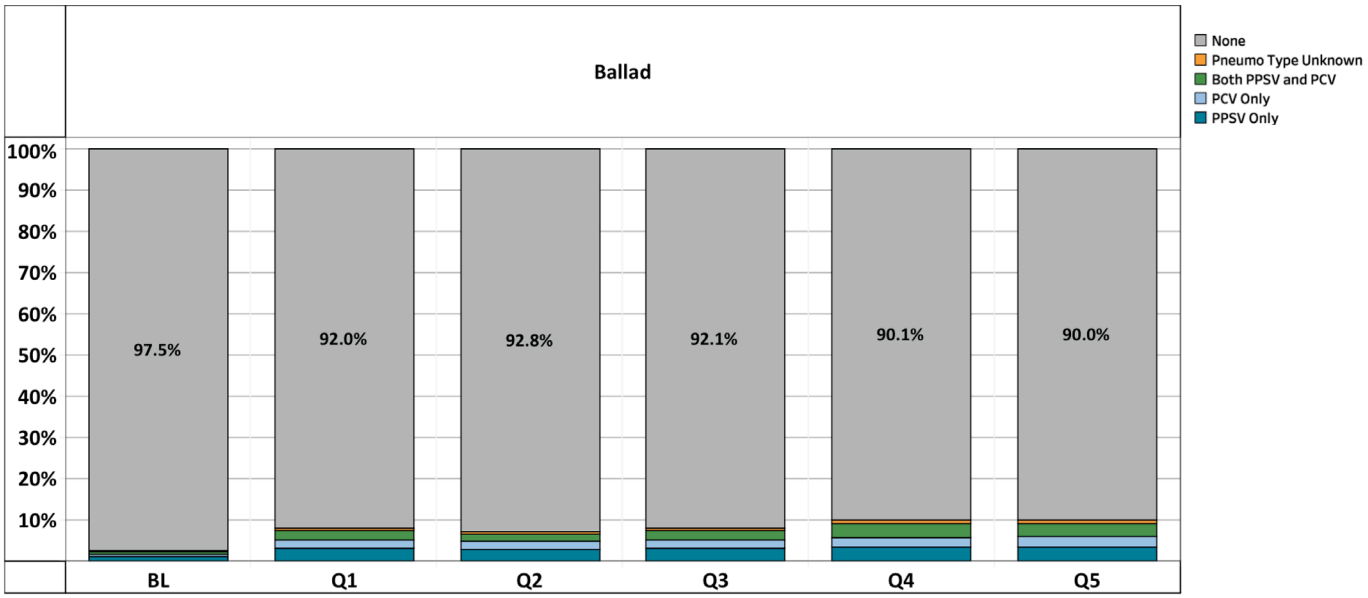
Measure 2 – Pneumococcal (Any) Immunization for Adults Ages 19–64 with High-Risk Conditions



Measure 2 – Pneumococcal (Any) Immunization for Adults Ages 19–64 with High-Risk Conditions



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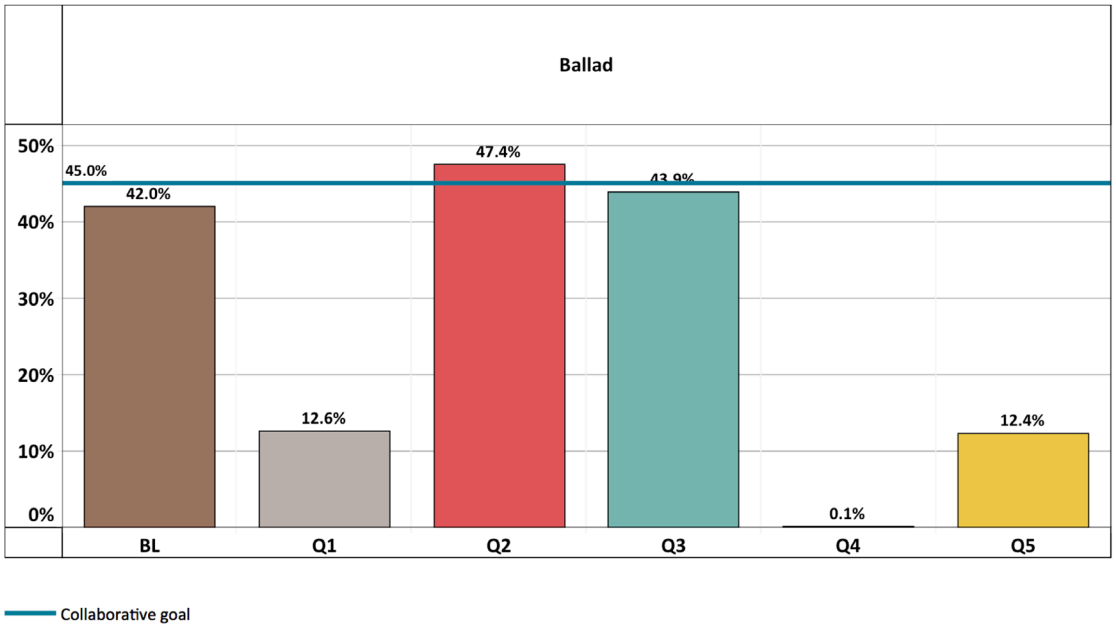
Measure 3 – Influenza Immunization, Age ≥ 18



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This project was sponsored by Pfizer Inc. Pfizer was not involved in the development of content for this publication.