AMGA

Advancing High Performance Health

AMGA Foundation

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

Scripps Medical Foundation

San Diego, CA

Organizational Profile

Scripps Medical Foundation (SMF) is a unit of Scripps Health. Scripps was originally established in 1924 by philanthropist Ellen Browning Scripps. Scripps Clinic Medical Group (SCMG) and Scripps Coastal Medical Center (SCMC) comprise the SMF, with SCMC joining Scripps Health in 2008 (forming SMF). SMF comprises 19 outpatient clinics and, combined with integrated Scripps Health Hospitals, treats up to half a million patients per year. SCMC has eight outpatient locations with over 100 providers; SCMG has the larger balance of locations with close to 800 providers. Primary Care comprises about 30%-40% of SCMG; SCMC is principally Primary Care. SMF's Southern Californian service area spans Coastal San Diego County from Oceanside in the north to Bonita in the south, and from La Jolla in the west to Santee and Rancho San Diego in the east. Improving pneumonia vaccine and influenza vaccine rates were, of course, SMF's goals in AMGA's Adult Immunization Best Practices Collaborative (AI Collaborative).

Executive Summary

Scripps Medical Foundation selected three interventions for the AI Collaborative. First, working with Epic analysts and the Epic EMR (electronic medical record) structure, SMF worked to refine and activate Health Maintenance (HM) alerts related to adult vaccines in the Epic user system. This allowed end user providers to be alerted for the patient's need for pneumonia vaccine and influenza vaccine. Secondly, an awareness campaign was instituted with poster placement in Family Medicine and Internal Medicine exam rooms. These posters would function to prompt the patient to ask about the pneumonia and influenza vaccine and also to remind providers and staff to check vaccine status. Finally, un-blinded vaccine completion data for pneumonia vaccine and influenza vaccine was presented monthly at the provider level. The data was distributed by email and also at monthly clinic site meetings, where it was reviewed by site directors with the providers.

Results from baseline data for the yearlong period ending on September 31, 2018, were as follows: For the pneumonia vaccine measures: Measure 1 rose from a baseline of 71.5% to 73.7%; Measure 2 rose from 19.2% to 20.4% and Measure 2a rose from 19.0% to 23.0%. The influenza (Measure 3) baseline was 26.9% and rose to a high of 33.4%.

Interventions principally revolved around awareness campaigns—the "assess" part of vaccination programs. SMF made providers aware of their current rates, made patients and providers aware of the need for vaccines, and created and made providers aware of HM tabs in Epic. These passive campaigns provided a modest increase in vaccine completion rates. There was no reduction in completion despite gradual expansion of the Primary Care base over the intervention period, but no great surge of completion either.

Lessons learned would be that awareness campaigns have their limitations in their effect over more structural, process-driven programs. An additional lesson learned involves the process of promulgation of our interventions. SMF is composed of a medical foundation consisting of two distinct business units. Vaccine improvement representatives have greater influence over the larger group (SCMG), but less penetration into the smaller but significant companion unit (SCMC). This limited the overall effect of SMF's interventions. The lesson here would be to develop better ways to involve areas of the intervention population of providers that are less influenced by SMF change processes.

Acronym Legend

AI Collaborative: AMGA's Adult Immunization Best Practices Collaborative
APC: Advanced Practice Clinician
EMR: Electronic Medical Record
HM: Health Maintenance
HP2020: Healthy People 2020
SCMC: Scripps Coastal Medical Center
SCMG: Scripps Clinic Medical Group
SMF: Scripps Medical Foundation

Program Goals and Measures of Success

AI Collaborative Goals

Collaborative goals were set for the AI Collaborative (Groups 2 and 3 participants). The AI 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).

SMF Goals

SMF goals for vaccination included programs for process improvement that were both passive (posters, awareness campaigns) as well as active (bulk orders, advanced practice clinician [APC]/care team population health initiatives). The SMF AI Collaborative team focused on the passive programs for its initial proposal and final report out. Additionally, SMF has a strong Department of Quality that measures monthly adherence to vaccination goals for childhood, adolescent, and adult vaccines. For the pneumonia vaccine, SMF's target completion goals were set to the AI Collaborative goals for patients age 65 or over and at-risk and high-risk patients. No specific system target was set for adult influenza vaccination, though SMF's "unconscious" goal was the AI Collaborative goal of 45%.

Data Documentation and Standardization

The data analytics team used the AI Collaborative measure specifications to develop and test data extraction queries and internal monthly performance reporting. Immunization data is stored in several locations within the EMR (e.g., scanned shot cards or paper documents). Data validation process confirmed the measure calculations included all available data.

Population Identification

SMF comprises 19 outpatient clinics and the AI Collaborative population covered for pneumonia and influenza vaccines was approximately 69,000. Of these, approximately 40,000 were potential pneumonia vaccine targets. SMF Primary Care providers number about 300. SMF Department of Quality used Epic data to identify this population. This patient population was primarily influenced by this collaborative project through Primary Care in SMF. Specialty care was not a focus of this project.

Intervention

As mentioned in the Executive Summary, SMF interventions principally dealt with the "assess" portion of the Adult Immunization Framework. Every month, providers would receive un-blinded data with regards to their pneumonia vaccine completion (only two dose completions over age 65 years was provided to them) and influenza vaccine completion. This data would show how they compared to their local clinic peers and would be also presented at monthly provider site meetings. Epic HM alerts were developed and refined and providers were made aware of their availability and functionality. Additionally, awareness campaigns with posters for pneumonia vaccine completion were placed in patient rooms in Internal Medicine and Family Medicine. Seasonal influenza posters were also placed.

Interventions did not involve specific clinic processes in SMF's initial AI Collaborative intervention proposal and no compensation strategies were employed. Late in 2018, proposals within the Department of Quality and the SMF Vaccine Committee led to the introduction of Epic bulk orders for influenza vaccine. This allowed for the availability of an influenza order no matter where the patient showed up in the SMF system. Though not part of the SMF proposal and data not finalized, the anecdotal reports include feedback that the bulk order process improved patient throughput at flu shot clinics and during nursing visits. Influenza vaccine usage was up 10% during the first three months of the current flu season, although there are other confounding variables that could have impacted this as well.

Outside the AI Collaborative, a pilot project was performed to provide assessment and administration of pneumonia vaccines in pre-existing influenza vaccine shot clinics. As an additional process outside the AI Collaborative, SMF established 14 "minute-clinic" type sites throughout the system in the summer of 2018. Despite SMF's efforts to provide all vaccines at these sites, the system was disappointed but fortunate to have only the influenza vaccine included in their scope of practice. This, along with bulk orders, allowed patients to walk in to these sites up to 9:00 p.m. on weekdays and between 8:00 a.m. and 5:00 p.m. on weekends for influenza vaccination.

Outcomes and Results

Results from baseline data for the yearlong period ending on September 31, 2018 were as follows: For the pneumonia vaccine measures: Measure 1, numbers rose from a baseline of 71.5% to 73.7%; Measure 2 (high-risk patients age 19-64) rose from 19.2% to 20.4% and Measure 2a (at-risk patients age 19-64) rose from 19.0% to 23.0%. For influenza (Measure 3), the baseline was 26.8% and rose to a high of 33.4%. Results were overall a modest increase in vaccination completion rates. At-risk patients ages 19-64 had the highest change. Reviewing specific providers and sites, those providers that were seen to be good vaccinators continued to be so, and there was some

conversion toward the positive with some providers who had not been as good. There remained providers who were less influenced by the interventions.

Lessons Learned and Ongoing Activities

There were several lessons learned. One involved the limitations of passive awareness campaigns. SMF's interventions demonstrated modest but not stark improvement in completion rates. Comparing this project with other SMF Vaccine Committee/SMF Department of Quality interventions in childhood and adolescent vaccination (which were more actively managed and changed clinic processes), the results achieved within the time period of this AI Collaborative were modest. This demonstrated that while awareness campaigns are useful, active campaigns that alter and improve processes are likely more effective. Perhaps a combination of awareness and process change would be more ideal. As an example, the establishment of walk-in "minute clinic" offerings in the Foundation, coupled with walk-in influenza vaccine visits and bulk orders for influenza vaccines, was associated with the report of a 10% increase in influenza vaccine purchases for the Foundation.

Another lesson learned is that it is important to have leadership involvement from all areas of the intervention environment. SMF is composed of two business units, SCMG and SCMC. There is limited penetration of Quality and Vaccine Committee leadership into SCMC. Local control of sites in SCMC is more of a theme, while in SCMG leadership structure is more defined. This leads to difficulty in intervention penetration into SCMC. The lesson is to have leadership involvement and provider engagement in all practice areas in order to enhance the success of the interventions.

Next steps would be a continuance of the awareness campaigns but also to take action on developing active vaccine improvement processes. Adding pneumonia vaccines to bulk orders in Epic and allowing SMF "minute clinic" Scripps HealthExpress sites to provide walk-in pneumonia vaccines would be a laudable goal. Bulk orders would allow medical assistants and licensed practical nurses to administer vaccines as part of the rooming process for patients during regular clinic visits and involve them more with the team of vaccinators. Additionally, convincing Internal and Family Medicine leadership to include adult pneumonia vaccination in Care Team Population Health processes would be important. The SMF Vaccine Committee and the SMF Department of Quality will continue their efforts toward improving all vaccine completion rates in SMF's affiliated patient population.

References

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

Appendix

Collaborative Goals

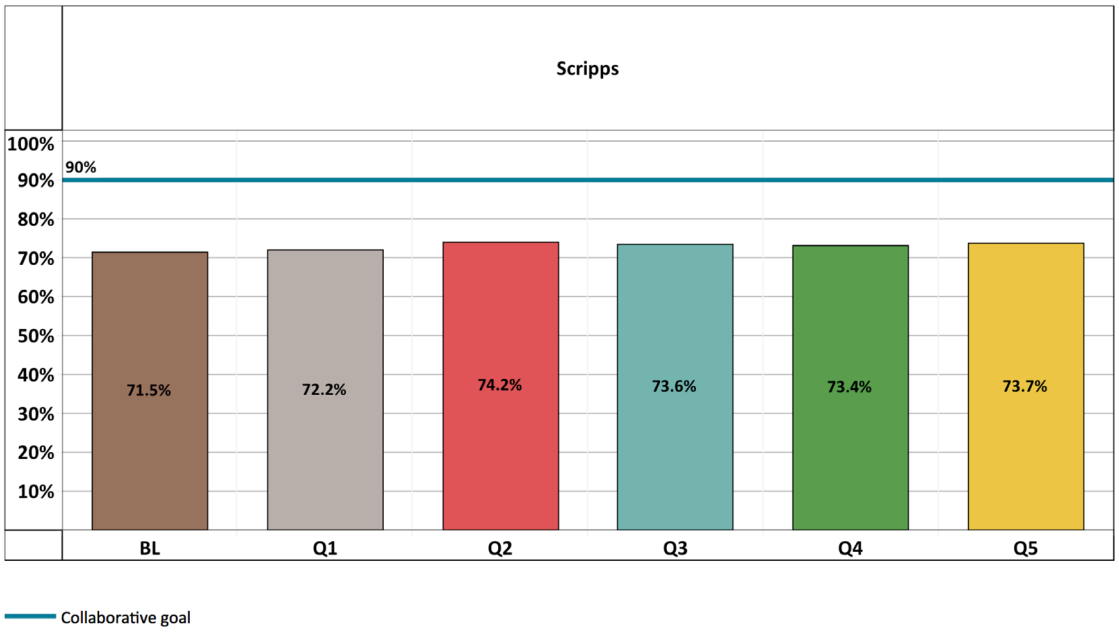
Measure	Healthy People 2020	Collaborative Goal
Measure 1 (65+) Any	90%	90%
Measure 1 (65+) Both PPSV and PCV*	90%	60%
Measure 2 (High-Risk)	60%	45%
Optional Measure 2a (At-Risk)**		
Measure 3 (Flu)	70%/90%***	45%

* 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.

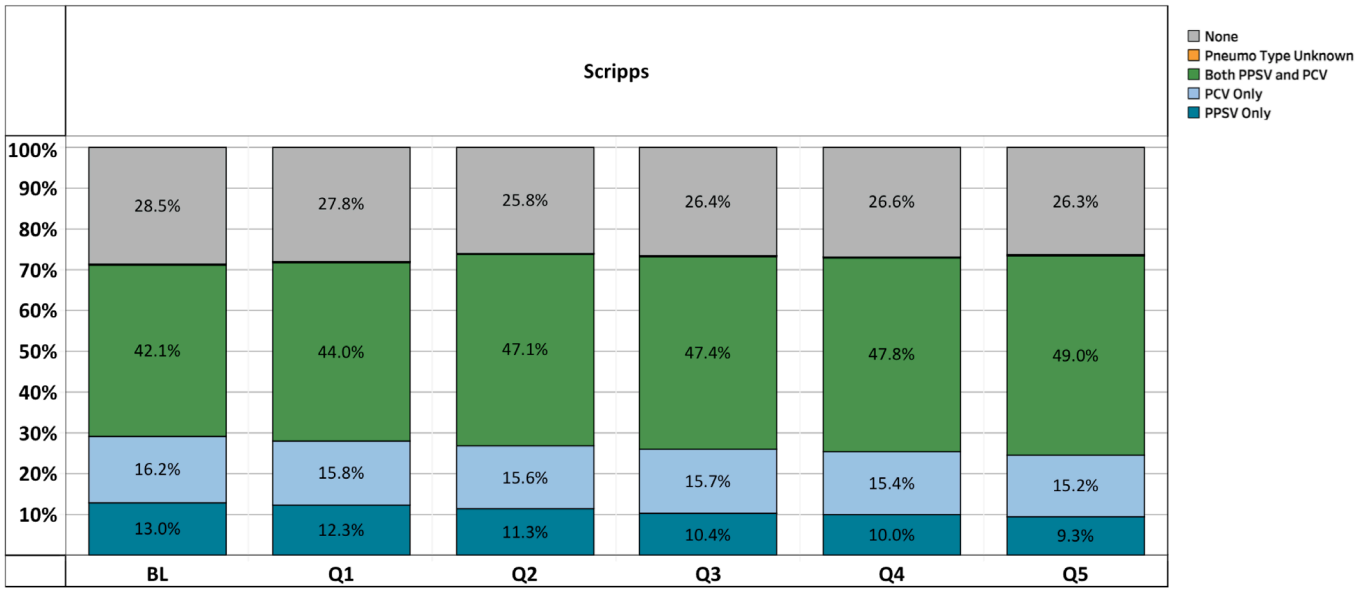
*** 70% for all patients, 90% for Medicare patients

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

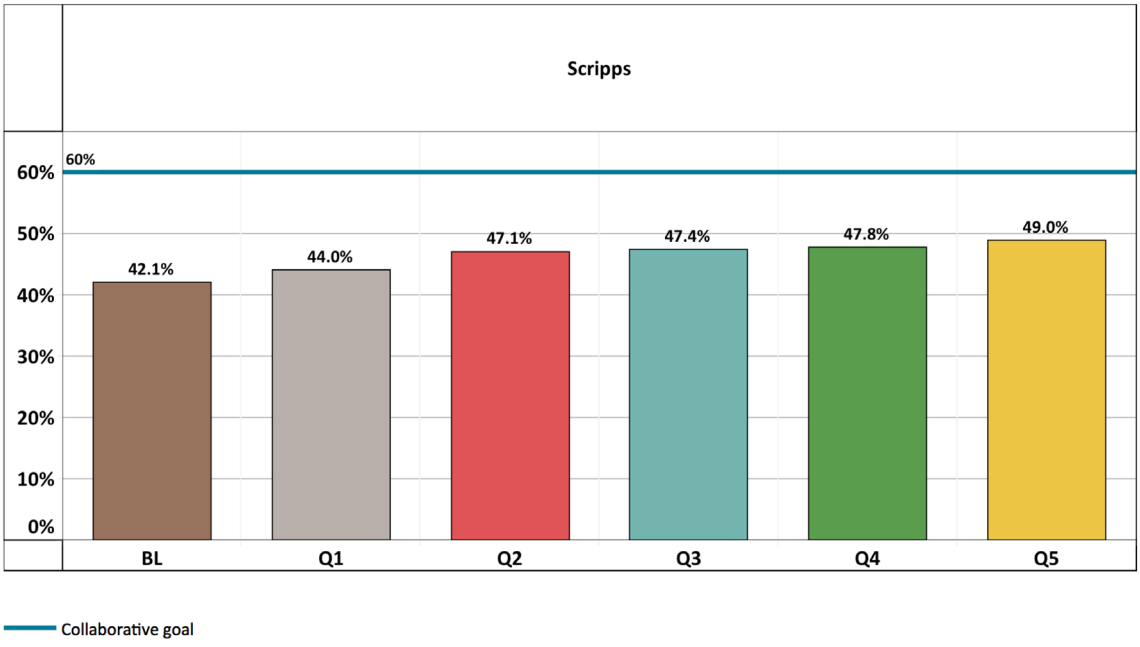


Appendix

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



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



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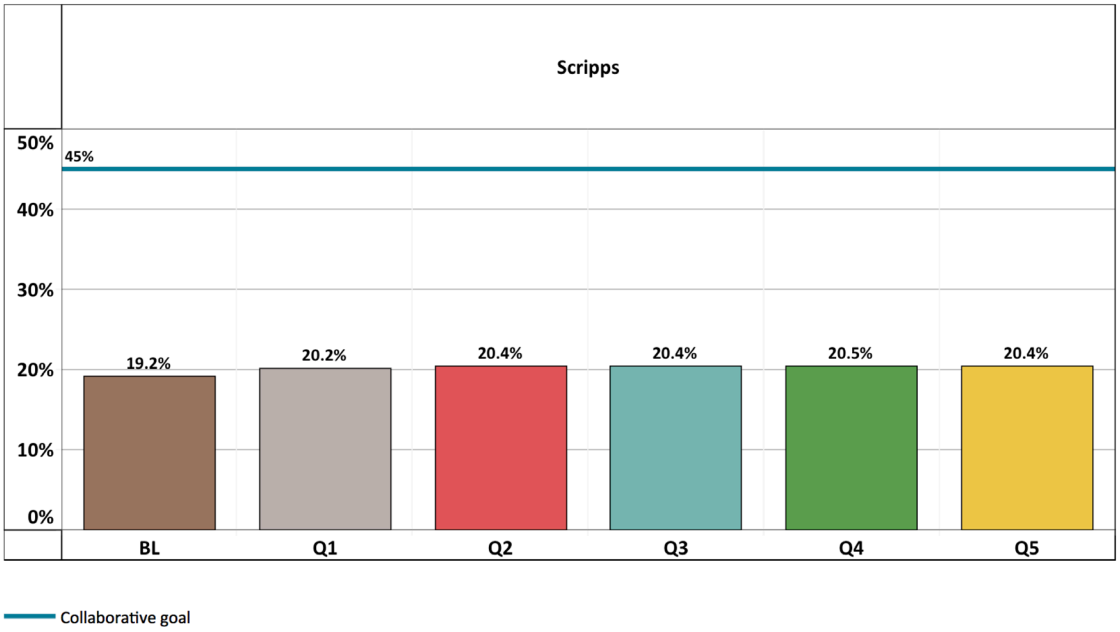
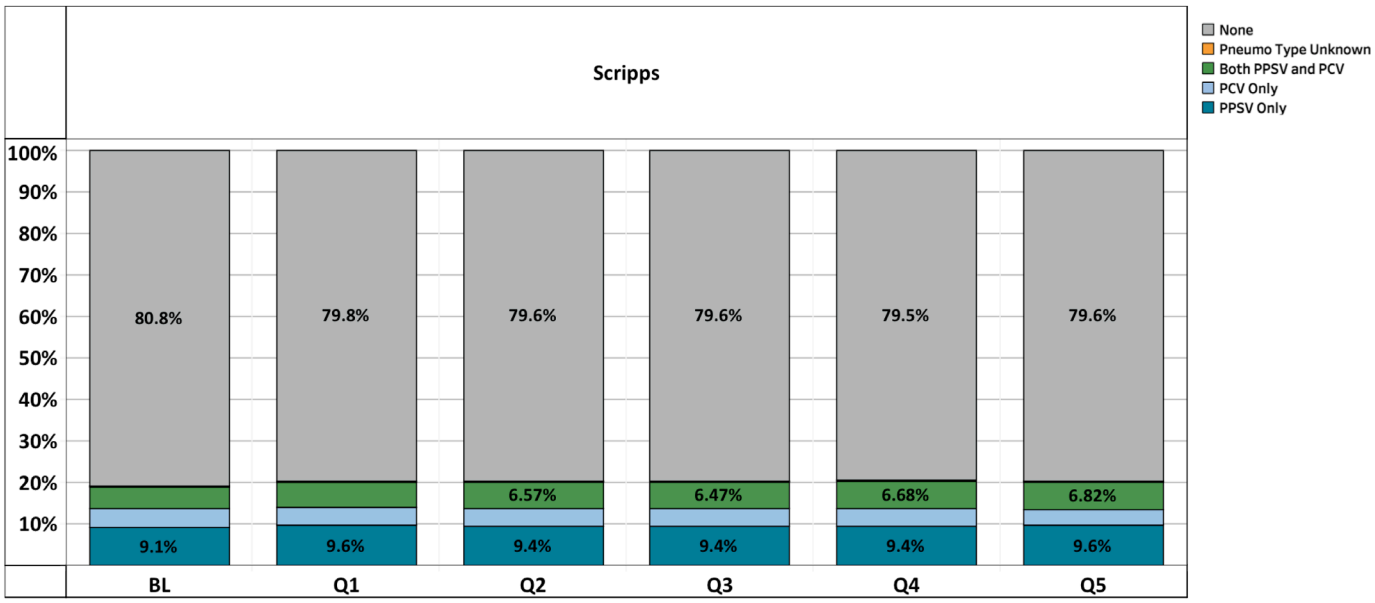
Measure 2 – Pneumococcal (Any) Immunization for Adults Ages 19–64 with High-Risk Conditions

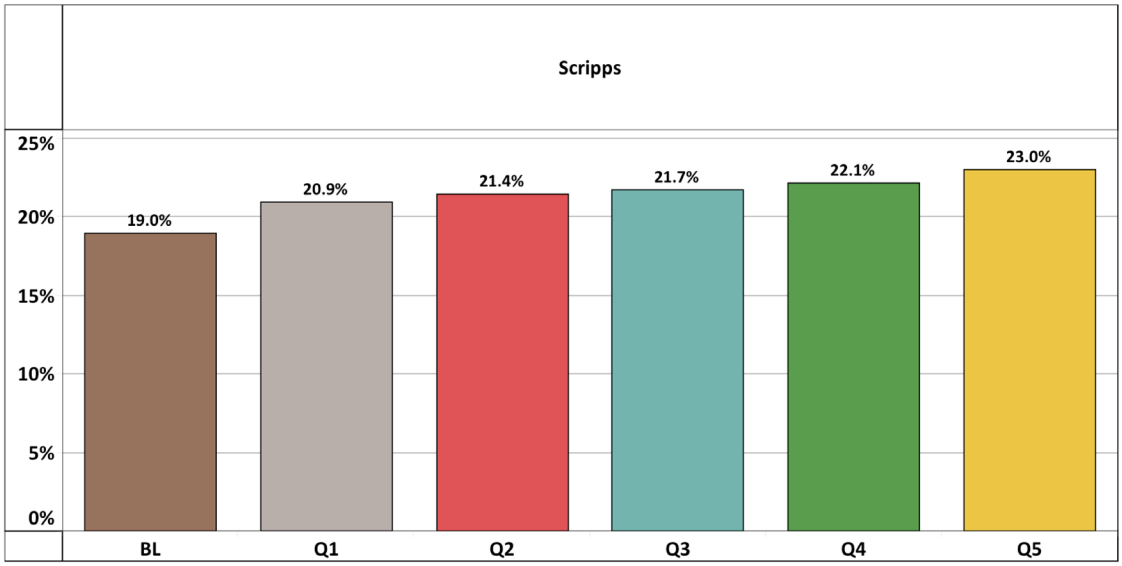


Measure 2 – Pneumococcal (Any) Immunization for Adults Ages 19–64 with High-Risk Conditions

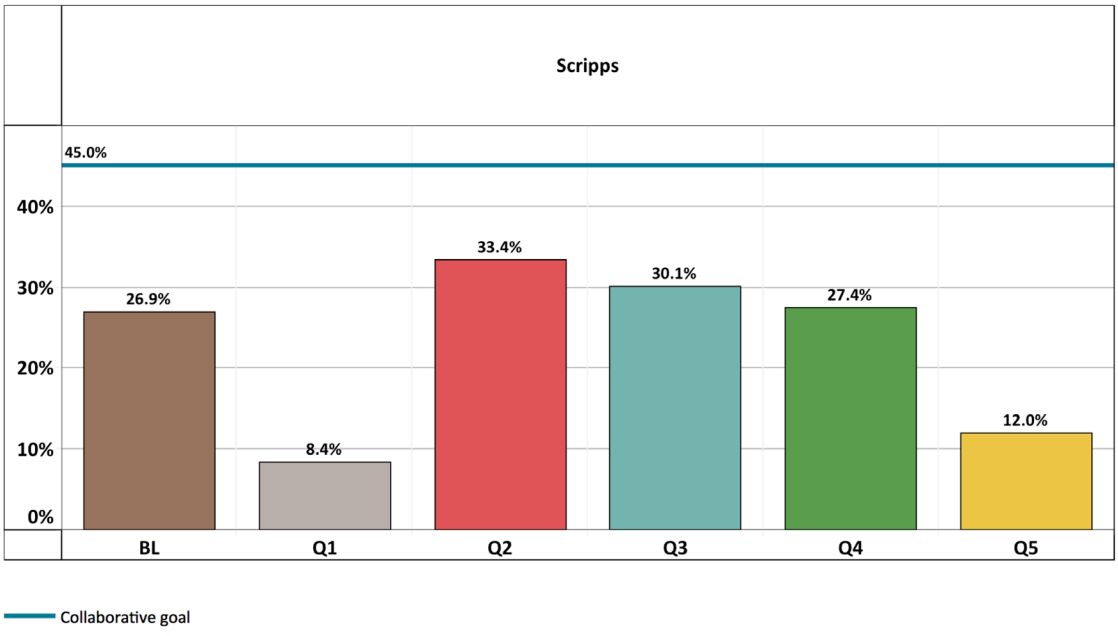


Appendix

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



Measure 3 – Influenza Immunization, Age ≥ 18



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AMGA's Distinguished Data and Analytics Collaborator

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