

# Hospital Compare Quality Measure Results for CAHs, 2015

Michelle Casey, MS; Tami Swenson, PhD; Alex Evenson, MA University of Minnesota

## **INTRODUCTION**

This report summarizes reporting rates and performance among all U.S. Critical Access Hospitals (CAHs) on Hospital Compare inpatient and outpatient process of care and structural measures for calendar year 2015. The Flex Monitoring Team also produces state-specific CAH reports with more detailed results.

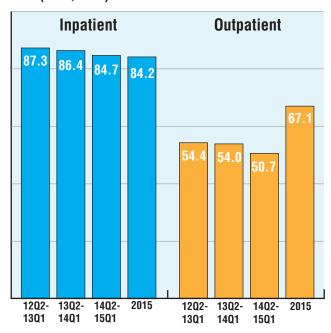
### BACKGROUND

Since 2004, acute care hospitals paid under the Medicare Prospective Payment System (PPS) have had a financial incentive to publicly report quality measure data on the Centers for Medicare & Medicaid Services' (CMS) Hospital Compare website. Although Critical Access Hospitals (CAHs) do not face the same financial incentives as PPS hospitals to participate, the Hospital Compare initiative provides an important opportunity for CAHs to publicly report, assess and improve their performance on national standards of care.

#### **APPROACH**

For the inpatient and outpatient process of care measures (except the median time process measures), the percentages of patients that received recommended care were calculated by dividing the total number of patients in all CAHs nationally who received the recommended care by the total number of eligible patients in all CAHs nationally for each measure. Median scores for the median time measures were calculated by arranging the median times by quarter for all CAHs nationally from the lowest time to the highest time by hospital, and selecting the middle value based on the number of patients. On the median times, are better. For each structural measure, the percentages of CAHs that reported no data and those that reported yes or no on each measure were calculated.

The Hospital Compare data in this report include several measures that are also measures for the Medicare Beneficiary Quality Improvement Project (MBQIP). Although the majority of CAHs report data on these measures to both Hospital Compare and MBQIP, the data in this report may differ from MBQIP reports because some CAHs only report data to one of these programs.



# Figure 1. CAH Participation in Hospital Compare, 2015 (N=1,332<sup>1</sup>)

1. N value refers to most recent data (2015). Prior years' N values are as follows: 1202-1301, 1,332; Q302-1401, 1,338; 1402-1501, 1,336.



Flex Monitoring Team Data Summary Report #22 | February 2017

CAH Hospital Compare Quality Measure Results, 2015

#### RESULTS

For 2015, 84.2% of CAHs reported data to Hospital Compare on at least one inpatient measure, while 67.1% of CAHs reported data on at least one outpatient measure (Figure 1). The inpatient reporting percentage represents a slight decrease from the previous reporting period, while outpatient reporting among CAHs has increased by more than 15% (from 50.7% between April 2014 and March 2015). Figure 2 shows state rankings on inpatient and outpatient reporting rates.

Tables 1 and 2 display the number of CAHs reporting and their performance on each of the inpatient and outpatient process-of-care measures (except the median time process measures) for 2015 discharges for CAHs nationally and for the 45 Flex states. Table 3 displays the national and state results for the median time measures. Table 4 provides results for CAHs nationally that reported data for structural quality measures in 2015; nationally, more than three-fourths of CAHs did not report these data.

#### **TOOLS AND RESOURCES**

The Flex Monitoring Team (FMT) provides free access to all publications and presentations on our website, <u>http://www.flexmonitoring.org</u>, including a series of policy briefs on evidence-based QI programs and strategies that could be implemented by CAHs.

The Technical Assistance Services Center (TASC) provides resources for State Flex Programs and CAHson their website. For profiles of State Flex Programs, State Contacts, and examples of Flex activities to support quality improvement, visit <u>http://www.ruralcenter.org/</u> <u>tasc/flexprofile</u>.

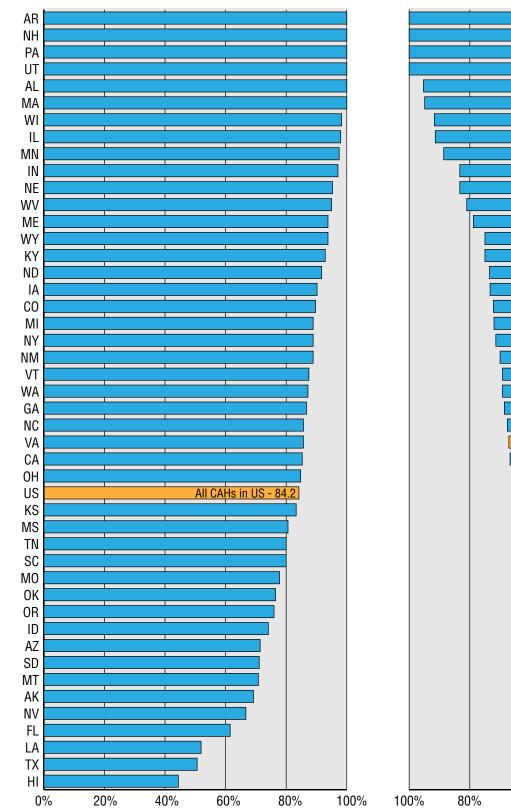
For resources focused on the Medicare Beneficiary Quality Improvement Program (MBQIP), visit <u>https://</u> www.ruralcenter.org/tasc/mbqip.

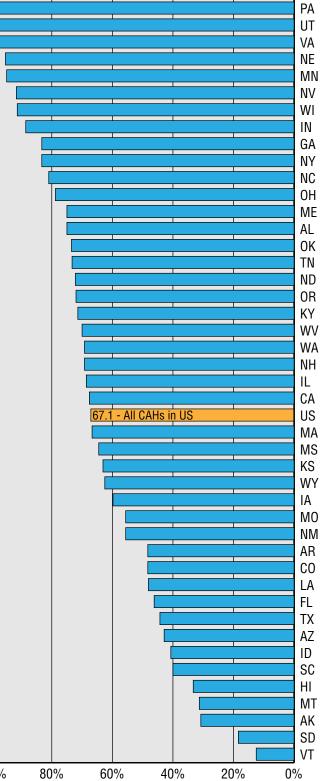
#### REFERENCES

1. The Flex Monitoring Team has published national Hospital Compare reports since 2006. All are available for download at <u>http://www.flexmonitoring.org/publica-tions/annual-hospital-compare-results/</u>.

Links to State-Specific Reports:					
Alabama	Idaho	<u>Michigan</u>	New York	Tennessee	
<u>Alaska</u>	<u>Illinois</u>	<u>MInnesota</u>	North Carolina	Texas	
<u>Arizona</u>	<u>Indiana</u>	<u>Mississippi</u>	North Dakota	<u>Utah</u>	
<u>Arkansas</u>	<u>lowa</u>	<u>Missouri</u>	<u>Ohio</u>	<u>Vermont</u>	
<u>California</u>	<u>Kansas</u>	<u>Montana</u>	<u>Oklahoma</u>	<u>Virginia</u>	
<u>Colorado</u>	<u>Kentucky</u>	<u>Nebraska</u>	<u>Oregon</u>	<u>Washington</u>	
<u>Florida</u>	<u>Louisiana</u>	<u>Nevada</u>	<u>Pennsylvania</u>	<u>West Virginia</u>	
<u>Georgia</u>	<u>Maine</u>	<u>New Hampshire</u>	South Carolina	<u>Wisconsin</u>	
<u>Hawaii</u>	<u>Massachusetts</u>	New Mexico	South Dakota	<u>Wyoming</u>	

Figure 2. State Rankings of CAH Reporting Rates for Inpatient and Outpatient Quality Measures, 2015





MI

# Table 1. Inpatient Process of Care Results for Patients Discharged from Reporting CAHs, 2015

	CALLS	
	CAHs reporting	CAH performance <sup>1</sup>
valuation of LVS function	613	85.3
mmunization for influenza	535	90.9
lealthcare workers given influenza vaccination	829	85.6
arly elective delivery (lower is better)	150	3.8
nitial antibiotic selection for pneumonia patient	625	87.4
Surgery patients who received perioperative beta blocker	166	94.7
Preventative antibiotic(s) 1 hour before incision	213	95.1
Received appropriate preventative antibiotic(s)	210	96.8
Preventative antibiotic(s) stopped within 24 hours after surgery	209	97.1
Jrinary catheter removed first / second day after surgery	185	97.4
Surgery patients who received appropriate VTE antibiotics	211	99.0
/TE prophylaxis	303	90.6
Discharged on antithrombotic therapy	217	95.4
Anticoagulation therapy for atrial fibrillation/flutter	127	90.9
Fhrombolytic therapy	105	13.5
Antithrombotic therapy by end of second hospital-day	212	93.4
Discharged on statin medication	284	83.8
Stroke education	238	82.3
Assessed for rehabilitation	228	95.6
/enous thromboembolism prophylaxis	395	90.4
CU venous thromboembolism prophylaxis	165	94.9
Anticoagulation overlap therapy	321	89.7
Infractionated heparin with dosages/platelet count monitoring	87	94.5
Varfarin therapy discharge instructions	285	87.8
ncidence of potentially-preventable VTE (lower is better)	88	2.5
	nmunization for influenza ealthcare workers given influenza vaccination arly elective delivery (lower is better) nitial antibiotic selection for pneumonia patient urgery patients who received perioperative beta blocker reventative antibiotic(s) 1 hour before incision eceived appropriate preventative antibiotic(s) reventative antibiotic(s) stopped within 24 hours after surgery rinary catheter removed first / second day after surgery urgery patients who received appropriate VTE antibiotics TE prophylaxis ischarged on antithrombotic therapy nticoagulation therapy for atrial fibrillation/flutter hrombolytic therapy ntithrombotic therapy by end of second hospital-day ischarged on statin medication troke education ssessed for rehabilitation enous thromboembolism prophylaxis CU venous thromboembolism prophylaxis nticoagulation overlap therapy nfractionated heparin with dosages/platelet count monitoring /arfarin therapy discharge instructions	valuation of LVS function613mmunization for influenza535ealthcare workers given influenza vaccination829arly elective delivery (lower is better)150nitial antibiotic selection for pneumonia patient625urgery patients who received perioperative beta blocker166reventative antibiotic(s) 1 hour before incision213eceived appropriate preventative antibiotic(s)210reventative antibiotic(s) stopped within 24 hours after surgery209rinary catheter removed first / second day after surgery185urgery patients who received appropriate VTE antibiotics211TE prophylaxis303ischarged on antithrombotic therapy217nticoagulation therapy for atrial fibrillation/flutter127hrombolytic therapy105ntithrombotic therapy by end of second hospital-day212ischarged on statin medication238ssessed for rehabilitation228enous thromboembolism prophylaxis165nticoagulation overlap therapy321ntractionated heparin with dosages/platelet count monitoring87/arfarin therapy discharge instructions285

1. Expressed as a percentage of patients receiving recommended care (lower is better for PC-01 and VTE-6), except for OP-27/ IMM-3, which is the percentage of healthcare workers immunized.

† MBQIP core measure (this table shows Hospital Compare data)

‡ MBQIP additional improvement measure (this table shows Hospital Compare data)

# Table 2. Outpatient Process of Care Results for Patients Discharged from Reporting CAHs, 2015

		CAHs reporting	CAH performance <sup>1</sup>
0P-2 <sup>†</sup>	Fibrinolytic therapy received within 30 minutes	312	49.4
0P-4 <sup>†</sup>	Aspirin at arrival	713	95.7
0P-22 <sup>†</sup>	Patient left without being seen (lower is better)	253	1.1
0P-23 <sup>‡</sup>	Received head CT scan interpretation within 45 minutes	375	54.4
0P-29	Appropriate follow-up interval, colonoscopy, average-risk patients	103	75.1
0P-30	Appropriate follow-up interval, colonoscopy, patients with polyps	84	85.7

1. Expressed as a percentage of patients receiving recommended care (lower is better for OP-22)

† MBQIP core measure (this table shows Hospital Compare data)

‡ MBQIP additional improvement measure (this table shows Hospital Compare data)

## Table 3. Median Time to Patients Receiving Recommended Care at CAHs, 2015

Note: lower scores are better for all median time measures		CAHs reporting	Minutes <sup>1</sup>
ED-1b <sup>‡</sup>	Median time from ED admission to ED departure for admitted patients	543	217
ED-2b <sup>‡</sup>	Admit decision time to ED departure time for admitted patients	538	55
0P-1 <sup>†</sup>	Median time to fibrinolysis	310	32.0
OP-3b <sup>†</sup>	Median time to transfer to another facility - acute coronary intervention	390	64.0
0P-5 <sup>†</sup>	Median time to ECG	714	7
OP-18b <sup>†</sup>	Median time from ED arrival to ED departure for discharged patients	554	102
0P-20 <sup>†</sup>	Median time from door to diagnostic evaluation	563	18
0P-21 <sup>†</sup>	Median time to pain management for long bone fracture	557	45

1. Median number of minutes to receiving recommended care (lower is better for all median time measures)

† MBQIP core measure (this table shows Hospital Compare data)

‡ MBQIP additional improvement measure (this table shows Hospital Compare data)

		No data (#CAHs / %)	No (#CAHs / %)	Yes (#CAHs / %)
0P-12	Ability to receive lab data directly to certified EHR	1,047 (78.6%)	27 (2.0%)	258 (19.4%)
0P-17	Ability to track clinical results between visits	1,052 (79.0%)	47 (3.5%)	233 (17.5%)
0P-25 <sup>‡</sup>	Use of safe surgery checklist: outpatient	1,024 (76.9%)	25 (1.9%)	283 (21.2%)
SM-3	Nursing care registry	1,051 (78.9%)	210 (15.8%)	71 (5.3%)
SM-4	General surgery registry	1,052 (79.0%)	256 (19.2%)	24 (1.8%)
SM-5	Use of safe surgery checklist: inpatient	1,034 (77.6%)	21 (1.6%)	277 (20.8%)

# Table 4. Structural Quality Measures Reported by CAHs, 2015

‡ MBQIP additional improvement measure (this table shows Hospital Compare data)

# **DEFINITIONS OF MEASURES**

Note: higher numbers reflect better performance, except where indicated below.

- ED-1b: Admit Decision Time to Emergency Department (ED) Departure Time for Admitted Patients - median time from admit decision time to time of departure from the ED for patients admitted to inpatient status. (A lower number is better.)
- ED-2b: Median Time from Emergency Department (ED) Arrival to ED Departure for Admitted Patients – median time from ED arrival to time of departure from the ED for patients admitted to the facility from the ED (A lower number is better.)
- HF-2: Evaluation of Left Ventricular Systolic (LVS) Function – heart failure patients with documentation in the hospital record that an evaluation of the LVS function was performed before arrival, during hospitalization, or is planned for after discharge.
- IMM-2: Influenza Vaccination This prevention measure addresses acute care hospitalized inpatients age 6 months and older who were screened for seasonal influenza immunization status and were vaccinated prior to discharge if indicated. The numerator captures two activities: screening and the intervention of vaccine administration when indicated. As a result, patients who had documented contraindications to the vaccine, patients who were offered and declined the vaccine, and patients who received the vaccine during the current

year's influenza season but prior to the current hospitalization are captured as numerator events.

- **OP-1**: Median Time to Fibrinolysis median time from arrival to fibrinolysis for patients that received fibrinolysis. (A lower number is better.)
- **OP-2:** Fibrinolytic therapy received within 30 minutes of arrival Acute Myocardial Infarction (AMI) patients receiving fibrinolytic therapy during the hospital stay and having a time from hospital arrival to fibrinolysis of 30 minutes or less.
- OP-3b: Median Time to Transfer to Another Facility for Acute Coronary Intervention – Median number of minutes before outpatients with heart attack who needed specialized care were transferred to another hospital. (A lower number is better.)
- OP-4: Aspirin at arrival Acute Myocardial Infarction (AMI) patients without aspirin contraindications who received aspirin within 24 hours before or after hospital arrival.
- **OP-5**: Median Time to echocardiogram (ECG) median number of minutes before outpatients with heart attack (or with chest pain that suggests a possible heart attack) got an ECG. (A lower number is better).
- OP-12: Ability to Receive Lab Data Directly to Electronic Health Record (EHR) – the ability for providers with Health Information Technology (HIT) to receive laboratory data directly into their ONC-certified EHR system as discrete searchable data.



- OP-17: Ability to Track Clinical Results between Visits – the ability for a facility to track pending laboratory tests, diagnostic studies, or patient referrals through the ONC-certified Electronic Health Record (EHR) system.
- OP-18b: Median Time from Emergency Department (ED) Arrival to ED Departure for Discharged Patients - median time from ED arrival to time of departure from the ED for patients discharged from the ED (a lower number is better).
- OP-20: Door to Diagnostic Evaluation by Qualified Medical Personnel - median time from Emergency Department (ED) arrival to provider contact for ED patients (a lower number is better).
- OP-21: Median Time to Pain Management for Long Bone Fracture - median time from Emergency Department (ED) arrival to time of initial oral or parenteral pain medication administration for ED patients with a principal diagnosis of long bone fracture (a lower number is better).
- OP-22: Left Without Being Seen percent of patients who leave the Emergency Department (ED) without being evaluated by a physician, advanced practice nurse (APN), or physician's assistant (PA). (A lower number is better.)
- OP-23: Head CT or MRI Scan Results for Acute Ischemic Stroke or Hemorrhagic Stroke Patients who Received Head CT or MRI Scan Interpretation Within 45 Minutes of Emergency Department (ED) Arrival - percentage of acute ischemic stroke or hemorrhagic stroke patients who arrive at the ED within 2 hours of the onset of symptoms who have a head CT or MRI scan performed during the stay and have interpretation of the CT or MRI scan within 45 minutes of arrival.
- OP-25: Use of Safe Surgery Checklist (Outpatient) whether or not a facility used a checklist for outpatient surgical procedures during each of the three critical perioperative periods (prior to administration of anes-thesia, prior to skin incision, and closure of incision / prior to patient leaving the operating room).
- **OP-27/HMM-3**: Health Care Workers Given Influenza Vaccination – Facilities must report vaccination data for three categories of Healthcare Personnel (HCP):

employees on payroll; licensed independent practitioners (who are physicians, advanced practice nurses, and physician assistants affiliated with the hospital and not on payroll); and students, trainees, and volunteers aged 18 or older. Only HCP physically working in the facility for at least one day or more between October 1 and March 31 should be counted. Data on vaccinations received at the facility, vaccinations received outside of the facility, medical contraindications, and declinations are reported for the three categories of HCP.

- OP-29: Appropriate Follow-up Interval for Normal Colonoscopy in Average Risk Patients - Percentage of patients aged 50 to 75 years of age receiving a screening colonoscopy without biopsy or polypectomy who had a recommended follow-up interval of at least 10 years for repeat colonoscopy documented in their colonoscopy repor
- **OP-30:** Colonoscopy Interval for Patients with a History of Adenomatous Polyps Percentage of patients aged 18 years and older receiving a surveillance colonoscopy, with a history of a prior colonic polyp(s) in previous colonoscopy findings, who had a follow-up interval of 3 or more years since their last colonoscopy.
- **PC-01**: Elective Delivery patients with elective vaginal deliveries or elective cesarean sections at greater than or equal to 37 and less than 39 weeks of gestation completed (a lower number is better).
- **PN-6**: Most Appropriate Initial Antibiotics immunocompetent patients with pneumonia who receive an initial antibiotic regimen that is consistent with current guidelines.
- SCIP-Inf-1: Prophylactic Antibiotic Received within One Hour Prior to Surgical Incision – surgical patients who received prophylactic antibiotics within 1 hour prior to surgical incision.
- SCIP-Inf-2: Prophylactic Antibiotic Selection for Surgical Patients – surgical patients who received the recommended antibiotics for their particular type of surgery.
- SCIP-Inf-3: Prophylactic Antibiotics Discontinued Within 24 Hours After Surgery End Time – surgical patients whose prophylactic antibiotics were discontinued within 24 hours after surgery end time.



- SCIP-Card-2: Surgery Patients on a Beta Blocker Prior to Arrival Who Received a Beta Blocker During the Perioperative Period surgery patients who were taking heart drugs called beta blockers before coming to the hospital, who were kept on the beta blockers during the period just before and after their surgery.
- SCIP-VTE-2: Surgery Patients Who Received Appropriate Venous Thromboembolism (VTE) Prophylaxis within 24 Hours Prior to Surgery to 24 Hours After Surgery surgery patients who received appropriate VTE prophylaxis within 24 hours prior to surgical incision time to 24 hours after surgery end time.
- SM-3: Nursing Care Registry participation in a systematic clinical database for nursing-sensitive care
- SM-4: General Surgery Registry participation in a systematic clinical database for general surgery
- SM-5: Use of Safe Surgery Checklist (inpatient) whether or not a facility used a checklist for inpatient surgical procedures during each of the three critical perioperative periods (prior to administration of anes-thesia, prior to skin incision, and closure of incision / prior to patient leaving the operating room).
- STK-1: Venous Thromboembolism (VTE) Prophylaxis - ischemic and hemorrhagic stroke patients who received VTE prophylaxis or have documentation why no VTE prophylaxis was given the day of or the day after hospital admission.
- STK-2: Discharged on Antithrombotic Therapy ischemic stroke patients prescribed antithrombotic therapy at hospital discharge.
- STK-3: Anticoagulation Therapy for Atrial Fibrillation/Flutter - ischemic stroke patients with atrial fibrillation/flutter who are prescribed anticoagulation therapy at hospital discharge.
- STK-4: Thrombolytic Therapy acute ischemic stroke patients who arrive at this hospital within two hours of time last known well and for whom intravenous tissue plasminogen activator (IV tPA) was initiated at this hospital within three hours of time last known well.

- STK-5: Antithrombotic Therapy By End of Hospital Day 2 ischemic stroke patients administered anti-thrombotic therapy by the end of hospital day two.
- STK-6: Discharged on Statin Medication ischemic stroke patients with low-density lipoprotein (LDL) cholesterol levels greater than or equal to 100 mg/dL, or LDL not measured, or who were on a lipid-lowering medication prior to hospital arrival are prescribed statin medication at hospital discharge.
- STK-8: Stroke Education ischemic or hemorrhagic stroke patients or their caregivers who were given educational materials during the hospital stay addressing all of the following: activation of emergency medical system, need for follow-up after discharge, medications prescribed at discharge, risk factors for stroke, and warning signs and symptoms of stroke.
- STK-10: Assessed for Rehabilitation ischemic or hemorrhagic stroke patients who were assessed forrehabilitation services.
- VTE-1: Venous Thromboembolism (VTE) Prophylaxis - the number of patients who received VTE prophylaxis or have documentation why no VTE prophylaxis was given the day of or the day after hospital admission or surgery end date for surgeries that start the day of or the day after hospital admission.
- VTE-2: Intensive Care Unit (ICU) Venous Thromboembolism (VTE) Prophylaxis - number of patients who received VTE prophylaxis or have documentation why no VTE prophylaxis was given the day of or the day after the initial admission (or transfer) to the ICU or surgery end date for surgeries that start the day of or the day after ICU admission (or transfer).
- VTE-3: Venous Thromboembolism (VTE) Patients with Anticoagulation Overlap Therapy - the number of patients diagnosed with confirmed VTE who received an overlap of parenteral (intravenous or subcutaneous) anticoagulation and warfarin therapy. Patients who received less than five days of overlap therapy should be discharged on both medications or have a reason for discontinuation of parenteral therapy. Overlap therapy should be administered for at least five days with an



international normalized ratio (INR) greater than or equal to two prior to discontinuation of the parenteral anticoagulation therapy, discharged on both medications, or have a reason for discontinuation of parenteral therapy.

- VTE-4: Venous Thromboembolism (VTE) Patients Receiving Unfractionated Heparin (UFH) with Dosages/Platelet Count Monitoring by Protocol or Nomogram - the number of patients diagnosed with confirmed VTE who received intravenous (IV) UFH therapy dosages and had their platelet counts monitored using defined parameters such as a nomogram or protocol.
- VTE-5: Venous Thromboembolism (VTE) Warfarin Therapy Discharge Instructions - the number of patients diagnosed with confirmed VTE that are discharged to home, home care, court/law enforcement or home on hospice care on warfarin with written discharge instructions that address all four criteria: compliance issues, dietary advice, follow-up monitoring, and information about the potential for adverse drug reactions/interactions.
- VTE-6: Hospital Acquired Potentially-Preventable Venous Thromboembolism (VTE) - the number of patients diagnosed with confirmed VTE during hospitalization (not present at admission) who did not receive VTE prophylaxis between hospital admission and the day before the VTE diagnostic testing order date (a lower number is better).

For detailed measure specifications:

- Specifications Manual for National Hospital Inpatient Quality Measures <u>http://bit.ly/InpManual</u>, accessed January 2017
- Specifications Manual for National Hospital Outpatient Quality Measures <u>http://bit.ly/OutpManual</u>, accessed January 2017
- Prenatal measure specifications <u>http://bit.ly/Prenatal-Specs</u>, accessed January 2017

For more information on this study, please contact Michelle Casey at mcasey@umn.edu



This study was conducted by the Flex Monitoring Team with funding from the Federal Office of Rural Health Policy (FORHP), Health Resources and Services Administration (HRSA), U.S. Department of Health and Human Services (HHS), under PHS Grant No. U27RH01080. The information, conclusions, and opinions expressed in this document are those of the authors and no endorsement by FORHP, HRSA, or HHS is intended or should be inferred.