# Nebraska Care Coordination Quarterly Report - April 2019



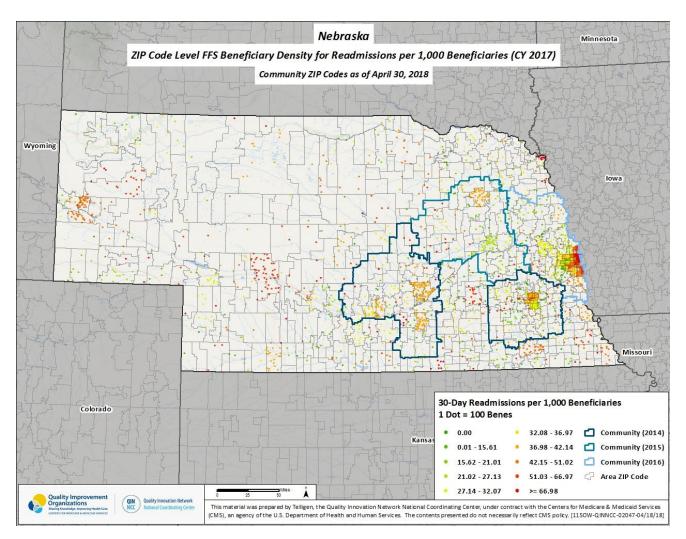


#### **Background**

Communities across the Great Plains Quality Innovation Network (QIN) region are collaborating to improve care coordination and medication safety. The Great Plains QIN is the Quality Innovation Network-Quality Improvement Organization (QIN-QIO) for North Dakota, South Dakota, Nebraska and Kansas. The communities across the Great Plains QIN are diverse; however, the goals of the communities are the same. The goals are to reduce avoidable hospital admissions and readmissions, including those caused by high risk medications (HRM) related to adverse drug events (ADE), improve medication safety and increase the number of nights Medicare beneficiaries stay at home. Great Plains QIN - Nebraska, as a partner in the Great Plains QIN, is sharing data with the communities in Nebraska.

#### **Communities**

Communities are identified based on two factors: 1) where each ZIP code's Medicare beneficiaries received most of their care and 2) where most of a hospitals' Medicare patients reside. The areas where these two factors experienced the most overlap resulted in these communities. The map below displays ZIP code level readmissions per 1,000 FFS beneficiaries for all valid ZIP codes in the state/territory. The map includes an overlay displaying all current care coordination communities.



This material was prepared by the Great Plains Quality Innovation Network, the Medicare Quality Improvement Organization for Kansas, Nebraska, North Dakota and South Dakota, under contract with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services. The contents presented do not necessarily reflect CMS policy. 11SOW-GPQIN-ND-C3-46/0316 (Revised 04/19)

#### **Data Overview and Definitions**

Medicare claims data provided to the Great Plains QIN by the National Coordinating Center (NCC) was used to calculate the measures contained in this report. Readmissions are defined as "all-cause" readmissions to any hospital within 30 days of discharge. We refer to the initial hospital admission as the "index discharge" and the second return admission as the "readmission." None of the measures are risk adjusted.

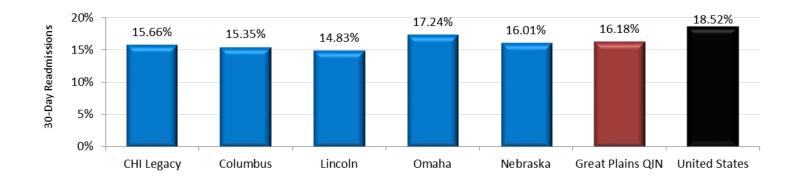
Community-level measures included are:

- 30-day Hospital Readmission Rate and Trends: The percentage of hospital readmissions within 30 days of discharge
- Acute Care Utilization Rate: Hospital Admissions, 30-Day Hospital Readmissions, Emergency Department (ED)
   Visits (without admission), and Observation Stays per 1000 Medicare FFS Beneficiaries
- **Composite Measure of Unplanned Care:** All Admissions, ED Visits, and Observation Stays per 1000 Medicare FFS Beneficiaries; Includes separate graphs for each acute care setting.
- Hospital Discharge Rate per Location: Home (Community), Home Health, Hospice, and Skilled Nursing Facility
- 30-Day Hospital Readmission Rate per Discharge Location: As Above
- Top Five DRG Bundles for Admissions
- Top Five DRG Bundles for 30-Day Readmissions
- Potential Opportunity for Improving End-of-Life Care: Hospital care utilization of Beneficiaries at End-of-Life
- Admissions by Drug Class: Hospital Admissions per 1000 Medicare FFS High Risk Beneficiaries; beneficiaries
  were identified as high risk if they take three of more medications of which at least one is from the three drug
  classes of Anticoagulants, Diabetic Agents, and Opioids
- **Readmissions by Drug Class:** 30-Day Hospital Readmissions per 1000 Medicare FFS High Risk Beneficiaries; beneficiaries were identified as high risk if they take three or more medications of which at least one is from the three drug classes of Anticoagulants, Diabetic Agents, and Opioids
- Composite Measure of Unplanned Care by Drug Class: All Admissions, ED Visits, and Observation Stays per 1000 Medicare FFS High Risk Medication Beneficiaries; Includes separate graphs for each acute care setting.
- Timing of Readmission after Potential ADE Discharge

The measures included in the Care Coordination Quarterly Report may vary from issue to issue depending on data availability and the needs of community partners.

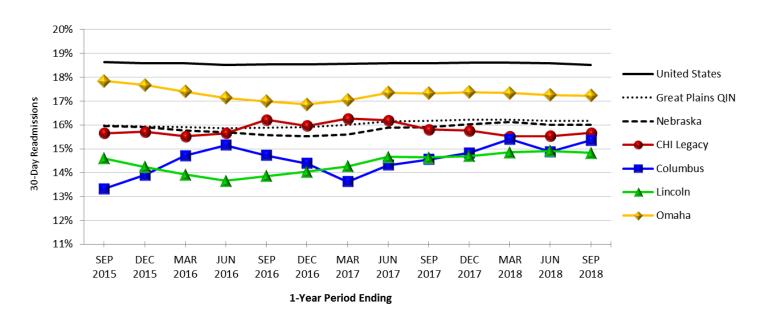
#### **Community Data Highlights**

Current Readmission Rates (# of readmissions within 30 days / # of discharges): 10/01/2017 - 09/30/2018



Community Discharge		30-Day Readmissions	30-Day Readmission Rates
CHI Legacy	6,827	1,069	15.66%
Columbus	4,547	698	15.35%
Lincoln	11,860	1,759	14.83%
Omaha	24,170	4,166	17.24%
Nebraska	69,787	11,176	16.01%
Great Plains QIN	240,690	38,947	16.18%
United States	9,694,493	1,794,983	18.52%

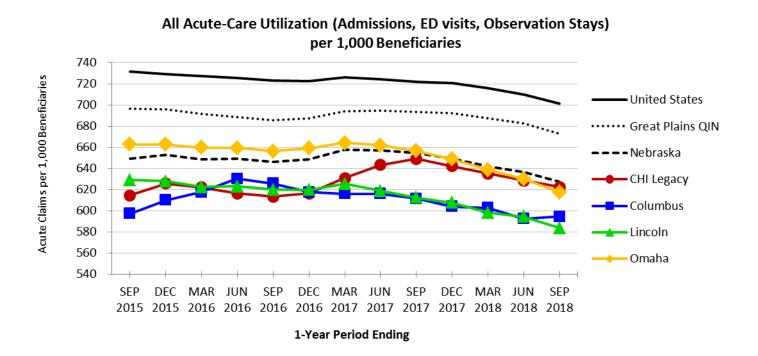
#### **Readmission Rate Trends:**



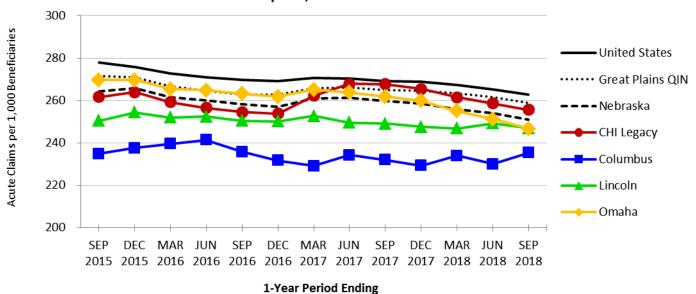
#### Acute Care Utilization (per 1,000 Beneficiaries): 10/01/2017 - 09/30/2018

Community	Benes	Adms	Adms per 1000 Benes	30-Day Readms	30-Day Readms per 1000 Benes	ED Visits	ED Visits per 1000 Benes	Obs Stays	Obs Stays per 1000 Benes
CHI Legacy	27,607	7,082	256.53	1,069	38.72	8,702	315.21	1,445	52.34
Columbus	19,932	4,696	235.60	698	35.02	5,934	297.71	1,231	61.76
Lincoln	49,630	12,282	247.47	1,759	35.44	14,542	293.01	2,198	44.29
Omaha	101,207	24,910	246.13	4,166	41.16	32,028	316.46	4,907	48.48
Nebraska	287,375	72,186	251.19	11,176	38.89	92,113	320.53	15,715	54.68
Great Plains QIN	957,361	248,351	259.41	38,947	40.68	345,721	361.12	51,255	53.54
United States	38,095,369	10,004,195	262.61	1,794,983	47.12	14,635,153	384.17	2,075,218	54.47

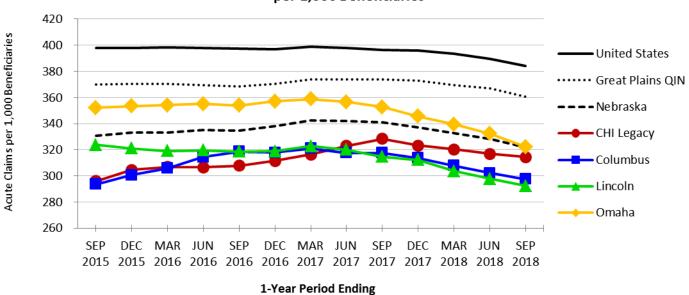
**Composite Measure of Unplanned Care:** Counts all the Admissions, ED visits and Observation stays per 1,000 beneficiaries.



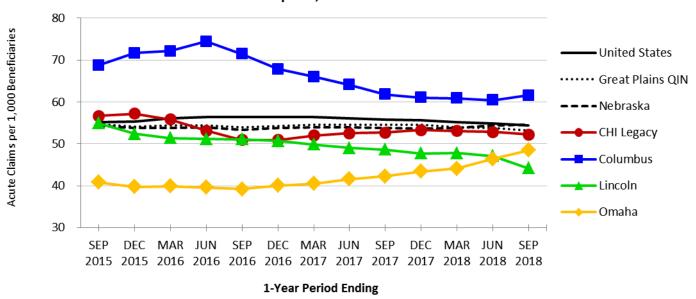
# Admission Utilization per 1,000 Beneficiaries



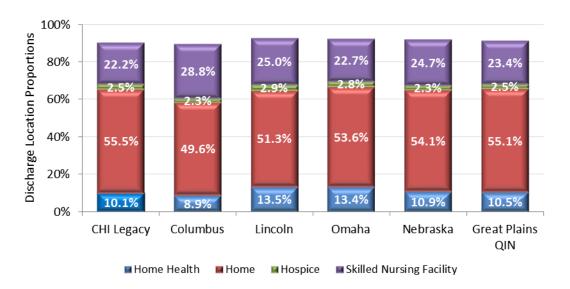
# Emergency Department Utilization per 1,000 Beneficiaries



# Observation Utilization per 1,000 Beneficiaries

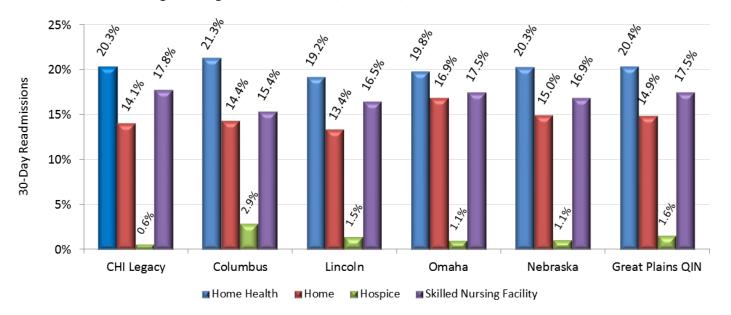


**Discharge Locations**: 10/01/2017 - 09/30/2018

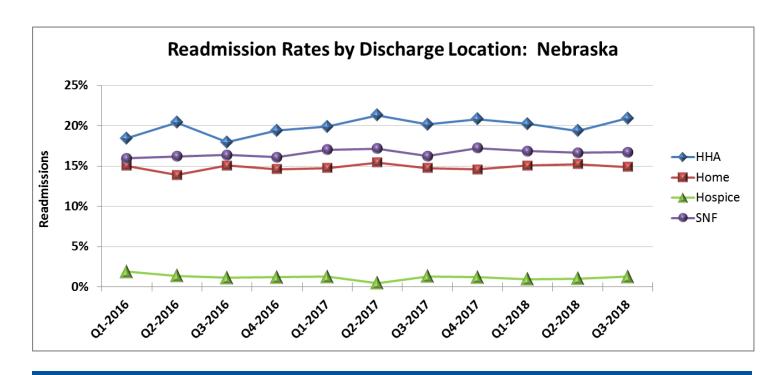


	Discharges									
		Home	Health	Home		Hospice		<b>Skilled Nursing Facility</b>		
Community	All	# to Home Health	% to Home Health	# to Home	% to Home	# to Hospice	% to Hospice	# to SNF	% to SNF	
CHI Legacy	6,827	688	10.1%	3,790	55.5%	168	2.5%	1,515	22.2%	
Columbus	4,547	403	8.9%	2,255	49.6%	104	2.3%	1,311	28.8%	
Lincoln	11,860	1,602	13.5%	6,085	51.3%	341	2.9%	2,970	25.0%	
Omaha	24,170	3,227	13.4%	12,946	53.6%	665	2.8%	5,480	22.7%	
Nebraska	69,787	7,629	10.9%	37,756	54.1%	1,606	2.3%	17,212	24.7%	
Great Plains QIN	240,690	25,211	10.5%	132,697	55.1%	6,001	2.5%	56,350	23.4%	

#### Readmission Rates among Discharge Locations: 10/01/2017 - 09/30/2018



	Home Health			Home		Hospice			Skilled Nursing Facility			
Community	Disch	30-Day Readm	30-Day Readm Rates	Disch	30-Day Readm	30-Day Readm Rates	Disch	30-Day Readm	30-Day Readm Rates	Disch	30-Day Readm	30-Day Readm Rates
CHI Legacy	688	140	20.3%	3,790	533	14.1%	168	1	0.6%	1,515	270	17.8%
Columbus	403	86	21.3%	2,255	324	14.4%	104	3	2.9%	1,311	202	15.4%
Lincoln	1,602	308	19.2%	6,085	814	13.4%	341	5	1.5%	2,970	490	16.5%
Omaha	3,227	640	19.8%	12,946	2,190	16.9%	665	7	1.1%	5,480	959	17.5%
Nebraska	7,629	1,551	20.3%	37,756	5,646	15.0%	1,606	18	1.1%	17,212	2,905	16.9%
Great Plains QIN	25,211	5,148	20.4%	132,697	19,795	14.9%	6,001	96	1.6%	56,350	9,866	17.5%



#### **Top 5 Admission DRG Bundles:** 10/01/2017 – 09/30/2018

DRGs that differ only in their level of complications are combined into "DRG Bundles". For example, DRGs 637, 638, and 639 (Diabetes with major complications, with complications, and without complications) are combined into one DRG bundle called Diabetes.

Community	DRG Bundle Description	DRG Bundle Admissions	Community Admissions	Percent of Community Admissions
	SEPTICEMIA OR SEVERE SEPSIS	624	7,082	8.81%
GILL	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	582	7,082	8.22%
CHI Legacy	HEART FAILURE & SHOCK	367	7,082	5.18%
	SIMPLE PNEUMONIA & PLEURISY	273	7,082	3.85%
	PSYCHOSES	265	7,082	3.74%
	SEPTICEMIA OR SEVERE SEPSIS	416	4,696	8.86%
Calamakan	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	383	4,696	8.16%
Columbus	HEART FAILURE & SHOCK	235	4,696	5.00%
	SIMPLE PNEUMONIA & PLEURISY	193	4,696	4.11%
	CHRONIC OBSTRUCTIVE PULMONARY DISEASE	136	4,696	2.90%
	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	940	12,282	7.65%
	SEPTICEMIA OR SEVERE SEPSIS	909	12,282	7.40%
Lincoln	SIMPLE PNEUMONIA & PLEURISY	Admissions   Adm		
Lincom	HEART FAILURE & SHOCK	466	12,282	3.79%
	PSYCHOSES	TREPLACEMENT OR REATTACHMENT OF REMITY  JRE & SHOCK  UMONIA & PLEURISY  265  OR SEVERE SEPSIS  TREPLACEMENT OR REATTACHMENT OF REMITY  JRE & SHOCK  UMONIA & PLEURISY  JRE & SHOCK  OR SEVERE SEPSIS  TREPLACEMENT OR REATTACHMENT OF REMITY  OR SEVERE SEPSIS  UMONIA & PLEURISY  JRE & SHOCK  466  OR SEVERE SEPSIS  TREPLACEMENT OR REATTACHMENT OF REMITY  JRE & SHOCK  430  OR SEVERE SEPSIS  TREPLACEMENT OR REATTACHMENT OF REMITY  1,086  JRE & SHOCK  UMONIA & PLEURISY  TREPLACEMENT OR REATTACHMENT OF REMITY  OR SEVERE SEPSIS  TREPLACEMENT OR REATTACHMENT OF REMITY  OR SEVERE SEPSIS  TREPLACEMENT OR REATTACHMENT OF REMITY  OR SEVERE SEPSIS  UMONIA & PLEURISY  JRE & SHOCK  3,087  OR SEVERE SEPSIS  OR SEVERE SEPSIS  TREPLACEMENT OR REATTACHMENT OF REMITY  JRE & SHOCK  3,087  TREPLACEMENT OR REATTACHMENT OF REMITY  TREPLACEMENT OR REATTACHMENT OF REMITY  JRE & SHOCK  3,087  TREPLACEMENT OR REATTACHMENT OF REMITY  TREPLACEMENT OR REATTACHMENT OF REMITY  JRE & SHOCK  17,679  REMITY  UMONIA & PLEURISY  11,7679	12,282	3.50%
	SEPTICEMIA OR SEVERE SEPSIS	2,332		
	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	1,915	24,910	7.69%
Omaha	PSYCHOSES	1,086	24,910	4.36%
	HEART FAILURE & SHOCK			
	SIMPLE PNEUMONIA & PLEURISY			
	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	5,596		
	SEPTICEMIA OR SEVERE SEPSIS	5,551	72,186	7.69%
Nebraska	SIMPLE PNEUMONIA & PLEURISY		-	t
	HEART FAILURE & SHOCK			
	CHRONIC OBSTRUCTIVE PULMONARY DISEASE  MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY  SEPTICEMIA OR SEVERE SEPSIS  SIMPLE PNEUMONIA & PLEURISY  HEART FAILURE & SHOCK  PSYCHOSES  MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY  PSYCHOSES  HEART FAILURE & SHOCK  SIMPLE PNEUMONIA & PLEURISY  MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY  PSYCHOSES  HEART FAILURE & SHOCK  SIMPLE PNEUMONIA & PLEURISY  SEPTICEMIA OR SEVERE SEPSIS  SIMPLE PNEUMONIA & PLEURISY  SEPTICEMIA OR SEVERE SEPSIS  SIMPLE PNEUMONIA & PLEURISY  SEPTICEMIA OR SEVERE SEPSIS  SIMPLE PNEUMONIA & PLEURISY  HEART FAILURE & SHOCK  PSYCHOSES  2,23	2,236		3.10%
Great Plains	SEPTICEMIA OR SEVERE SEPSIS			8.18%
	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY			7.12%
QIN	SIMPLE PNEUMONIA & PLEURISY	11,721	248,351	4.72%
	HEART FAILURE & SHOCK			4.46%
	PSYCHOSES			2.89%

**Top 5 Readmission DRG Bundles:** 10/01/2017 – 09/30/2018

Community	DRG Bundle Description	DRG Bundle 30-Day Readmissions	Community 30-Day Readmissions	Percent of Community 30-Day Readmissions
	SEPTICEMIA OR SEVERE SEPSIS	83	1,069	7.76%
	PSYCHOSES	77	1,069	7.20%
CHI Legacy	HEART FAILURE & SHOCK	68	1,069	6.36%
	SIMPLE PNEUMONIA & PLEURISY	38	1,069	3.55%
	CHRONIC OBSTRUCTIVE PULMONARY DISEASE	30	1,069	2.81%
	SEPTICEMIA OR SEVERE SEPSIS	57	698	8.17%
	HEART FAILURE & SHOCK	39	698	5.59%
Columbus	SIMPLE PNEUMONIA & PLEURISY	29	698	4.15%
	RENAL FAILURE	25	698	3.58%
	ACUTE MYOCARDIAL INFARCTION	22	698	3.15%
	SEPTICEMIA OR SEVERE SEPSIS	144	1,759	8.19%
	PSYCHOSES	95	1,759	5.40%
Lincoln	HEART FAILURE & SHOCK	78	1,759	4.43%
	SIMPLE PNEUMONIA & PLEURISY	73	1,759	4.15%
	G.I. HEMORRHAGE	57	1,759	3.24%
	SEPTICEMIA OR SEVERE SEPSIS	374	4,166	8.98%
	PSYCHOSES	332	4,166	7.97%
Omaha	HEART FAILURE & SHOCK	252	4,166	6.05%
	RENAL FAILURE	141	4,166	3.38%
	SIMPLE PNEUMONIA & PLEURISY	132	4,166	3.17%
	SEPTICEMIA OR SEVERE SEPSIS	868	11,176	7.77%
	HEART FAILURE & SHOCK	633	11,176	5.66%
Nebraska	PSYCHOSES	572	11,176	5.12%
	SIMPLE PNEUMONIA & PLEURISY	465	11,176	4.16%
	CHRONIC OBSTRUCTIVE PULMONARY DISEASE	345	11,176	3.09%
	SEPTICEMIA OR SEVERE SEPSIS	3,226	38,947	8.28%
Great Plains	HEART FAILURE & SHOCK	2,433	38,947	6.25%
QIN	SIMPLE PNEUMONIA & PLEURISY	1,665	38,947	4.28%
QIN	PSYCHOSES	1,594	38,947	4.09%
	CHRONIC OBSTRUCTIVE PULMONARY DISEASE	1,170	38,947	3.00%

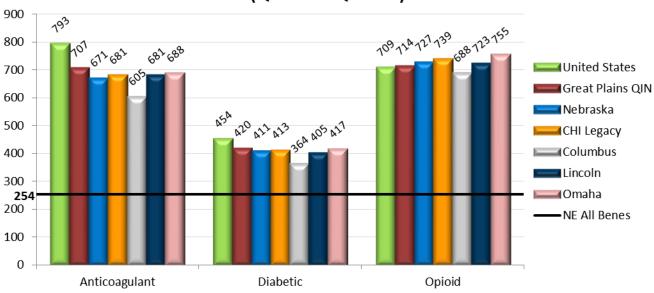
#### **Potential Opportunity for Improving End-of-Life Care:** 10/01/2017 – 09/30/2018

This is a proxy measure to identify opportunities for discussing an individual's preferences for end-of-life care, including where he or she would like to receive that care.

		# of Deceased Benes	% of Deceased Benes	# of Deceased	% of Deceased	
Community	Deceased	With at Least One 30-	With at Least One 30-	Benes Who Died	Benes Who Died	
Community	Bene Total	Day Readmission in Last	Day Readmission in Last	While Hospital	While Hospital	
		Six Months of Life	Six Months of Life	Inpatient	Inpatient	
CHI Legacy	1,262	159	12.60%	231	18.30%	
Columbus	976	112	11.48%	129	13.22%	
Lincoln	2,319	277	11.94%	392	16.90%	
Omaha	5,196	572	11.01%	684	13.16%	
Nebraska	14,062	1,701	12.10%	2,166	15.40%	
Great Plains QIN	48,036	5,708	11.88%	6,809	14.17%	

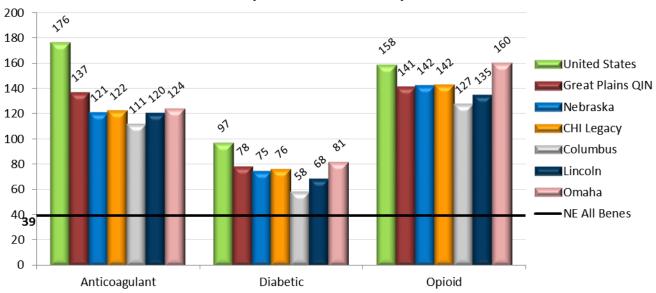
Admissions by High Risk Drug Class: Counts the admissions per 1,000 FFS high risk medication (HRM) beneficiaries by anticoagulant, diabetic agent, and opioid drug classes and compares to overall admission rates for all Medicare FFS beneficiaries (including those with and without HRMs).





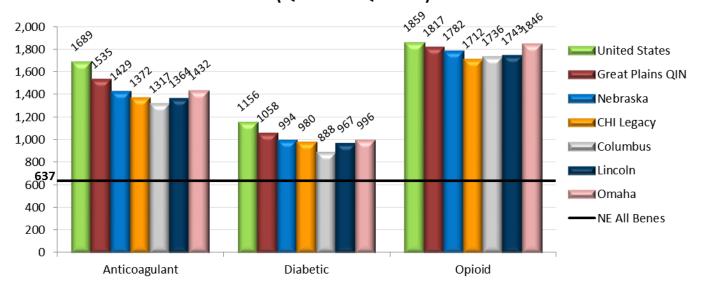
**Readmissions by High Risk Drug Class:** Counts the 30-day readmissions per 1,000 FFS high risk medication (HRM) beneficiaries by anticoagulant, diabetic agent, and opioid drug classes and compares to overall 30-day readmission rates for all Medicare FFS beneficiaries (including those with and without HRMs).

# Readmissions per 1,000 HRM Beneficiaries by Drug Class (Q3 2017 - Q2 2018)

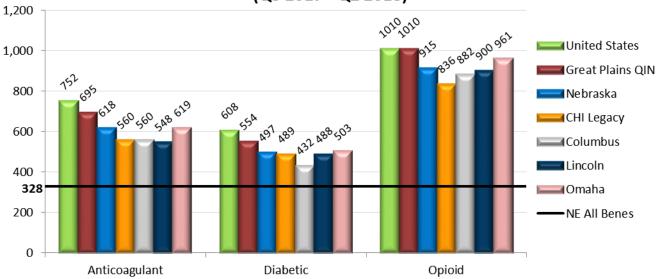


**Composite Measure of Unplanned Care by Drug Class:** Counts all the Admissions, ED visits and Observation stays per 1,000 HRM beneficiaries by anticoagulant, diabetic agent, and opioid drug classes and compares to overall rates for all Medicare FFS beneficiaries (including those with and without HRMs).

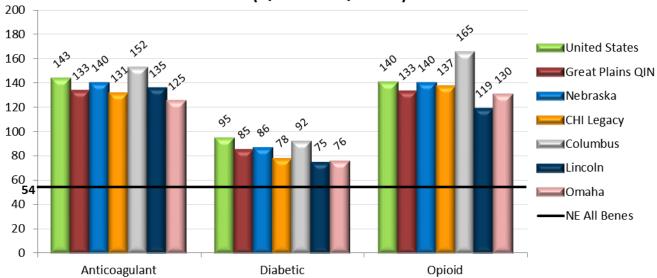
# All Acute-Care Utilization (Admissions, ED Visits, Observation Stays) per 1,000 HRM Beneficiaries by Drug Class (Q3 2017 - Q2 2018)



### Emergency Department Utilization per 1,000 HRM Beneficiaries by Drug Class (Q3 2017 - Q2 2018)

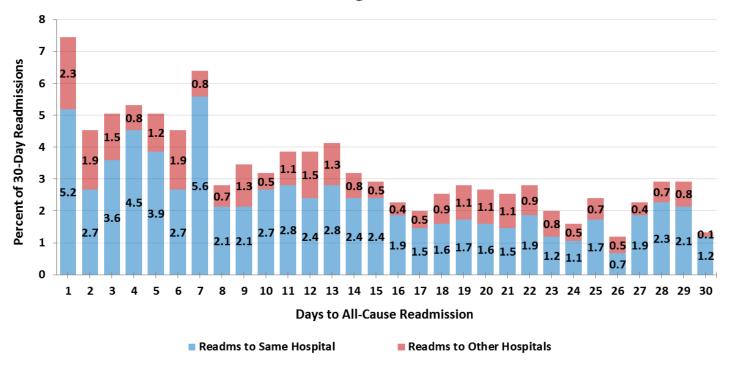


### Observation Utilization per 1,000 HRM Beneficiaries by Drug Class (Q3 2017 - Q2 2018)

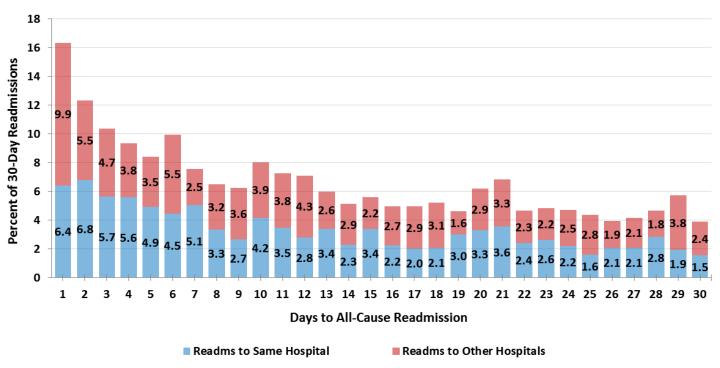


How many days after being discharged with a potential ADE were Medicare Beneficiaries readmitted: 10/01/2017 - 09/30/2018

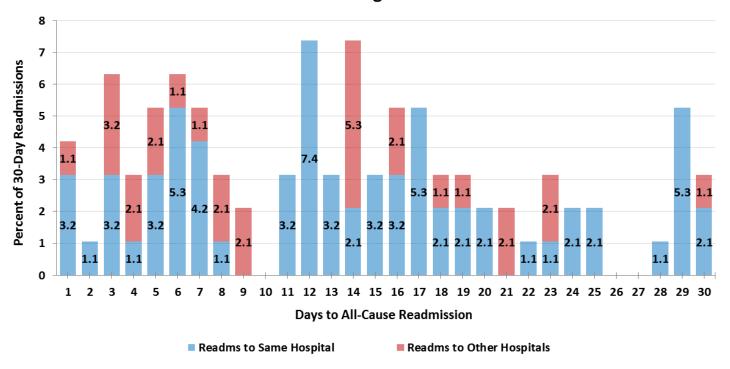
**Nebraska - Anticoagulant Potential ADEs** 



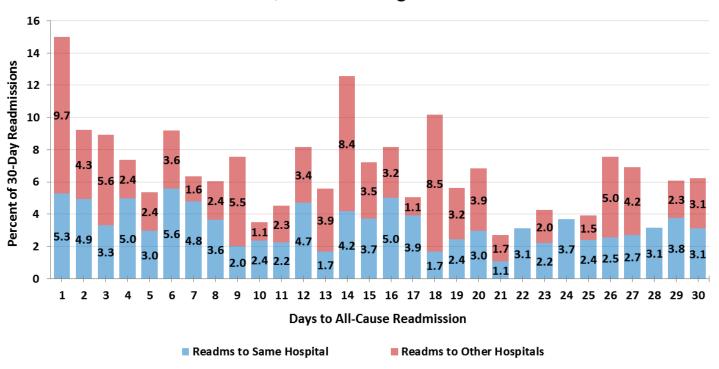
### **Great Plains QIN - Anticoagulant Potential ADEs**



## **Nebraska - Diabetic Agent Potential ADEs**

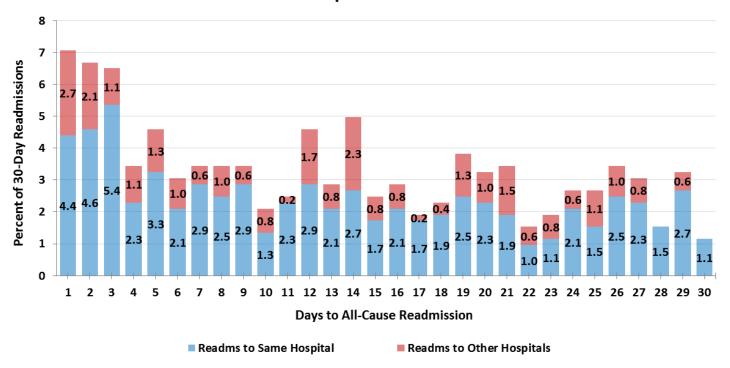


### **Great Plains QIN - Diabetic Agent Potential ADEs**

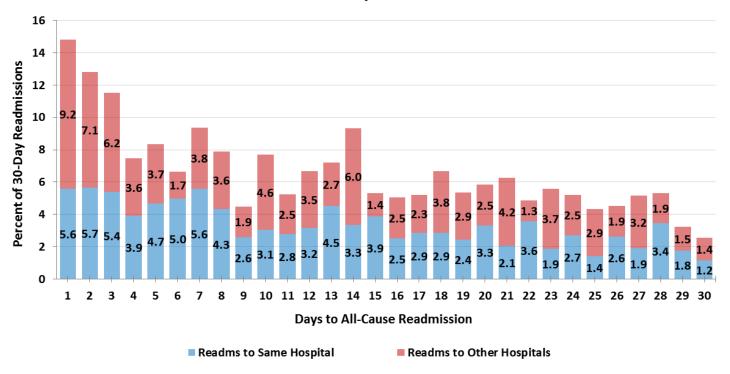


Quarterly Report – April 2019 Page 15 of 16

#### **Nebraska - Opioid Potential ADEs**



### **Great Plains QIN - Opioid Potential ADEs**



For any questions on this report, please contact Paula Sitzman RN, BSN, paula.sitzman@area-a.hcqis.org.

Quarterly Report – April 2019 Page 16 of 16