

# North Dakota Care Coordination Quarterly Report - April 2017

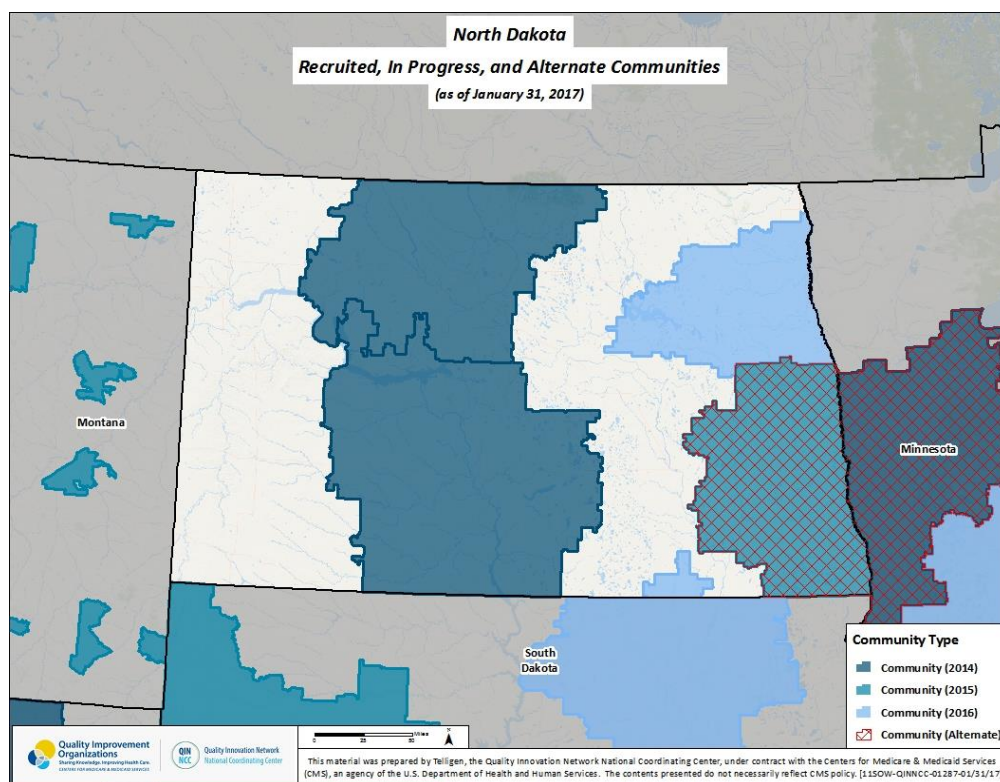


## Background

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. Quality Health Associates of North Dakota (QHA), as a partner in the Great Plains QIN, is sharing data with the communities in North Dakota.

## 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.



## 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.

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 04/17)

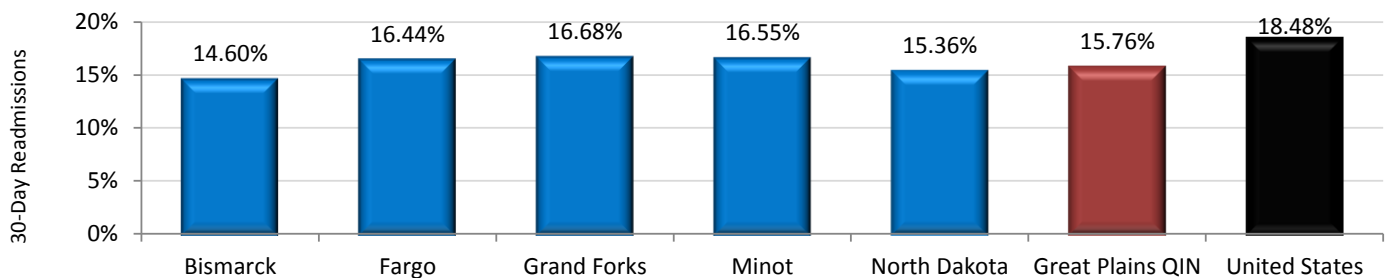
Community-level measures included are:

- **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
- **Admissions by Drug Class:** Hospital Admissions 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
- **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
- **Top Five DRG Bundles for Admissions**
- **Top Five DRG Bundles for 30-Day Readmissions**

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.

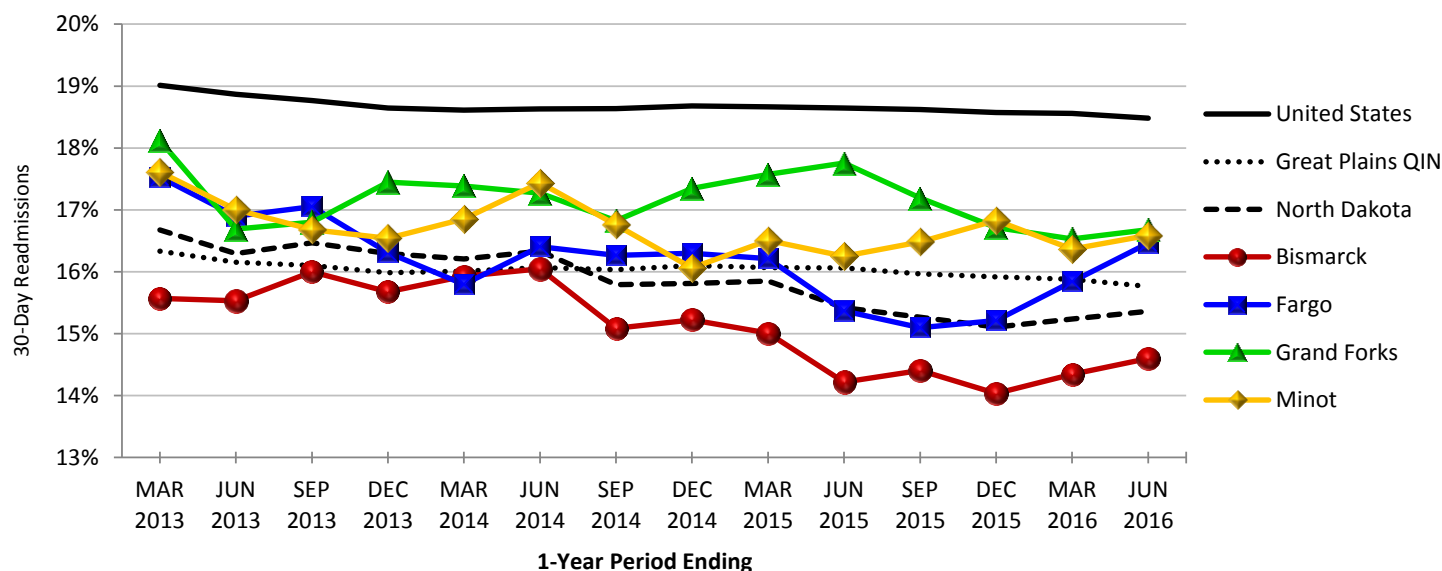
## Community Data Highlights

**Current Readmission Rates (# of readmissions within 30 days / # of discharges): 07/01/2015 – 06/30/2016**



Community	Discharges	30-Day Readmissions	30-Day Readmission Rates
Bismarck	4,946	722	14.60%
Fargo	5,968	981	16.44%
Grand Forks	3,633	606	16.68%
Minot	2,942	487	16.55%
North Dakota	22,800	3,503	15.36%
Great Plains QIN	235,112	37,060	15.76%
United States	9,898,069	1,829,194	18.48%

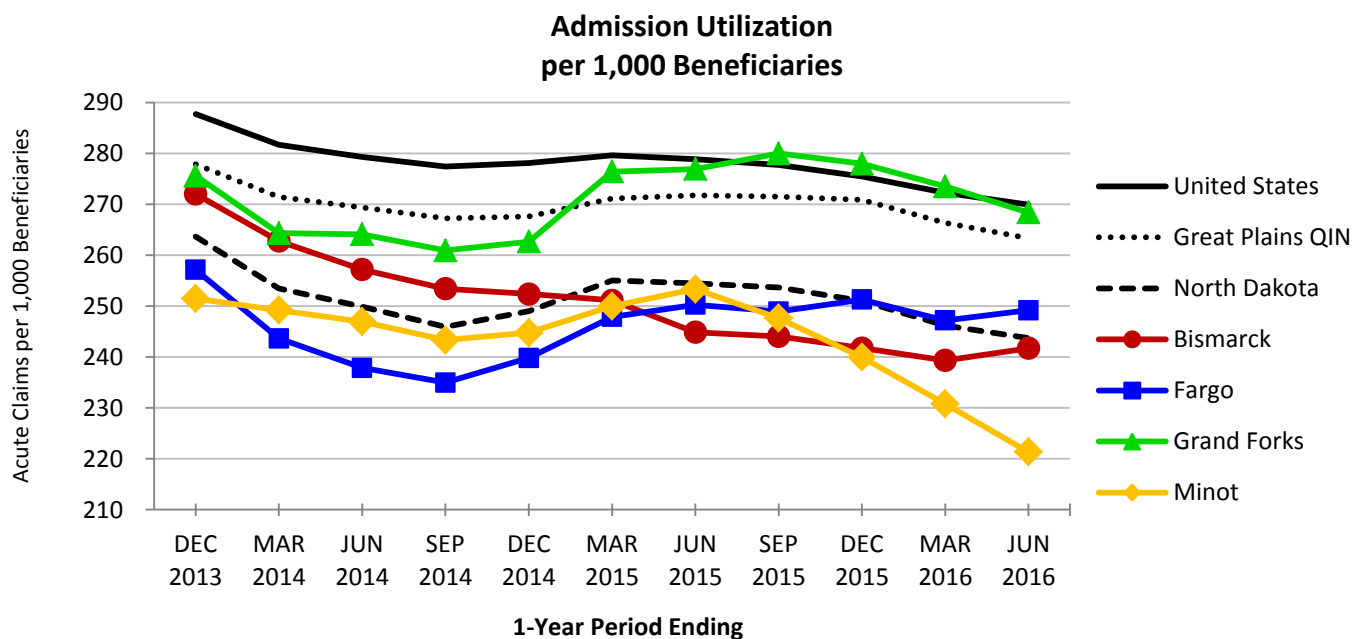
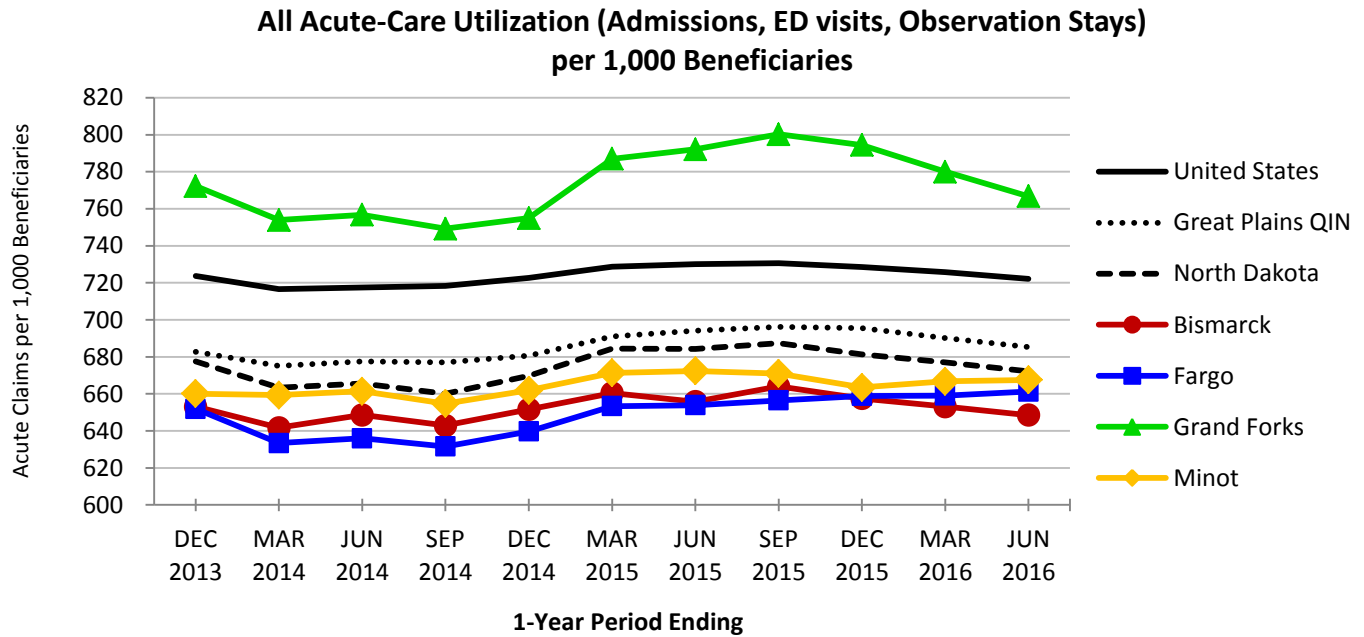
## Readmission Rate Trends:



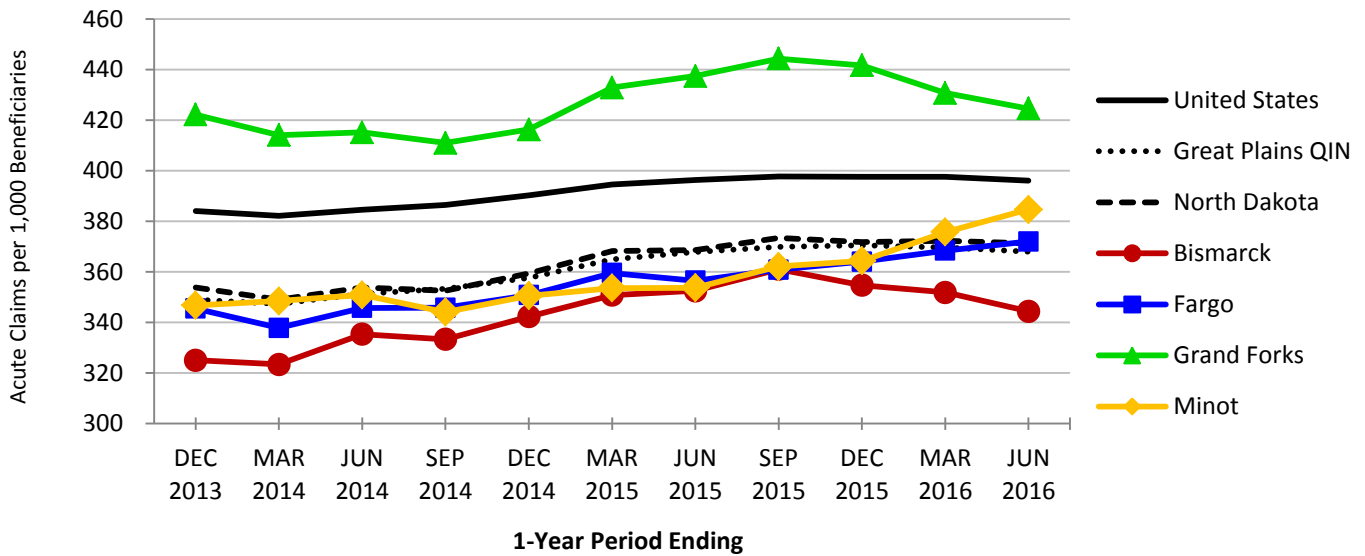
## Acute Care Utilization (per 1,000 Beneficiaries): 07/01/2015 – 06/30/2016

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
Bismarck	21,298	5,162	242.37	722	33.90	7,355	345.34	1,333	62.59
Fargo	24,936	6,228	249.76	981	39.34	9,298	372.87	1,002	40.18
Grand Forks	14,061	3,784	269.11	606	43.10	5,986	425.72	1,041	74.03
Minot	13,944	3,095	221.96	487	34.93	5,376	385.54	861	61.75
North Dakota	97,406	23,801	244.35	3,503	35.96	36,259	372.25	5,577	57.26
Great Plains QIN	922,576	242,859	263.24	37,060	40.17	339,387	367.87	49,719	53.89
United States	37,758,082	10,220,823	270.69	1,829,194	48.45	14,996,099	397.16	2,124,467	56.27

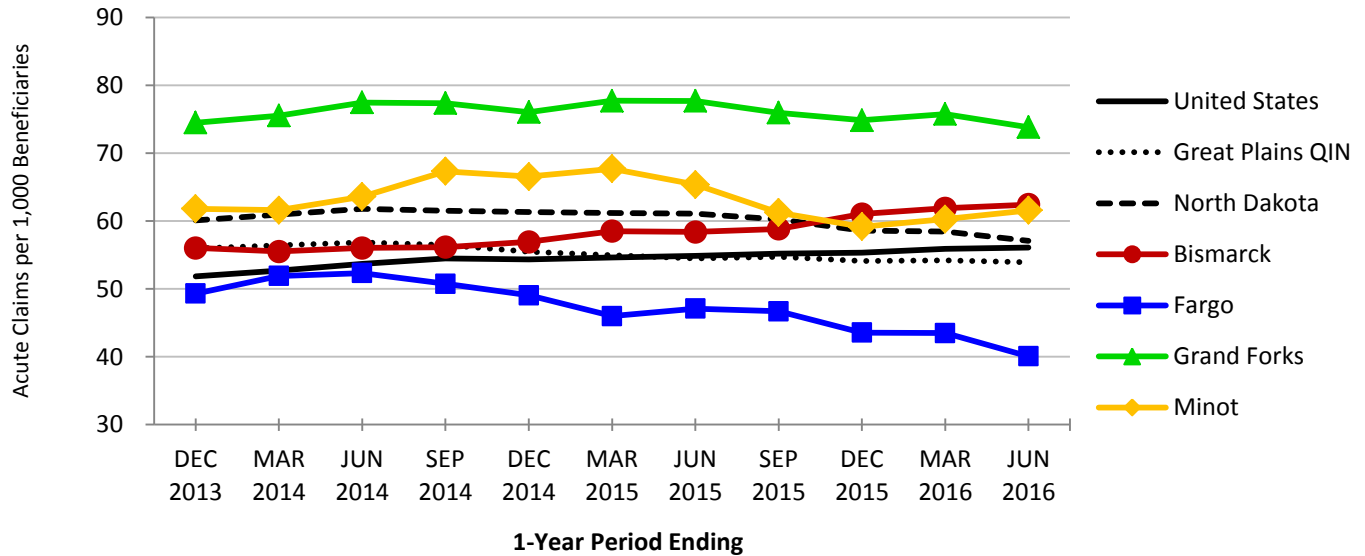
**Composite Measure of Unplanned Care:** *Counts all the Admissions, ED visits and Observation stays per 1,000 beneficiaries.*



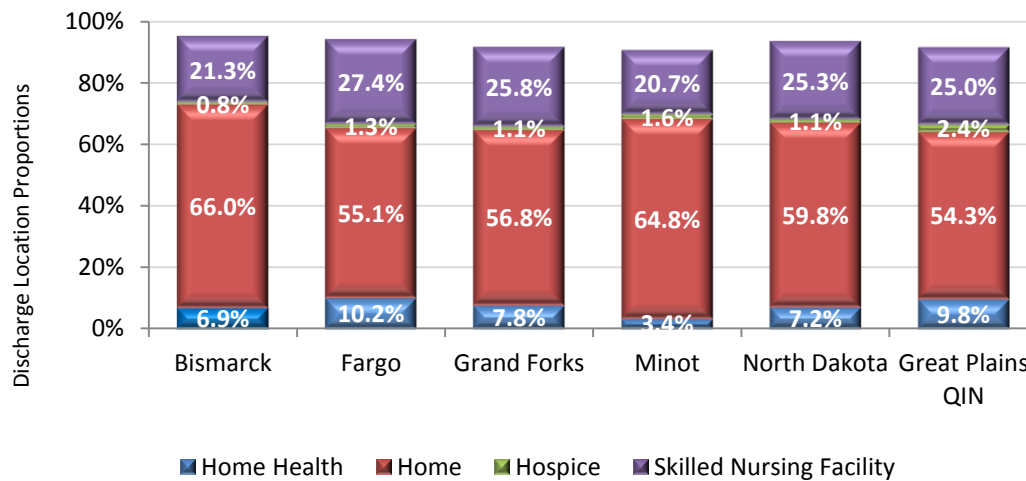
### Emergency Department Utilization per 1,000 Beneficiaries



### Observation Utilization per 1,000 Beneficiaries

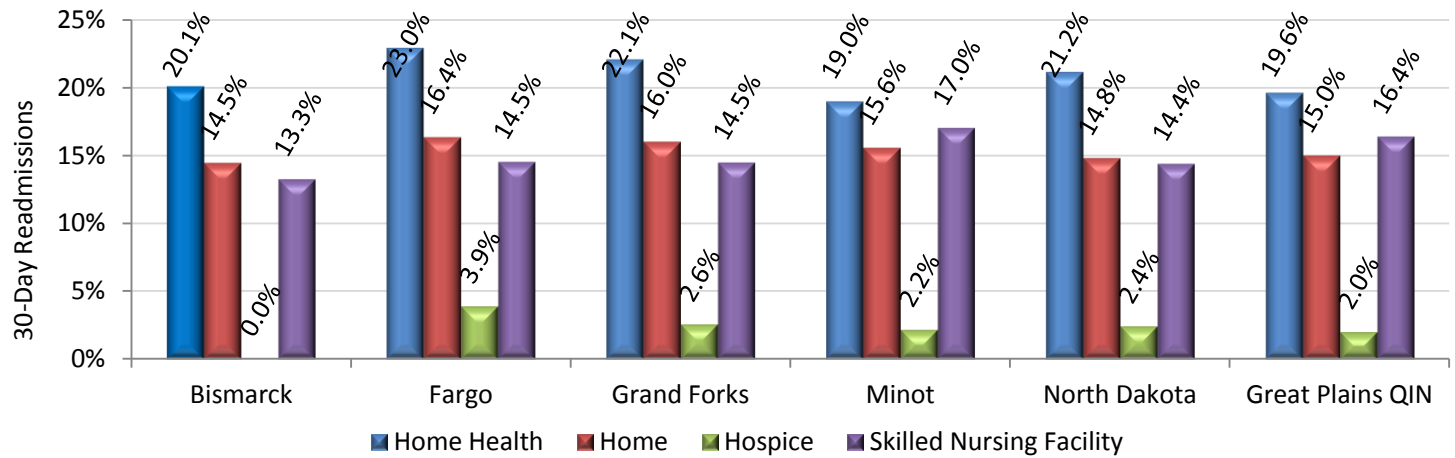


**Discharge Locations: 07/01/2015 – 06/30/2016**



Community	Discharges								
	All	Home Health		Home		Hospice		Skilled Nursing Facility	
		# to Home Health	% to Home Health	# to Home	% to Home	# to Hospice	% to Hospice	# to SNF	% to SNF
Bismarck	4,946	343	6.9%	3,264	66.0%	40	0.8%	1,055	21.3%
Fargo	5,968	610	10.2%	3,287	55.1%	77	1.3%	1,637	27.4%
Grand Forks	3,633	285	7.8%	2,065	56.8%	39	1.1%	938	25.8%
Minot	2,942	100	3.4%	1,907	64.8%	46	1.6%	610	20.7%
North Dakota	22,800	1,634	7.2%	13,645	59.8%	247	1.1%	5,768	25.3%
Great Plains QIN	235,112	22,976	9.8%	127,568	54.3%	5,730	2.4%	58,805	25.0%

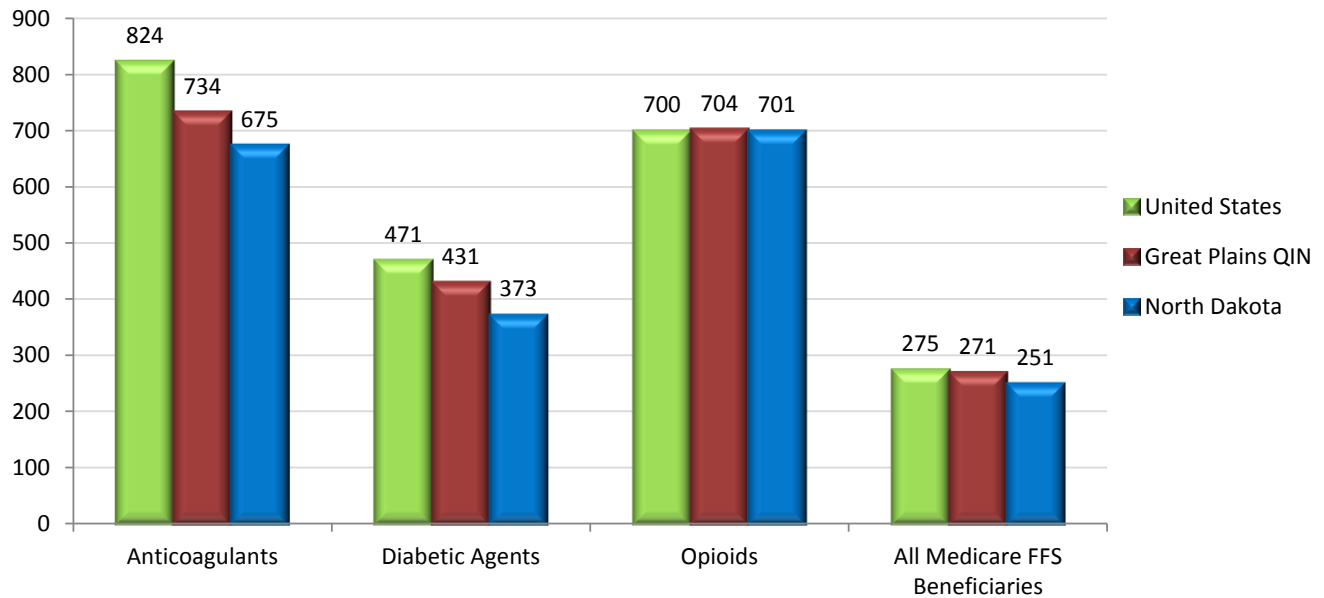
## Readmission Rates among Discharge Locations: 07/01/2015 – 06/30/2016



Community	Home Health			Home			Hospice			Skilled Nursing Facility		
	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
Bismarck	343	69	20.1%	3,264	472	14.5%	40	0	0.0%	1,055	140	13.3%
Fargo	610	140	23.0%	3,287	538	16.4%	77	3	3.9%	1,637	238	14.5%
Grand Forks	285	63	22.1%	2,065	331	16.0%	39	1	2.6%	938	136	14.5%
Minot	100	19	19.0%	1,907	297	15.6%	46	1	2.2%	610	104	17.0%
North Dakota	1,634	346	21.2%	13,645	2,022	14.8%	247	6	2.4%	5,768	831	14.4%
Great Plains QIN	22,976	4,511	19.6%	127,568	19,149	15.0%	5,730	115	2.0%	58,805	9,647	16.4%

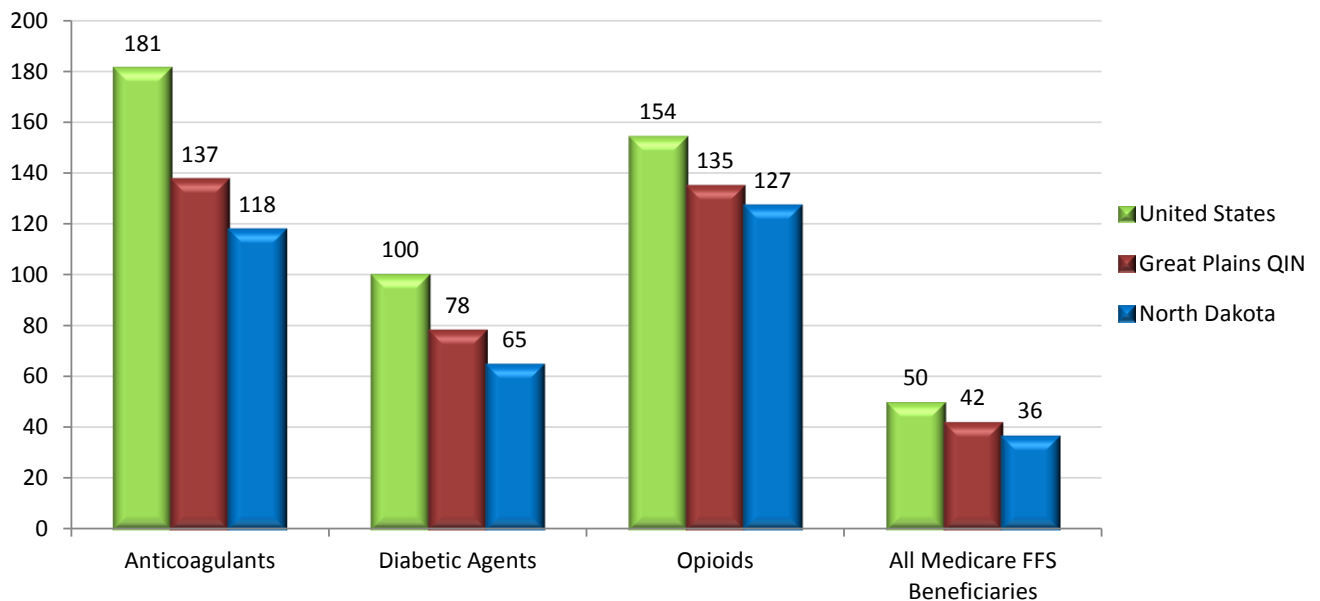
**Admissions by High Risk Drug Class:** Counts the admissions per 1,000 FFS high risk medication (HRM) beneficiaries by anticoagulant, diabetic agent, and opioid drug classes and compares to overall admission rates for all Medicare FFS beneficiaries (including those with and without HRMs).

**Admissions per 1,000 HRM Beneficiaries by Drug Class  
(CY 2015)**



**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  
(CY 2015)**



**Top 5 Admission DRG Bundles: 07/01/2015 – 06/30/2016**

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
Bismarck	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	388	5,162	7.52%
	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96+ HOURS	345	5,162	6.68%
	HEART FAILURE & SHOCK	274	5,162	5.31%
	SIMPLE PNEUMONIA & PLEURISY	247	5,162	4.78%
	INTRACRANIAL HEMORRHAGE OR CEREBRAL INFARCTION	139	5,162	2.69%
Fargo	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	511	6,228	8.20%
	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96+ HOURS	305	6,228	4.90%
	HEART FAILURE & SHOCK	268	6,228	4.30%
	SIMPLE PNEUMONIA & PLEURISY	234	6,228	3.76%
	PSYCHOSES	207	6,228	3.32%
Grand Forks	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	285	3,784	7.53%
	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96+ HOURS	283	3,784	7.48%
	SIMPLE PNEUMONIA & PLEURISY	205	3,784	5.42%
	HEART FAILURE & SHOCK	195	3,784	5.15%
	CHRONIC OBSTRUCTIVE PULMONARY DISEASE	103	3,784	2.72%
Minot	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	242	3,095	7.82%
	SIMPLE PNEUMONIA & PLEURISY	217	3,095	7.01%
	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96+ HOURS	144	3,095	4.65%
	CHRONIC OBSTRUCTIVE PULMONARY DISEASE	112	3,095	3.62%
	HEART FAILURE & SHOCK	111	3,095	3.59%
North Dakota	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	1,869	23,801	7.85%
	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96+ HOURS	1,317	23,801	5.53%
	SIMPLE PNEUMONIA & PLEURISY	1,250	23,801	5.25%
	HEART FAILURE & SHOCK	1,148	23,801	4.82%
	CHRONIC OBSTRUCTIVE PULMONARY DISEASE	647	23,801	2.72%
Great Plains QIN	MAJOR JOINT REPLACEMENT OR REATTACHMENT OF LOWER EXTREMITY	17,664	242,859	7.27%
	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96+ HOURS	16,079	242,859	6.62%
	SIMPLE PNEUMONIA & PLEURISY	10,986	242,859	4.52%
	HEART FAILURE & SHOCK	9,973	242,859	4.11%
	PSYCHOSES	7,349	242,859	3.03%

**Top 5 Readmission DRG Bundles: 07/01/2015 – 06/30/2016**

Community	DRG Bundle Description	DRG Bundle 30-Day Readmissions	Community 30-Day Readmissions	Percent of Community 30-Day Readmissions
Bismarck	HEART FAILURE & SHOCK	56	722	7.76%
	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96+ HOURS	40	722	5.54%
	SIMPLE PNEUMONIA & PLEURISY	26	722	3.60%
	RESPIRATORY INFECTIONS & INFLAMMATIONS	25	722	3.46%
	PSYCHOSES	23	722	3.19%
Fargo	HEART FAILURE & SHOCK	66	981	6.73%
	PSYCHOSES	53	981	5.40%
	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96+ HOURS	48	981	4.89%
	CHRONIC OBSTRUCTIVE PULMONARY DISEASE	42	981	4.28%
	NUTRITIONAL & MISC METABOLIC DISORDERS	33	981	3.36%
Grand Forks	HEART FAILURE & SHOCK	46	606	7.59%
	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96+ HOURS	40	606	6.60%
	SIMPLE PNEUMONIA & PLEURISY	27	606	4.46%
	CHEMOTHERAPY W/O ACUTE LEUKEMIA AS SECONDARY DIAGNOSIS	20	606	3.30%
	CHRONIC OBSTRUCTIVE PULMONARY DISEASE	20	606	3.30%
Minot	SIMPLE PNEUMONIA & PLEURISY	35	487	7.19%
	CHRONIC OBSTRUCTIVE PULMONARY DISEASE	21	487	4.31%
	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96+ HOURS	21	487	4.31%
	HEART FAILURE & SHOCK	19	487	3.90%
	RENAL FAILURE	19	487	3.90%
North Dakota	HEART FAILURE & SHOCK	232	3,503	6.62%
	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96+ HOURS	183	3,503	5.22%
	SIMPLE PNEUMONIA & PLEURISY	158	3,503	4.51%
	CHRONIC OBSTRUCTIVE PULMONARY DISEASE	123	3,503	3.51%
	PSYCHOSES	119	3,503	3.40%
Great Plains QIN	SEPTICEMIA OR SEVERE SEPSIS W/O MV 96+ HOURS	2,587	37,060	6.98%
	HEART FAILURE & SHOCK	2,043	37,060	5.51%
	PSYCHOSES	1,586	37,060	4.28%
	SIMPLE PNEUMONIA & PLEURISY	1,538	37,060	4.15%
	CHRONIC OBSTRUCTIVE PULMONARY DISEASE	1,183	37,060	3.19%

For any questions on this report, please contact Lorrie Lendvoy at QHA, [Lorrie.Lendvoy@area-a.hcqis.org](mailto:Lorrie.Lendvoy@area-a.hcqis.org) at 701-852-4231.