

Testimony
Interim Health Services Committee
April 13, 2016; 3:10 p.m.
North Dakota Department of Health

Good afternoon Chairman Lee and members of the Interim Health Services Committee. I am Tom Nehring, Division Director, Division of Emergency Medical Systems (DEMS) of the North Dakota Department of Health (NDDoH). I am here to provide a report on progress made toward the recommendations in NDCC 23-43-04 regarding continuous improvement of quality care for those with stroke.

The North Dakota Stroke System was created by the legislature in 2009 to establish a comprehensive, coordinated, efficient system along the continuum of health care for individuals suffering a stroke. The program is administered by DEMS and stroke partners, including the American Heart Association, Critical Access Hospitals, tertiary hospitals, the North Dakota Emergency Medical Services (EMS) Association, and NDDoH Division of Chronic Disease. The legislative investment in the system has improved stroke care throughout the state.

The statute requires that the department report on progress made towards fulfilling the legal requirements in NDCC 23-43-04. Below we list a portion of the statute and the activities that have been done towards fulfilling that requirement.

1. The state department of health shall establish and implement a plan for achieving continuous quality improvement in the quality of care provided under the state comprehensive stroke system for stroke response and treatment.
 - DEMS utilizes Get with the Guidelines-Stroke to maintain a statewide stroke database that compiles statistics for stroke performance standards for use in quality improvement
 - NDDoH has agreements with participating hospitals and pays a yearly fee to have Super User access to statewide aggregate data through the Get with the Guidelines-Stroke database
 - There are 24 Critical Access Hospitals and six tertiary hospitals in the registry; additional critical access hospitals are expected to join this year due to the acute stroke ready hospital designation requirements
 - EMS reports data to DEMS

- DEMS encourages facilities to review their individual hospital data and implement a quality improvement process; DEMS continues to expand the quality improvement process in hospitals
- Through the critical access hospital designation system, DEMS can bring focus to quality improvement and encourages sharing of information between hospitals to improve quality of stroke care

2. The state department of health shall establish a data oversight process and implement a plan for achieving continuous quality improvement in the quality of care provided under the state comprehensive stroke system for stroke response and treatment:

- Data is shared at quarterly stroke task force meetings and at regional critical access hospital quality meetings
- Stroke Task Force utilizes the data in making recommendations for interventions to improve stroke care delivery in the state
- The Stroke System of Care has developed State Stroke Guidelines for the care and transport of stroke patients that arrive at critical access hospitals

3. Data reported under this section must be made available to the state department of health and to other government agencies, or contractors of government agencies, which have responsibility for the management and administration of emergency medical services throughout the state.

- Data reported under this section is made available by DEMS to the state department of health and other government agencies upon request

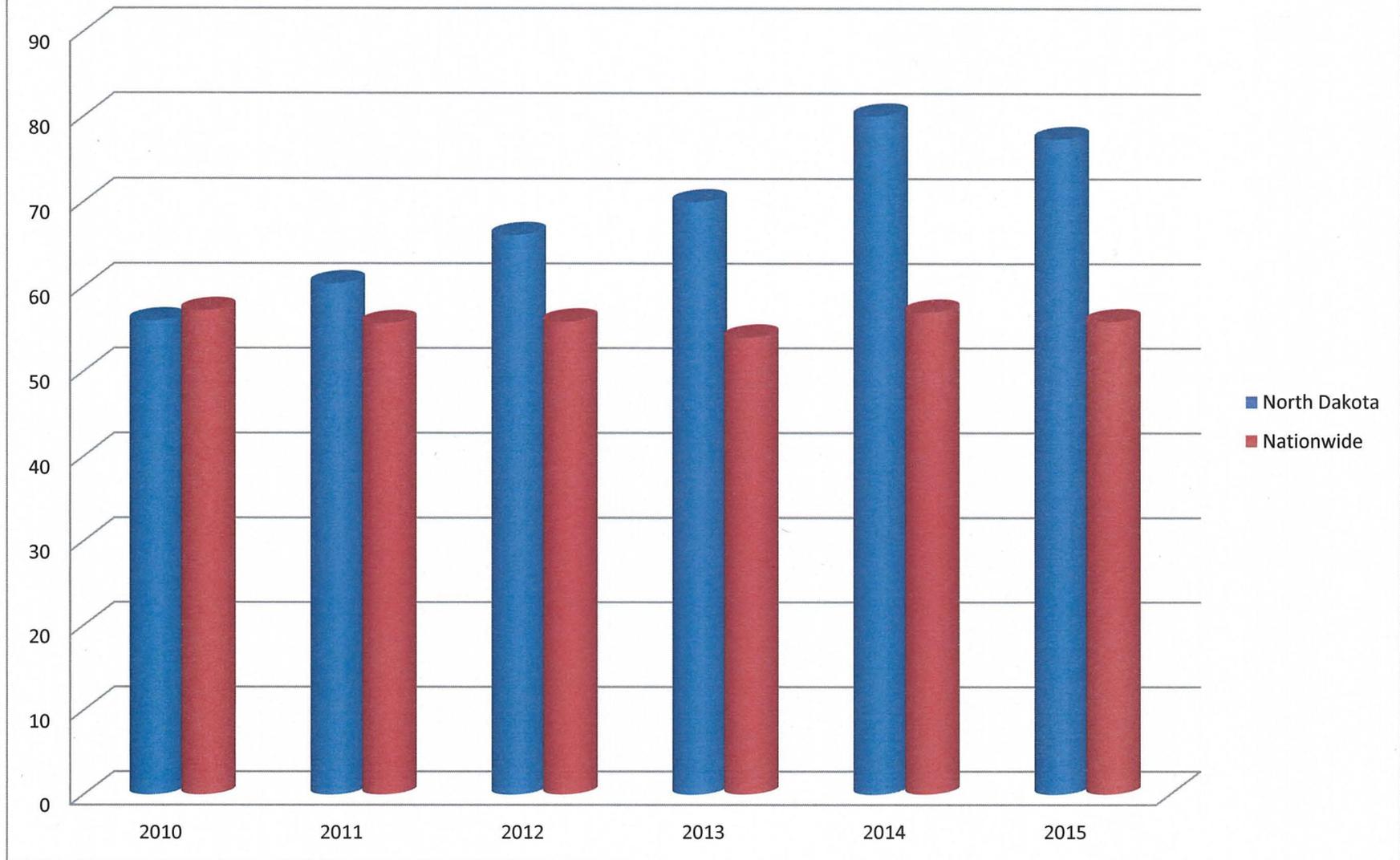
Other progress made in the Stroke System includes:

- All six tertiary hospitals in North Dakota are now Primary Stroke Centers
- Twenty-two out of 36 Critical Access Hospitals are designated as Acute Stroke Ready Hospitals
- DEMS maintains an updated list of designated stroke facilities on its website
- The Stroke System of Care has adopted the Cincinnati Stroke Scale for EMS, and National Institutes of Health (NIH) Stroke Scale for hospital use; both are nationally recognized, standardized stroke triage assessment tools and can be found on the DEMS webpage
- DEMS has contracted with ND EMS Association to offer stroke education to all North Dakota EMS Services
- DEMS collaborates with Primary Stroke Center Coordinators to provide education to Critical Access Hospitals

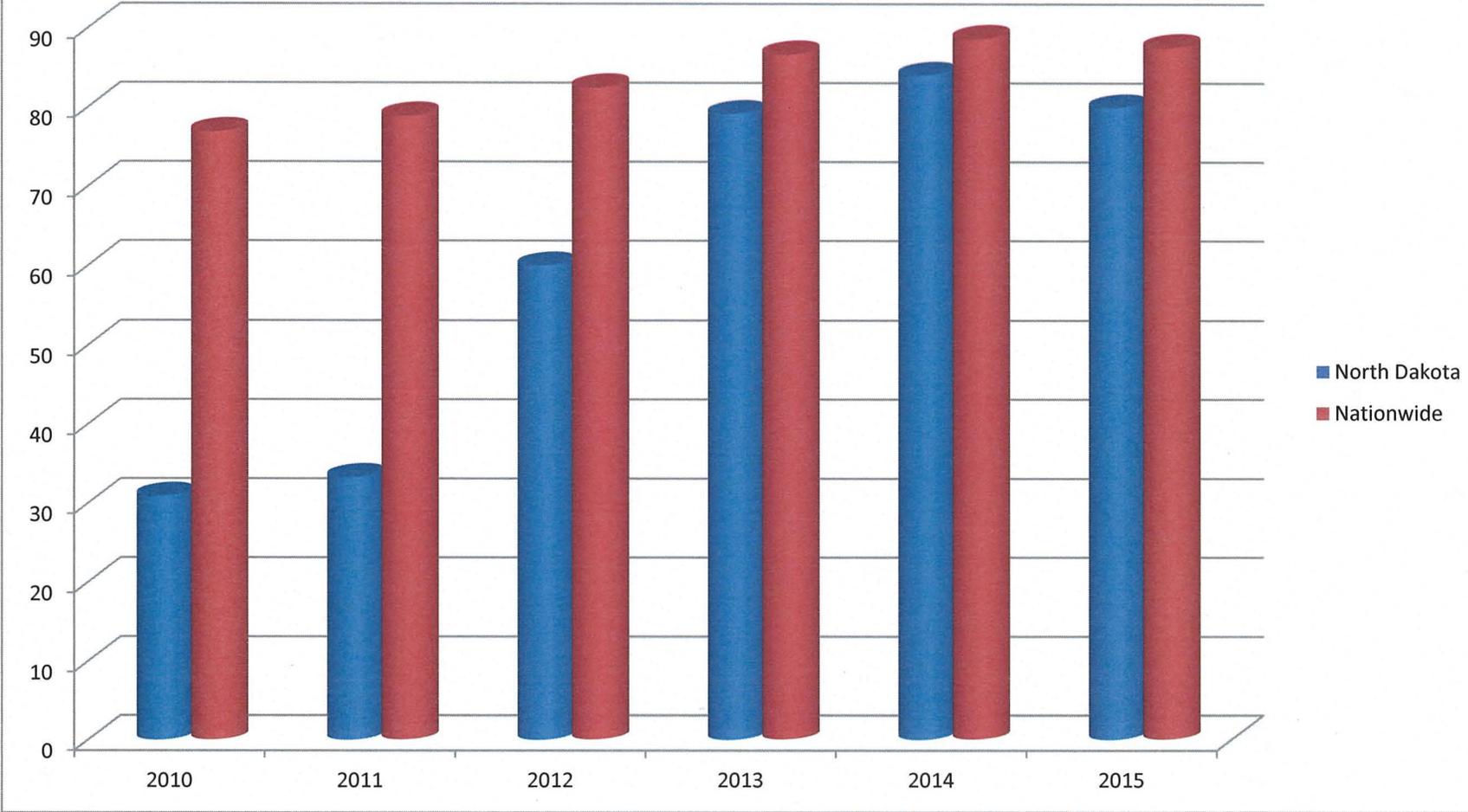
- Each EMS service will soon be required to submit detailed stroke transport plans; this is currently being introduced statewide in 'Future of EMS' meetings
- The stroke protocols will address the transport of acute stroke patients to the nearest stroke designated hospital within a specific time of onset of symptoms
- Last year, DEMS created a successful stroke campaign, and materials from the campaign continue to be used in public education efforts across the state
- Statistics from State Stroke Registry (See handout)
 - In 2010, EMS gave advanced notification to the destination hospital of a potential stroke patient being transported from the scene in only 56 percent of cases; in 2015, hospitals received advance notification 77.4 percent of the time (nationwide the number is 55.9 percent)
 - The percentage of acute ischemic stroke patients who arrived at the hospital within two hours of the time the patient was last known to be without the signs and symptoms of the current stroke, and for whom IV-t-PA was initiated within three hours of the time the patient was at his or her prior baseline, increased from 30.9 percent of patients that qualified in 2010, to 80 percent of eligible patients in 2015.
 - Additional statistics are available in the handout in front of you

Thank you for this opportunity to provide testimony regarding the Stroke System in North Dakota. I would be happy to take any questions you may have.

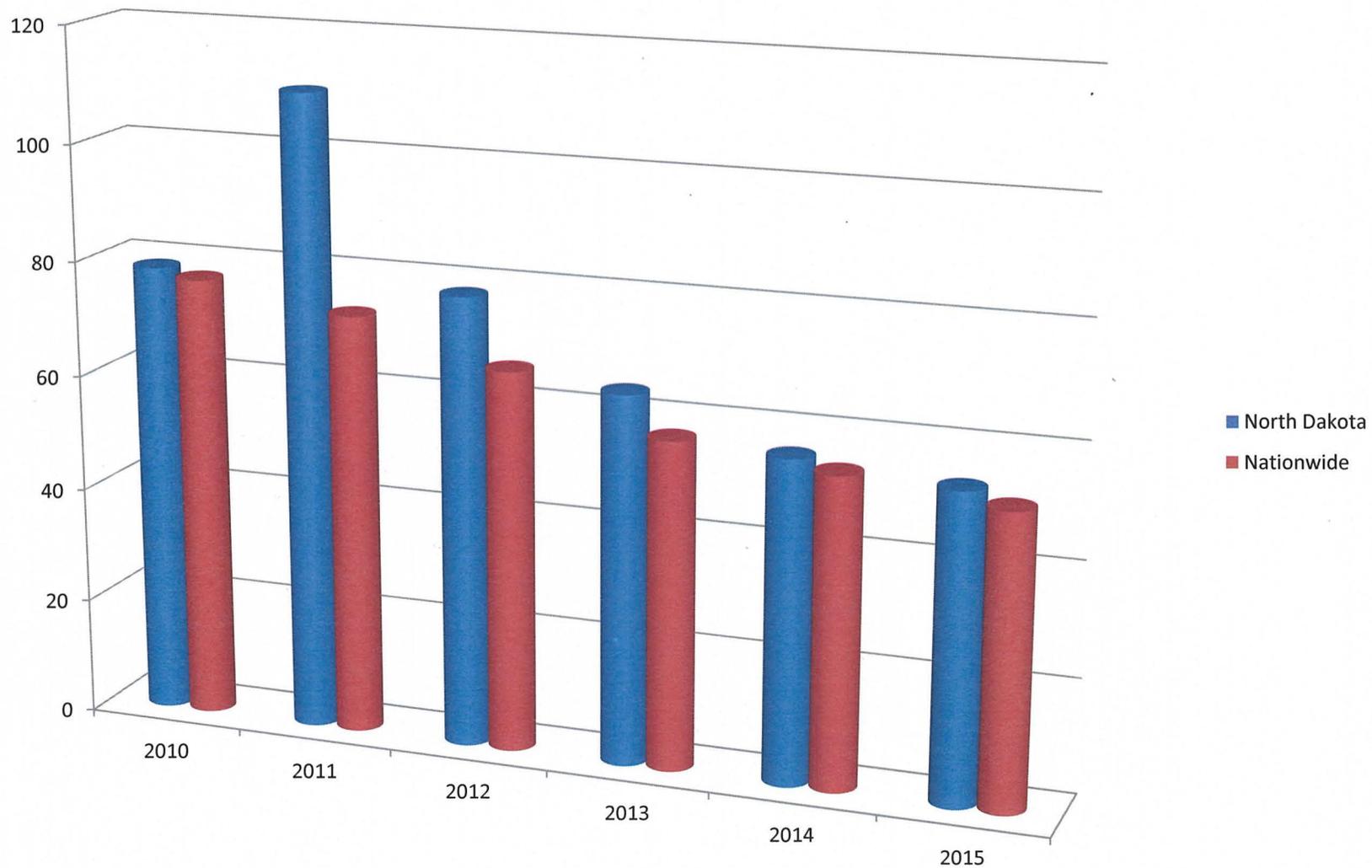
Pre-notification-Percent of cases of advanced notification by EMS for patients transported by EMS from scene



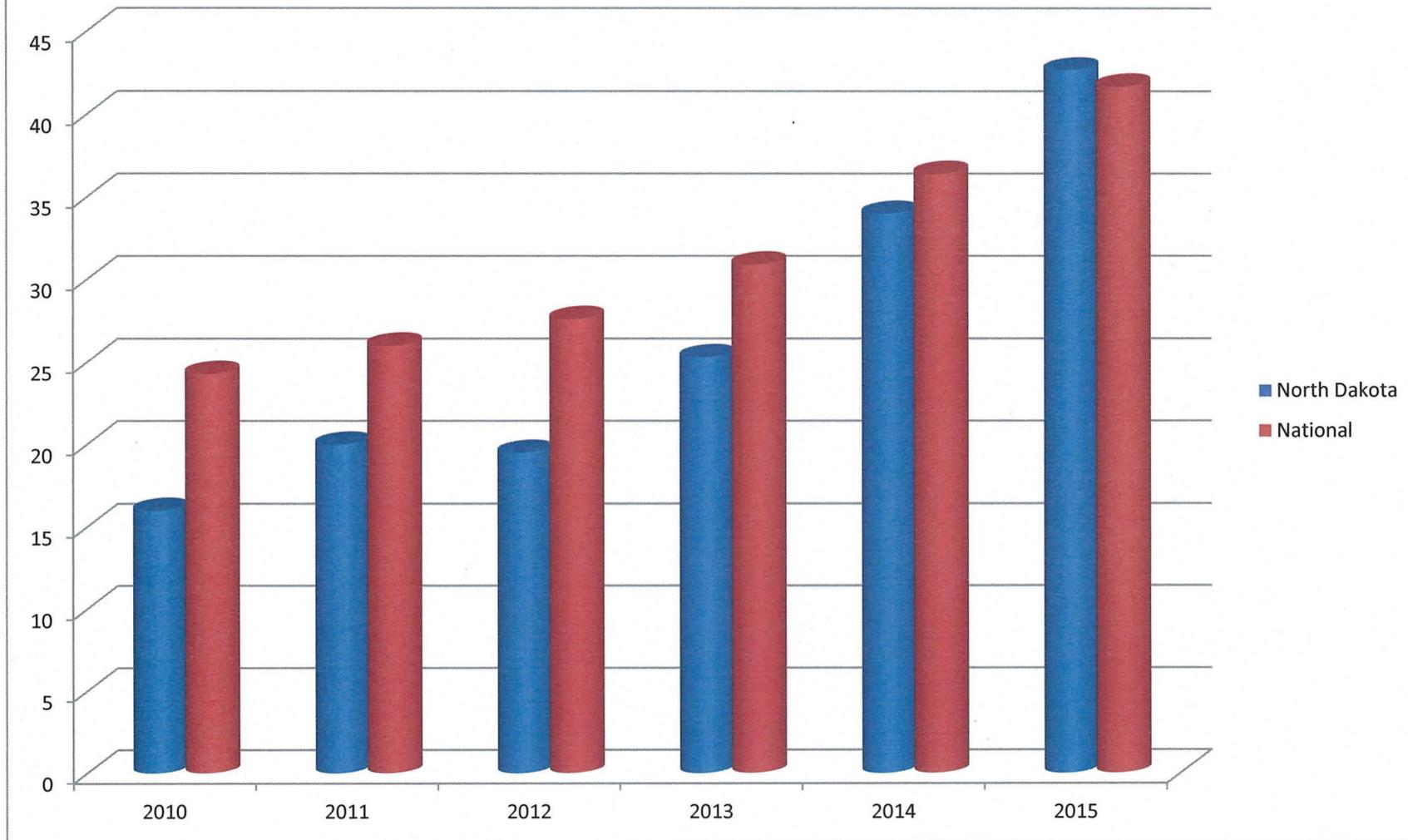
Percent of patients that arrived to hospital within 2 hours of time last known well, and IV t-PA therapy was initiated at the hospital within 3 hours of time last known well



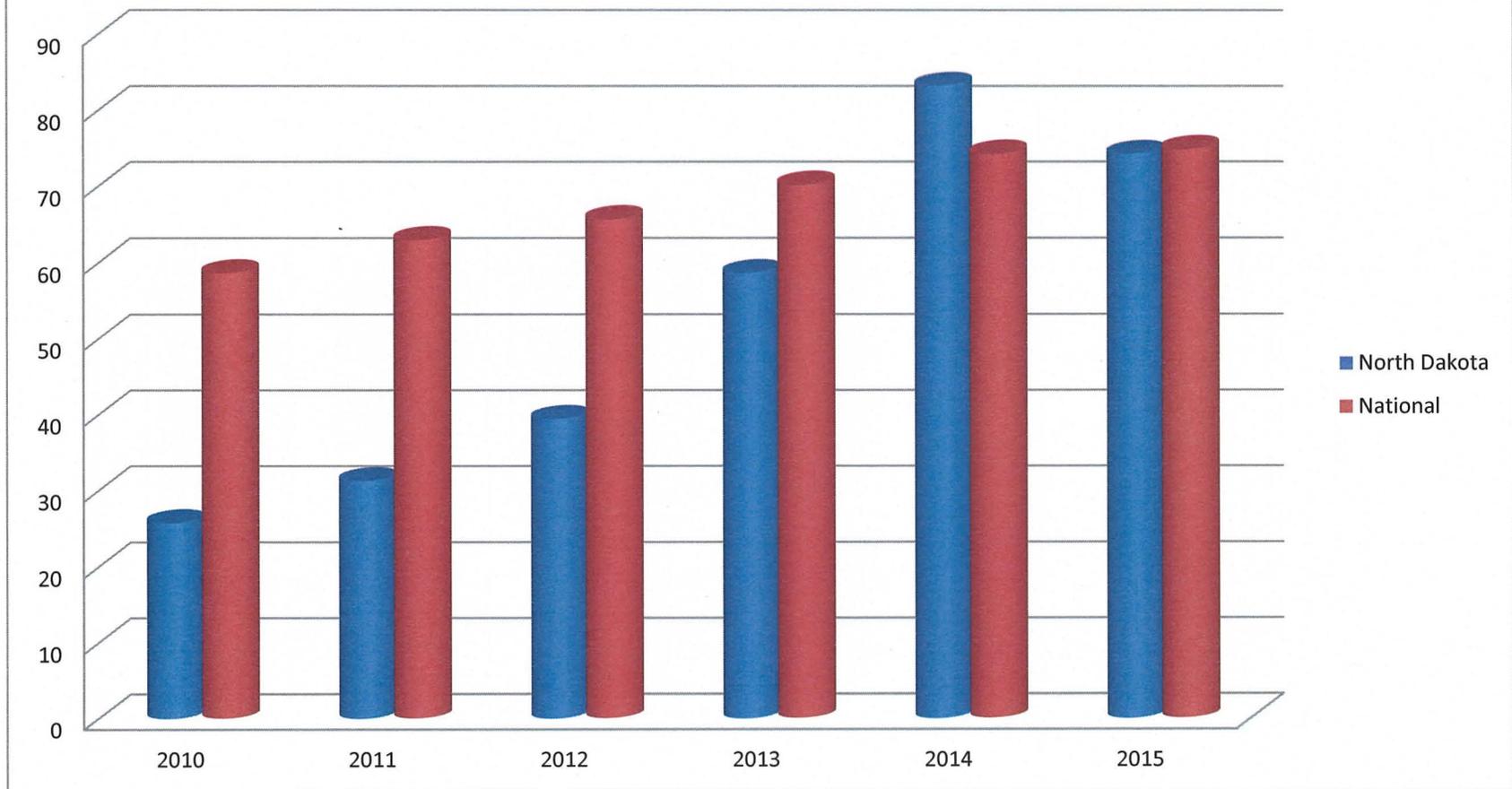
Median time in minutes from hospital arrival to initiation of thrombolytic administration for ischemic stroke patients



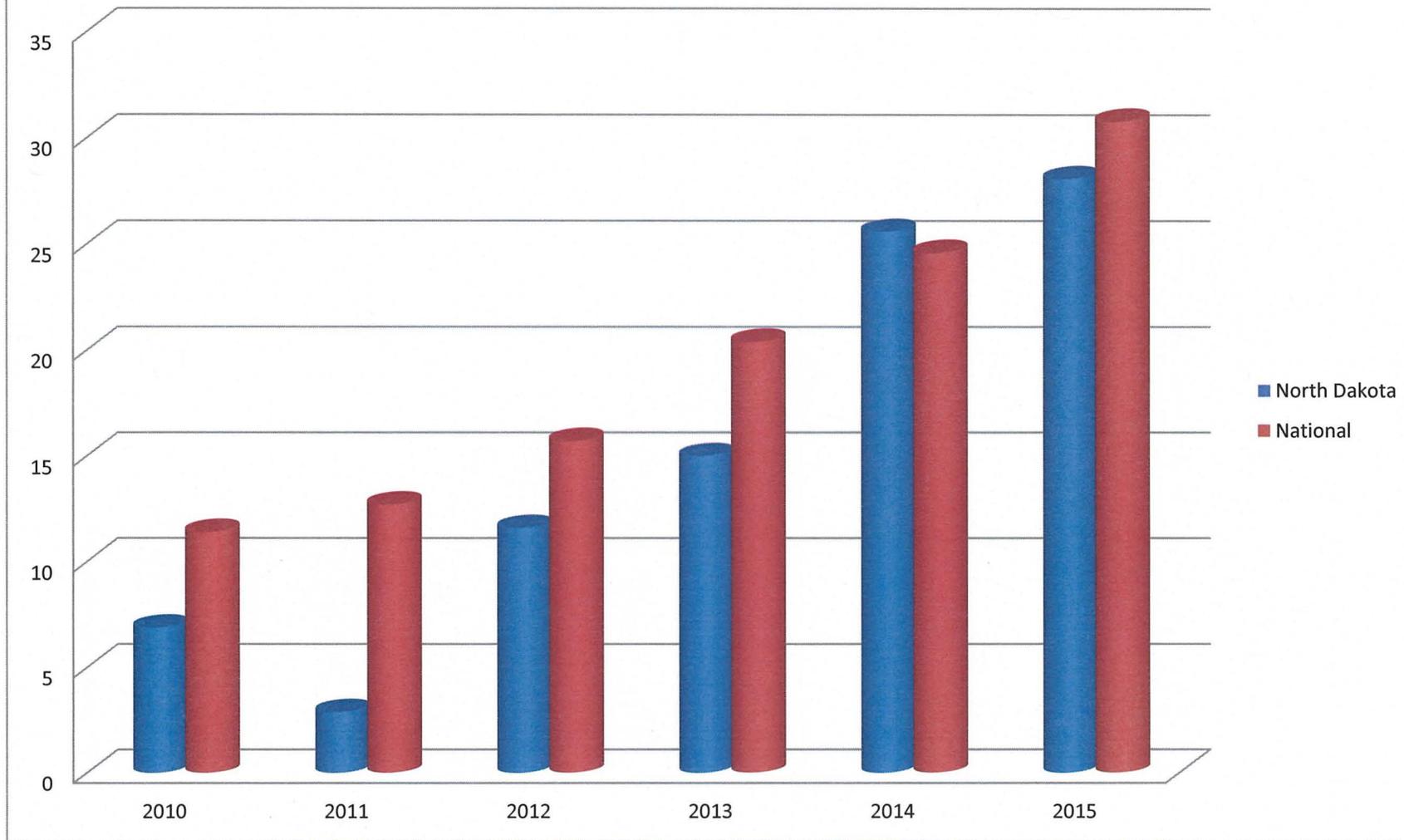
Percent of Patients who receive brain imaging (CT) within 25 minutes of arrival to hospital



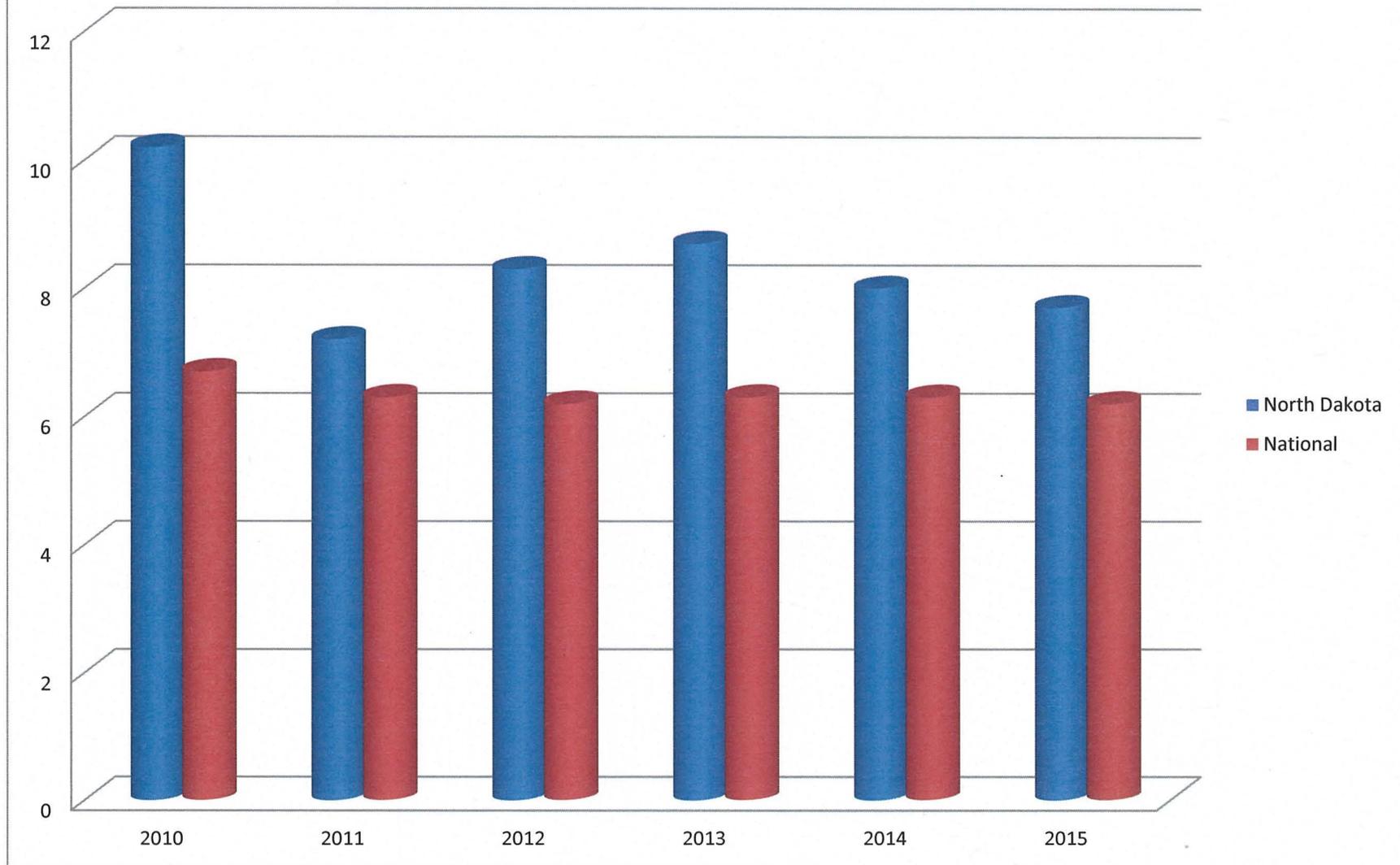
Percent of acute ischemic stroke patients who arrive at the hospital within 3.5 hours of time last known well and for whom IV t-PA was initiated at the hospital within 4.5 hours of time last known well



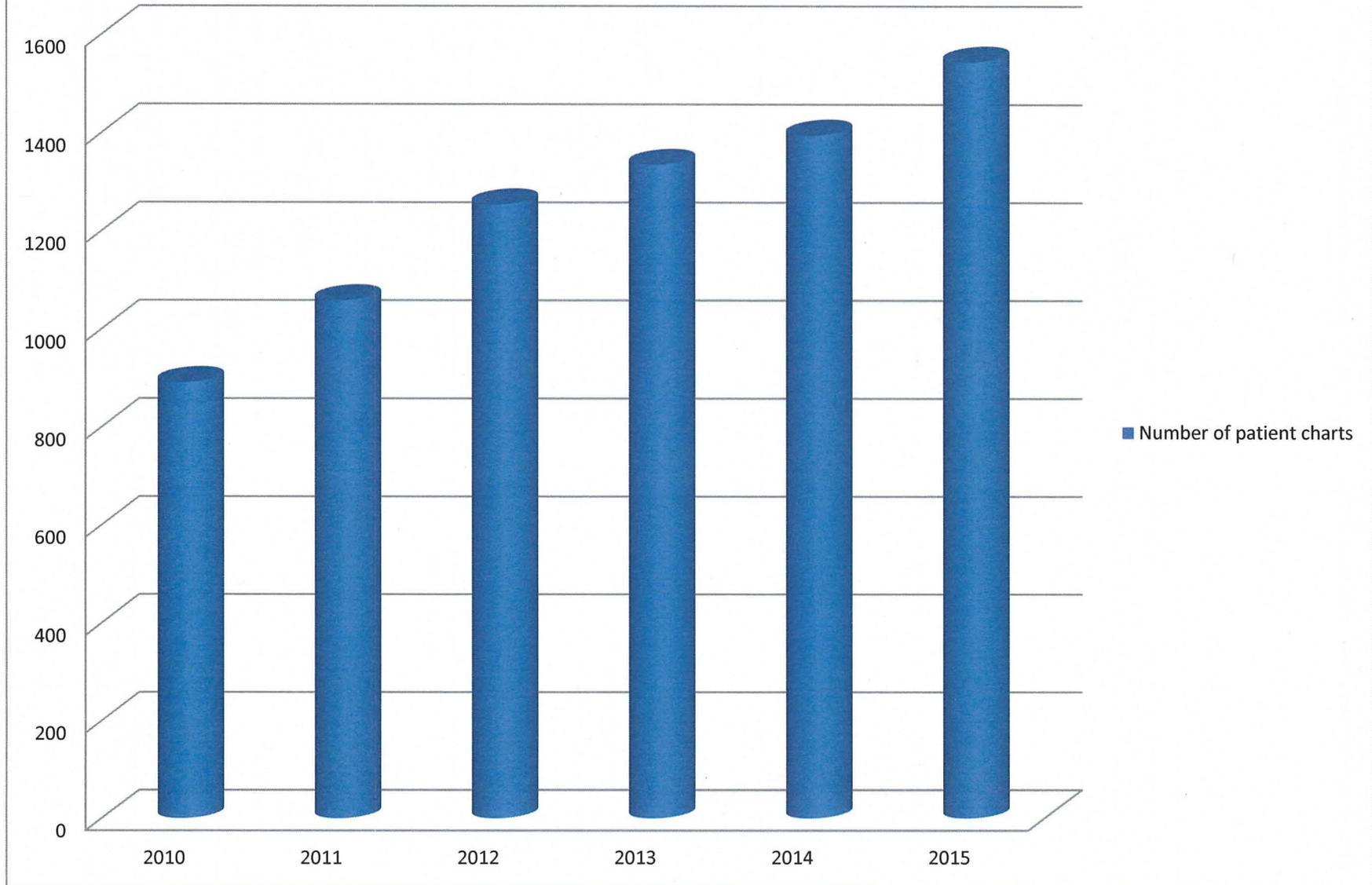
Percent of ischemic stroke patients receiving IV t-PA at hospital who are treated within 45 minutes after emergency department arrival



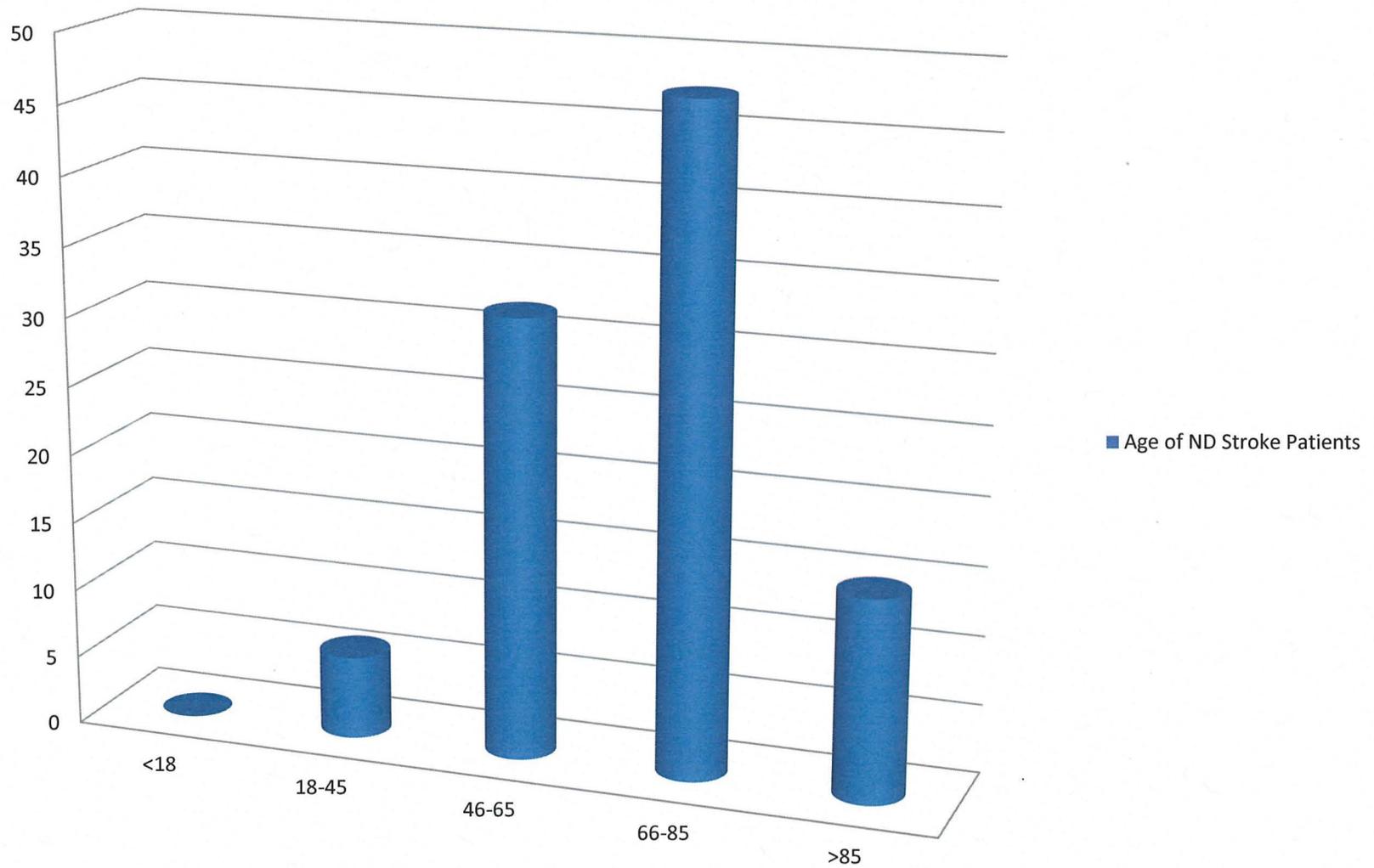
In hospital mortality percentage for all stroke patients



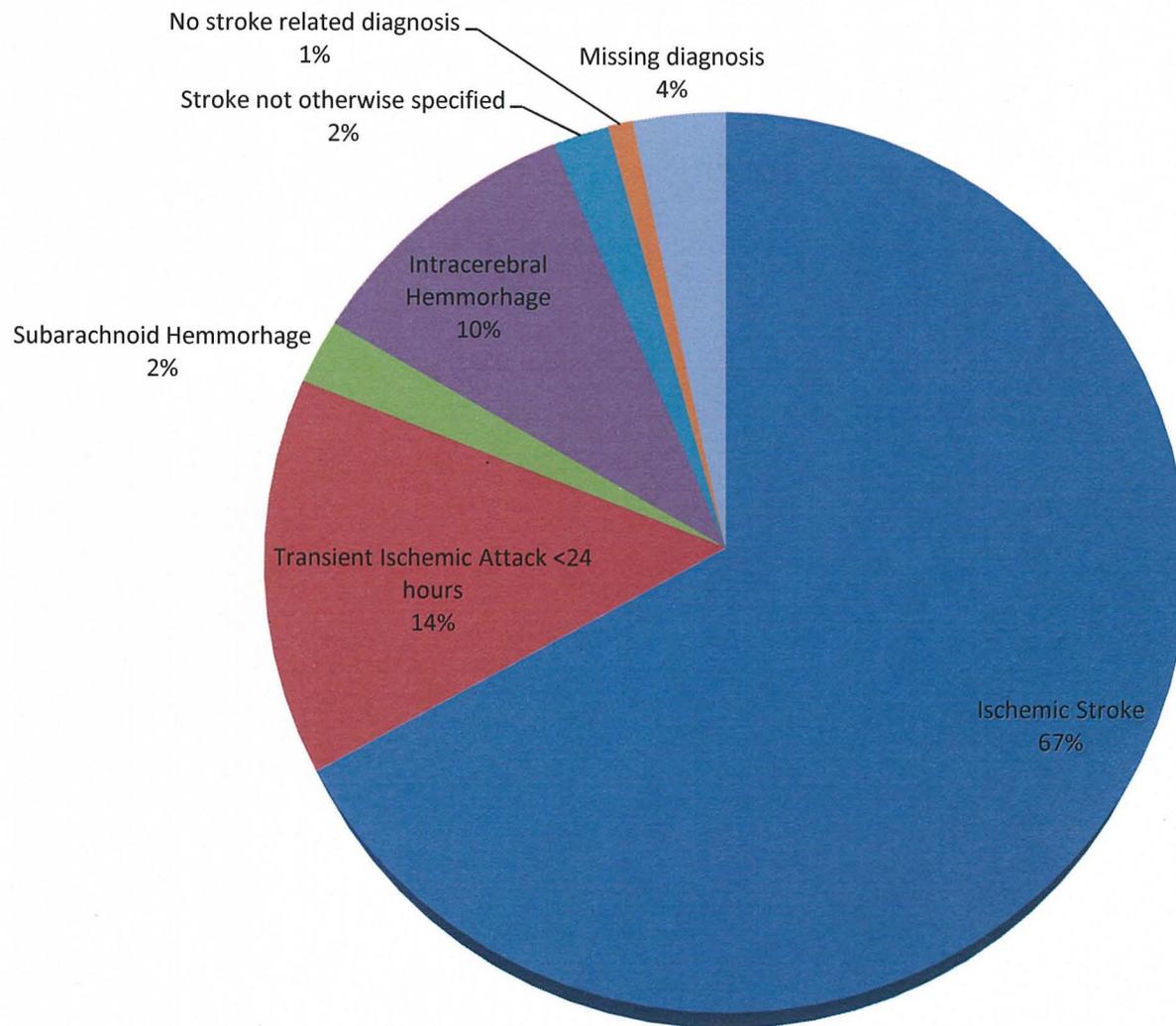
Number of patient charts entered into State Stroke Registry



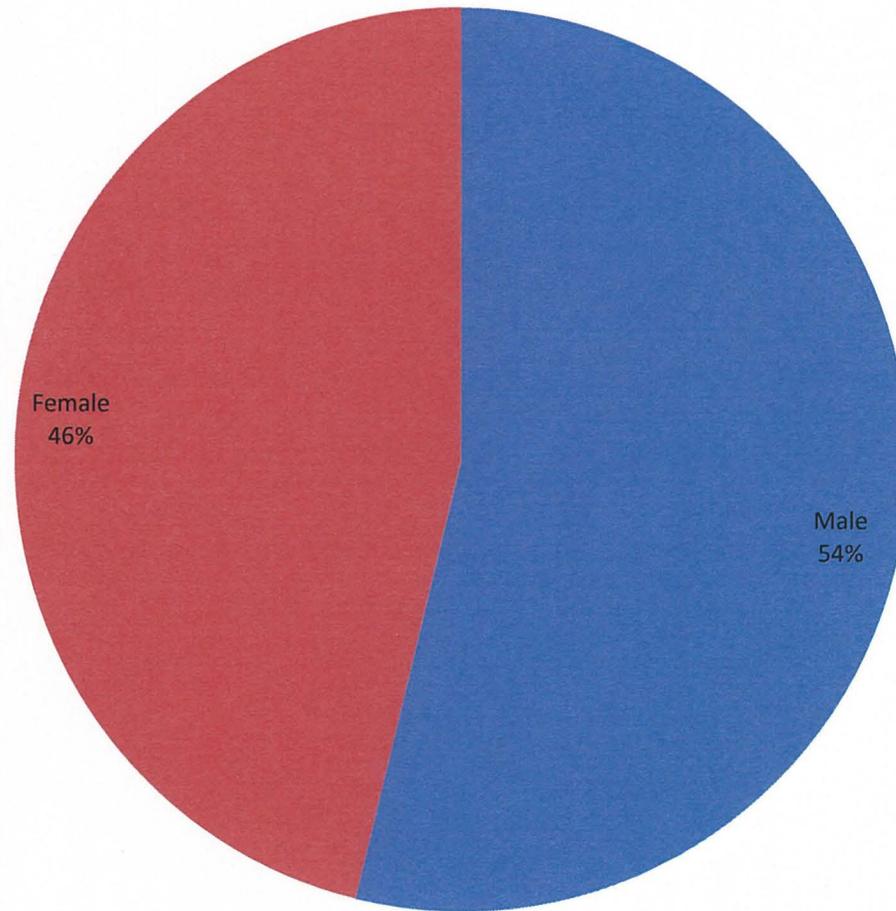
% ND Stroke Patients in Age Groups (2015)



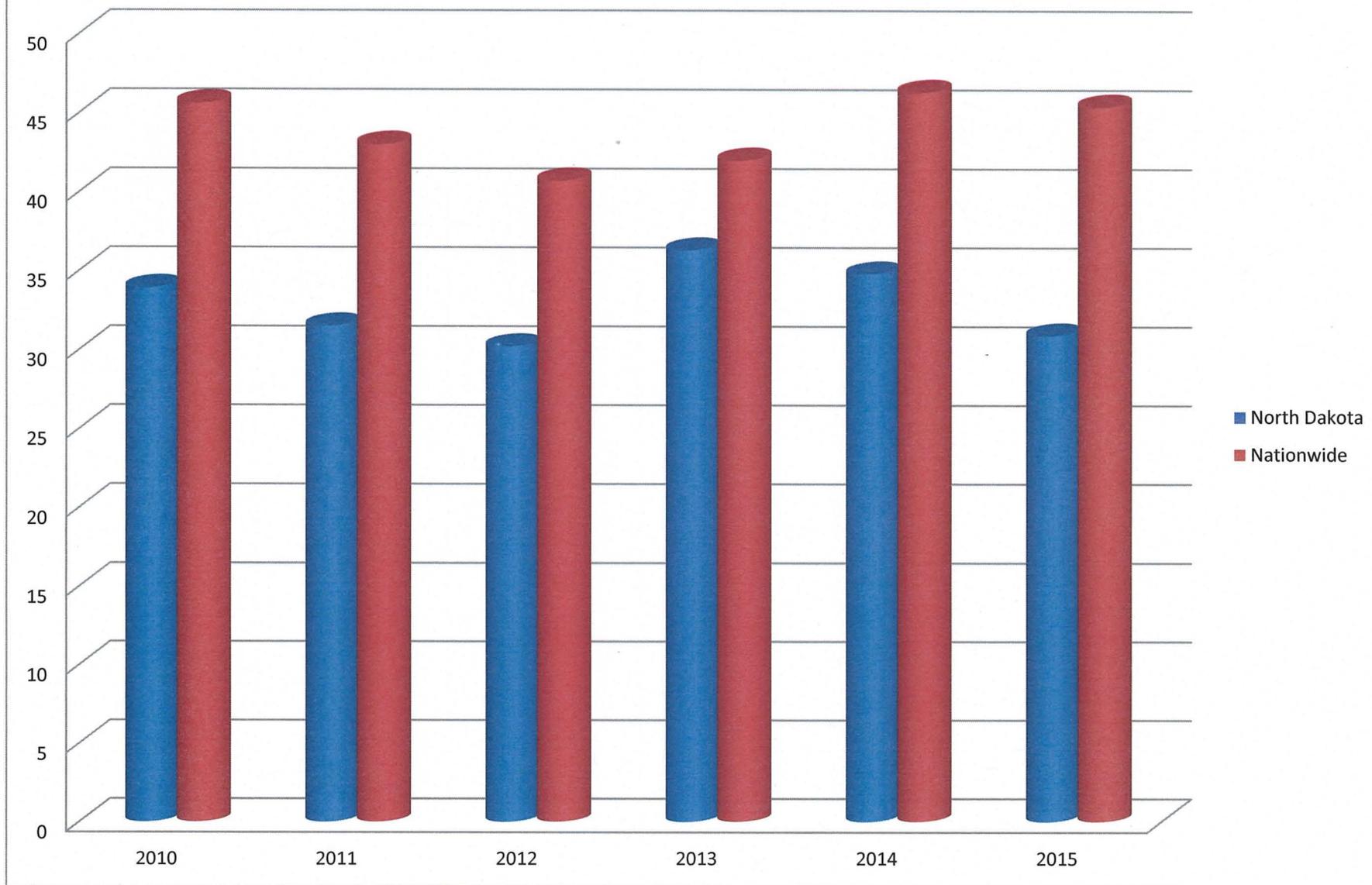
ND Stroke Patient Diagnosis (2015)



Gender of ND Stroke Patients (2015)



Percent Stroke Patients Arrival via EMS from Home/Scene



Percent of Stroke Patients Arriving by Private Transport/Taxi/Other

