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#### **KEY FINDINGS: NORTH CAROLINA**

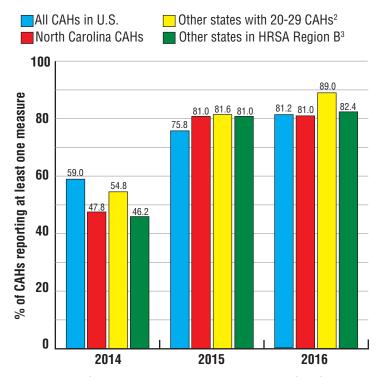
- The HCAHPS reporting rate of 81.0% for North Carolina CAHs in 2016 was less than the national reporting rate of 81.2% and ranks #24 among 45 states that participate in the Flex Program.
- Compared with all other CAHs nationally, North Carolina did not have significantly different scores on any of the 11 HCAHPS measures.

#### **BACKGROUND**

The Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) is a national, standardized survey of patients' perspectives of hospital care. It was developed by the Agency for Healthcare Research and Quality and the Centers for Medicare & Medicaid Services (CMS) to complement other hospital tools designed to support quality improvement. The survey is administered to a random sample of adult patients following discharge from the hospital for inpatient medical, surgical, or maternity care.

Eleven HCAHPS measures are publicly-reported on Hospital Compare. Seven are composite measures that address how well doctors and nurses communicate with patients, the responsiveness of hospital staff, pain management, communication about medicines, and patient understanding of their care when they left the hospital. These, along with two measures regarding the hospital environment, are reported in response categories of "always," "usually," and "sometimes/never." Additional measures address the provision of discharge information ("yes/no"), an overall rating of the hospital on a 1-10 scale ("high" = 9 or 10, "medium" = 7 or 8, "low" ≤ 6), and the patient's willingness to recommend the hospital ("definitely would," "probably would," and "probably/definitely would not"). CMS adjusts the

Figure 1. CAH Participation in HCAHPS<sup>1</sup>, 2014 - 2016



- 1. Percentage of CAHs in each state or group of states reporting HCAHPS data.
- Group includes states with 20-29 CAHs: AR(29),ID(27),KY(27),LA(27),OR(25), WV(20)
- 3. HRSA Region B includes: AL(4),FL(13),GA(30),KY(27),MS(31),SC(5),TN(15)



publicly-reported HCAHPS results for patient-mix, mode of data Figure 2. State Rankings of HCAHPS collection, and non-response bias.

CAHs may voluntarily report HCAHPS measures to Hospital Compare. HCAHPS measures are a core improvement activity in the Medicare Beneficiary Quality Improvement Project (MBQIP).

#### **APPROACH**

This study used data publicly-reported to Hospital Compare by CAHs for discharges during calendar year 2016 as well as data from MBQIP. In 2016, CMS began suppressing HCAHPS results from Hospital Compare for hospitals with fewer than 25 completed surveys. The FMT national and state HCAHPS reports include MBQIP HCAHPS data from 140 CAHs that agreed to participate in Hospital Compare, but whose results were suppressed from Hospital Compare because of having fewer than 25 completed surveys. Although some CAHs had very few surveys, the results are reported in aggregate for all CAHs in each state, and no states had fewer than 25 surveys for all CAHs in the state.

The national and state HCAHPS reports exclude results from 51 CAHs that submitted HCAHPS data to MBQIP but did not agree to publicly report to Hospital Compare. The reports include data from six CAHs that reported HCAHPS data to Hospital Compare, but not to MBQIP.

For each HCAHPS measure, the percentages of patients reporting the highest response (e.g., "always") on each measure were summed and averaged across all reporting CAHs within a state and all other states.

Two-sample t-tests were used to compare whether the mean scores on each measure are significantly different between CAHs in each state and all other CAHs.

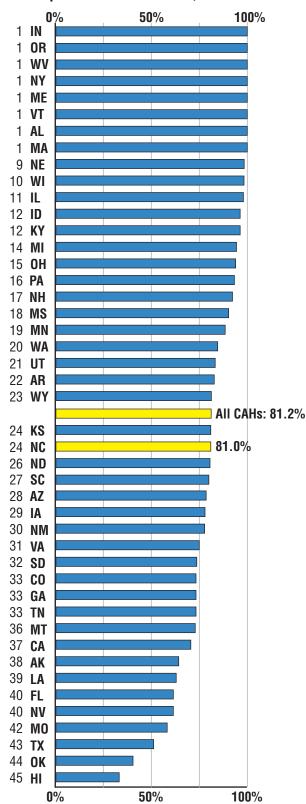
## RESULTS

Figure 1 (previous page) compares participation rates in HCAHPS over time among four groups of CAHs: those in North Carolina, all CAHs nationally, those located in other states with a similar number of CAHs, and those located in the same HRSA geographic region as North Carolina. The HCAHPS reporting rate of 81.0% for North Carolina CAHs was less than the national reporting rate of 81.2%.

Figure 2 ranks the states by their CAHs' respective HCAHPS reporting rate for 2016. North Carolina's rate was ranked #24 of the 45 states that participate in the Flex program.

Table 1 (page 3) shows the number of completed HCAHPS sur-

Participation Rates for CAHs, 2016



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Table 1. Number of Completed HCAHPS Surveys and Response Rates for CAHs Nationally and in North Carolina, 2016

	Total CAHs	Number of completed HCAHPS surveys					HCAHPS survey response rates		
	reporting	< 25	25-49	50-99	100-299	≥ 300	< 25%	25-50%	> 50%
US	1,090	140	193	293	400	64	196	858	36
NC	17	0	0	5	8	4	5	12	0

# Table 2. HCAHPS Results for CAHs in North Carolina and All Other States, 2016

Significantly better than rate for all other CAHs nationally (p<.05)

Significantly worse than rate for all other CAHs nationally (p<.05)

Mean (average) percentage of patients that gave the highest level of response (e.g., "always")	North Carolina (n=17)¹	All Other States (n=1,073)
Composite 1: Communication with Nurses (Nurses always communicated well)	84.9	83.2
Composite 2: Communication with Doctors (Doctors always communicated well)	85.5	85.2
Composite 3: Responsiveness of Hospital Staff (Patient always received help as soon as wanted)	74.9	74.9
Composite 4: Pain Management (Patient felt pain was always well-controlled)	75.5	74.1
Composite 5: Communication about Medicines (Staff always explained medications before giving them to patient)	68.6	69.0
Composite 6: Discharge Information (Yes, staff provided information about what to do during recovery at home)	89.0	88.6
Composite 7: Care Transitions (Patient strongly agreed they understood their care when they left the hospital)	55.0	54.8
Question 8: Cleanliness of Hospital Environment (Patient's room and bathroom were always clean)	78.5	79.3
Question 9: Quietness of Hospital Environment (Area around patient's room was always quiet at night)	67.4	66.2
Question 21: Overall Rating of Hospital (Patient gave a rating of 9 or 10 (high) on 1-10 scale)	77.5	75.9
Question 22: Willingness to Recommend Hospital (Patient would definitely recommend the hospital to friends and family)	75.5	74.3

 $<sup>1. \</sup> Rates \ without \ highlights \ were \ not \ significantly \ different \ from \ comparable \ rates \ among \ all \ CAHs \ nationally.$ 

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veys per CAH in North Carolina and nationally, in five survey completion and three survey response rate categories. CMS recommends that each hospital obtain 300 completed HCAHPS surveys annually, in order to be more confident that the survey results are reliable for assessing the hospital's performance. However, some smaller hospitals may sample all of their HCAHPS-eligible discharges and still have fewer than 300 completed surveys. Caution should be exercised in comparing HCAHPS results for states that have few CAHs reporting results and/ or CAHs whose results are based on fewer than 100 completed surveys.

Compared to all other CAHs nationally, North Carolina's CAHs scored significantly higher on 0 of 11 HCAHPS measures and significantly lower on 0 measures (Table 2, page 3).

For more information on this study, please contact Megan Lahr at lahrx074@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.