

# North Carolina

Troubling issues related to the *Medical Liability Environment* and *Access to Emergency Care* overshadowed North Carolina's strong performance in the *Quality and Patient Safety Environment*, as well as its *Disaster Preparedness* efforts.

**Strengths.** North Carolina's grade for the *Quality and Patient Safety Environment* reflects the state's commitment to improving and maintaining statewide systems of care. The state has demonstrated this commitment by funding quality improvement of its EMS system, as well as an EMS medical director position, and maintaining a uniform system for providing pre-arrival instructions. Hospitals within the state have also demonstrated a commitment to quality improvement through the use of electronic medical records (56.9 percent) and computerized practitioner order entry (21.6 percent).

North Carolina ranked 20<sup>th</sup> in the nation in the *Disaster Preparedness* category. The state has made noteworthy strides in preparing for disasters and emergency events. North Carolina has an all-hazards medical response plan or ESF-8 plan that is shared with all EMS and essential hospital personnel and a written plan for the coordination of the State Emergency Operations Center or local emergency management agencies to provide security to hospitals during a disaster event. The state also requires training in disaster management and response to bio- and chemical terrorism for all EMS and essential hospital personnel. North Carolina has statewide patient and victim tracking systems and a medical communication system with one layer of redundancy.

**Challenges.** North Carolina's *Medical Liability Environment* could benefit substantially from instituting liability reforms.

The state lacks a medical liability cap on non-economic damages, as well as additional liability protections for EMTALA-mandated emergency care. While the state requires expert witnesses to be of the same specialty as the defendant, it lacks requirements for case certification by an expert witness and for the witness to be licensed to practice in the state.

North Carolina falls well below most states with regard to *Access to Emergency Care*. The state has relatively few facilities compared to the nation as a whole with 1.0 Level I or II trauma centers and 11.7 emergency departments per 1 million people, compared with an average across the states of 1.8 and 19.9 per 1 million, respectively. The lack of insurance among adults and children is also a concern in North Carolina: 19.2 percent of adults and 14.0 percent of children lack health insurance, compared to nationwide averages of 17.2 and 11.7 percent, respectively.

North Carolina received an average grade in *Public Health and Injury Prevention*. Despite a number of high points, such as traffic safety, the state could still make substantial improvements in this category. North Carolina has a high infant mortality rate (8.8 deaths per 1,000 live births) compared to the nation as a whole (6.9 per 1,000). The state also suffers from a relatively high percentage of adults who are obese (26.6 percent) and who are current smokers (22.1 percent).

**Recommendations.** Policymakers in North Carolina should focus on improving *Access to Emergency Care* for everyone, regardless of their insurance status. The state needs to address the relatively high rates of uninsured, as well as the deficit in available facilities to provide adequate access to care for all residents. The state should also




## Policymakers in North Carolina should focus on improving Access to Emergency Care for everyone, regardless of their insurance status.

|                                      | RANK | GRADE |
|--------------------------------------|------|-------|
| ACCESS TO EMERGENCY CARE             | 34   | D-    |
| QUALITY & PATIENT SAFETY ENVIRONMENT | 5    | A     |
| MEDICAL LIABILITY ENVIRONMENT        | 46   | F     |
| PUBLIC HEALTH & INJURY PREVENTION    | 23   | C     |
| DISASTER PREPAREDNESS                | 20   | B-    |
| OVERALL                              | 32   | C-    |

work with the medical community to increase the number of providers accepting Medicare, currently 2.7 per 100 beneficiaries. The state must also address the lack of mental health providers, needing an additional 42.9 full-time equivalent providers to serve its population, and the low rate of psychiatric care beds (19.5 per 100,000 people).

North Carolina could also benefit from a more favorable *Medical Liability Environment*. Policymakers should act to implement a cap on non-economic damages and to abolish joint and several liability, which may help attract and retain more physicians. Additional liability protections for EMTALA-mandated emergency care could help encourage more specialists to provide on-call services to emergency patients.


**ACCESS TO EMERGENCY CARE** **D-**

|  |  |
|--|--|
| Board-certified emergency physicians per 100,000 pop.                |  <b>9.2</b>   |
| Emergency physicians per 100,000 pop.                                | <b>12.0</b>  |
| Neurosurgeons per 100,000 pop.                                       | <b>1.8</b>   |
| Orthopedists and hand surgeon specialists per 100,000 pop.           | <b>8.8</b>   |
| Plastic surgeons per 100,000 pop.                                    | <b>1.9</b>   |
| ENT specialists per 100,000 pop.                                     | <b>3.5</b>   |
| Registered nurses per 100,000 pop.                                   |  <b>903.0</b> |
| Additional primary care FTEs needed                                  | <b>66.9</b>  |
| Additional mental health FTEs needed                                 | <b>42.9</b>  |
| Level I or II trauma centers per 1M pop.                             | <b>1.0</b>   |
| % of population within 60 minutes of Level I or II trauma center     | <b>86.0</b>  |
| Accredited chest pain centers per 1M pop.                            | <b>1.0</b>   |
| % of population with an unmet need for substance abuse treatment     | <b>7.5</b>   |
| Pediatric specialty centers per 1M pop.                              | <b>3.0</b>   |
| Physicians accepting Medicare per 100 beneficiaries                  | <b>2.7</b>   |
| Medicaid fee levels for office visits as a % of the national average | <b>127.4</b>   |
| % change in Medicaid fees for office visits (2004-05 to 2007)        | <b>-0.2</b>  |
| % of adults with no health insurance                                 | <b>19.2</b>  |
| % of children with no health insurance                               | <b>14.0</b>  |
| % of adults with Medicaid  | <b>8.1</b>   |
| Emergency departments per 1M pop.                                    |  <b>11.7</b>  |
| Hospital closures in 2006  | <b>1</b>   |
| Staffed inpatient beds per 100,000 pop.                              | <b>321.5</b>   |
| Hospital occupancy rate per 100 staffed beds                         | <b>71.9</b>  |
| Psychiatric care beds per 100,000 pop.                               | <b>19.5</b>  |
| State collects data on diversion                                     | <b>Yes</b>   |



**MEDICAL LIABILITY ENVIRONMENT** **F**

|  |                  |
|--|------------------|
| Lawyers per 10,000 pop.  | <b>10.8</b>      |
| Lawyers per physician  | <b>0.4</b>       |
| Lawyers per emergency physician  | <b>8.8</b>       |
| ATRA judicial hellholes (range 0 to -7)                                    | <b>0</b>         |
| Malpractice award payments/100,000 pop.                                    | <b>0.8</b>       |
| Average malpractice award payments   | <b>\$286,765</b> |
| Databank reports per 1,000 physicians                                      | <b>11.9</b>      |
| Patient compensation fund  | <b>No</b>        |
| Health court pilot project grant   | <b>No</b>        |
| Number of insurers writing medical liability policies per 1,000 physicians | <b>3.2</b>       |
| Average medical liability insurance premium for primary care physicians    | <b>\$14,089</b>  |
| Average medical liability insurance premiums for specialists               | <b>\$65,662</b>  |
| Pretrial screening panels  | <b>No</b>        |
| Are pretrial screening panels' findings admissible as evidence?            | <b>N/A</b>       |
| Periodic payments  | <b>No</b>        |
| Medical liability cap on non-economic damages                              | <b>No</b>        |
| Additional liability protection for EMTALA-mandated emergency care         | <b>No</b>        |
| Joint and several liability abolished                                      | <b>No</b>        |
| State provides for case certification                                      | <b>No</b>        |
| Expert witness required to be of the same specialty as the defendant       | <b>Yes</b>       |
| Expert witness must be licensed to practice medicine in the state          | <b>No</b>        |

**QUALITY & PATIENT SAFETY ENVIRONMENT** **A**


|   |   |
|---|---|
| Funding for quality improvement within the EMS system                                 | <b>Yes</b>  |
| Funded state EMS medical director   | <b>Yes</b>  |
| Emergency medicine residents per 1M pop.  |  <b>16.0</b> |
| Adverse event reporting required  | <b>No</b>   |
| Hospital-based infections reporting required  | <b>No</b>   |
| Mandatory quality reporting requirement   | <b>Yes</b>  |
| % of counties with E-911 capability   | <b>100.0</b>  |
| Uniform system for providing pre-arrival instructions                                 | <b>Yes</b>  |
| State has or is working on a stroke system of care                                    | <b>Yes</b>  |
| State has or is working on a PCI network or a STEMI system of care                    | <b>Yes</b>  |
| Statewide trauma registry   | <b>Yes</b>  |
| % of hospitals with computerized practitioner order entry                             | <b>21.6</b>   |
| % of hospitals with electronic medical records  | <b>56.9</b>   |
| % of patients with acute myocardial infarction given PCI within 90 minutes of arrival | <b>70</b>   |
| Number of Joint Commission reviewed sentinel events per 1M pop. (1995-2006)           | <b>13</b>   |


**PUBLIC HEALTH & INJURY PREVENTION** **C**


|   |   |
|---|---|
| Traffic fatalities per 100,000 pop.   | <b>17.6</b>   |
| % of traffic fatalities alcohol related                                     | <b>36.0</b>   |
| Front occupant restraint use (%)  | <b>88.8</b>   |
| Helmet use required for all motorcycle riders                               | <b>Yes</b>  |
| Child safety seat/seat belt legislation (10 points possible)                | <b>8</b>  |
| % of children immunized, aged 19-35 months                                  |  <b>84.3</b> |
| % of adults aged 65+ who received flu vaccine in the last 12 months         |  <b>69.6</b> |
| % of adults aged 65+ who ever received pneumococcal vaccine                 |  <b>68.5</b> |
| Fatal occupational injuries per 1M workers                                  | <b>40.8</b>   |
| Homicides and suicides (non-motor vehicle) per 100,000 pop.                 | <b>19.3</b>   |
| Unintentional fall-related fatal injuries per 100,000 pop.                  | <b>7.1</b>  |
| Unintentional fire/burn-related fatal injuries per 100,000 pop.             | <b>1.5</b>  |
| Unintentional firearm-related fatal injuries per 100,000 pop.               | <b>0.3</b>  |
| Gun-purchasing legislation (8 points possible)                              | <b>1.5</b>  |
| % of tobacco settlement funds spent on health-related services and programs | <b>9.7</b>  |
| Total injury prevention funds per 1,000 pop.                                | <b>\$265.89</b>   |
| Unintentional injury prevention funds per 1,000 pop.                        | <b>\$15.36</b>  |
| Intentional injury prevention funds per 1,000 pop.                          | <b>\$161.61</b>   |
| Fall injury prevention funds per 1,000 pop.                                 | <b>\$0.00</b>   |
| Infant mortality rate per 1,000 live births                                 | <b>8.8</b>  |
| % of adults with BMI > 30   | <b>26.6</b>   |
| Current smokers, % of adults  | <b>22.1</b>   |
| Binge alcohol drinkers, % of adults   | <b>11.3</b>   |

**DISASTER PREPAREDNESS** **B-**

|  |                   |
|--|-------------------|
| Per capita federal disaster preparedness funds   | <b>\$6.79</b>     |
| Disaster preparedness funds used specifically for health care-related preparedness are tracked                                   | <b>Yes</b>        |
| All-hazards medical response plan or ESF-8 plan?   | <b>Yes</b>        |
| Plan shared with all EMS and essential hospital personnel?   | <b>Yes</b>        |
| Public health and emergency physician input into the state planning process  | <b>Yes, Yes</b>   |
| Public health and emergency physician input into the daily operations of the SEOC  | <b>Yes, Yes</b>   |
| Written plan for the coordination of the SEOC or local EMAs to provide security to hospitals in case of emergency events         | <b>Yes</b>        |
| Number of drills and exercises conducted involving hospital personnel, equipment, or facilities                                  | <b>121</b>        |
| Accredited by the Emergency Management Accreditation Program   | <b>No</b>         |
| Written plan specifically for special needs patients   | <b>Yes</b>        |
| Written plan to supply medications for chronic conditions  | <b>No</b>         |
| Written plan to supply dialysis for patients   | <b>No</b>         |
| Real-time notification system in place to notify identified health care providers of an event                                    | <b>Yes</b>        |
| "Just-in-time" training systems in place   | <b>Statewide</b>  |
| Statewide medical communication system with one layer of redundancy  | <b>Yes</b>        |
| Statewide patient tracking system  | <b>Yes</b>        |
| Statewide victim tracking system   | <b>Yes</b>        |
| Statewide real-time or near real-time syndromic surveillance system  | <b>Yes</b>        |
| Real-time surveillance system in place for common ED presentations   | <b>Yes</b>        |
| Bed surge capacity per 1M pop.   | <b>NR</b>         |
| Burn unit beds per 1M pop.   | <b>3.0</b>        |
| ICU beds per 1M pop.   | <b>284.7</b>      |
| Verified burn centers per 1M pop.  | <b>0.1</b>        |
| State able to verify credentials and assign volunteer health professionals to four ESAR-VHP levels                               | <b>Yes</b>        |
| Nurses registered in ESAR-VHP per 1M pop.  | <b>39.2</b>       |
| Physicians registered in ESAR-VHP per 1M pop.  | <b>11.8</b>       |
| Training required in disaster management and response to bio- and chem terrorism for essential hospital personnel, EMS personnel | <b>Yes, Yes</b>   |
| State or regional strike teams or medical assistance teams   | <b>Yes</b>        |
| Additional liability protections for health care workers during a disaster   | <b>Yes, civil</b> |
| % of RNs that received any emergency training  | <b>39.5</b>       |
| State requires EMS and essential ED personnel to be NIMS compliant   | <b>Yes</b>        |

 Improved since 2006

 Worsened since 2006

 No change since 2006

**NR** Not reported

**N/A** Not applicable

See *Summary Statistics for State Comparisons*