Survey on carotid artery stenting privileging

Earlier this year, the Credentialing Resource Center (CRC) surveyed medical staff professionals (MSP) regarding which specialties should be granted privileges for carotid artery stenting. This benchmarking survey is a direct response to interest among MSPs about the issue of privileging disputes in this practice area. We’d like to thank all of the respondents who completed the survey. The pages that follow detail the survey results.

Help us to help you

We’re continually striving to bring you the most helpful information in our benchmarking survey reports. If you have any suggestions concerning topics for future benchmarking surveys or how we could improve the survey or report, please e-mail them to managing editor Margot Suydam at msuydam@hcpro.com. We welcome and value your feedback.

The mission

Carotid artery stenting is a procedure that is a hot topic for many hospitals when it comes to privilege disputes. Currently, the list of specialties lining up to perform the procedure includes: interventional cardiologists, vascular surgeons, interventional radiologists, neurosurgeons, neurologists, interventional neuroradiologists, as well as general surgeons, cardiovascular surgeons, and internal medicine physicians who have completed a fellowship in cardiovascular medicine. The issue is not only which individuals should hold privileges for performing carotid artery stenting, but also what education, training, and experience should be required for the physician to be deemed competent in the procedure. Our objective is to provide you, the MSP, with the detailed information that you need to learn about the carotid artery stenting privileging practices of your peers at hospitals with demographics similar to your facility.

The design

According to a previous CRC survey, the demographics most requested by respondents were the number of physicians practicing, the annual number of procedures performed at the facility, and facility bed size. We have also included data on what type of facilities that respondents represent and whether the hospital is part of a healthcare system or is a stand-alone facility. We have carefully crossreferenced all data so you can gain knowledge of the privileging trends of your colleagues in terms
Survey < continued from p. 1

of the criteria listed above. We have not included regional data in this report because the number of individuals who responded from the various regions was relatively small, and did not seem to be representative of regional trends.

Each facility demographic has its own section that starts with a general statistical overview. Following the overview is a series of charts that drill down into the privileging trends of respondents. In each demographic section, we have addressed the following questions:

1. Which of the following specialties are granted privileges to perform carotid artery stent placement in your hospital?
2. Has your medical staff experienced privileging disputes regarding which specialties should be granted privileges for carotid artery stents?
3. In order to be granted carotid artery stenting privileges at your facility, how many of these procedures must a physician have performed in the past 12 months for competency?
4. In order to be granted carotid artery stenting privileges at your facility, how many diagnostic cerebral angiograms must the physician have performed in the past 12 months to demonstrate competency?
5. Has your facility created a dedicated carotid artery stenting team for this procedure?

I. The issue at hand

Almost half (44%) of hospitals responding to the survey say they have experienced carotid artery stent privileging disputes. Of interest is the nature of these disputes and how they were resolved. Nine percent of all respondents report that they have created stent teams or multidisciplinary subcommittees with representations from involved specialties to develop criteria that is acceptable to each specialty.

According to one MSP, the issue centers around the following questions:

1. Which specialty should primarily be in control of the procedure—vascular surgery or interventional radiology?
2. What is required in advanced training and experience to perform the procedure?

Another facility reports that only interventional radiologists hold privileges, although vascular surgeons and cardiologists are requesting them. Not until a more comprehensive program is designed and tested in its radiology specials lab, will the facility allow other specialties to begin the procedure. According to another hospital, interventional cardiologists want to perform carotid artery stent procedures, but they cannot meet the established criteria. Specifically, the hospital expects that postprocedure physician-response time to attend to patients must be 30 minutes or less, however the interventional cardiologists have not yet achieved this response rate.

A number of hospitals report that they have formed multidisciplinary subcommittees to hash out criteria acceptable to each specialty involved. One hospital says it formed an ad hoc committee composed of all of the specialties involved. Each specialty was mandated to meet and develop draft privileging requirements, which were then sent to individual departments for final review and recommendation and then to the credentialing committee and board of directors for final approval.

For many hospitals, the issue remains unresolved because gaining consensus among the specialties regarding the criteria is difficult. One MSP says it took over one year to get the involved specialties to agree upon and approve privileging criteria. A second MSP reports that after six years of negotiation, a subcommittee was finally convinced that there was a recommended national standard that they should meet. Therefore, the hospital adopted criteria very close to what the Society of Cardiovascular and Interventional Radiology recommends. Another hospital’s multidisciplinary team worked through the model privileging criteria outlined by the healthcare system HCA.

Meanwhile, another facility says when radiologists, cardiologists, and cardiovascular surgeons could not agree
on which practitioners should perform carotid artery stent procedures or which individuals should be involved in patient selection and postoperative care, they finally agreed on a carotid artery stenting team that would enable all interested physicians to be involved with the patient care. The team—which consists of cardiologists, vascular surgeons, radiologists, and neurologists—agreed on the following: At the time of the procedure, at least one of the participating interventionalists will have advanced training and experience in performing diagnostic or cerebral angiography, and be adept at treating the possible complications of carotid artery stenting.

II. A bird’s-eye view

Before we analyze each demographic, let’s take a big-picture look at the MSPs who responded to the survey. Most of the respondents hail from the north central and southeast regions of the country, with smaller percentages from other regional areas. A majority of respondents work at hospitals with more than 500 physicians, which perform fewer than 25 carotid artery stent procedures per year, and have more than 200 beds. The majority represented nonacademic acute-care hospitals and were part of the national healthcare system.

Nationally, vascular surgeons are most likely to hold privileges for carotid artery stenting, followed closely by interventional cardiologists and interventional radiologists. Significantly smaller percentages of hospitals privilege neurosurgeons, neurologists, and interventional neuroradiologists.

To be granted the privilege, 30% of respondents say that a physician must have performed 10–24 carotid artery stent procedures in the past 12 months. Almost the same percentage (27%) report no specific volume of procedures was required to show competency. Most hospitals (42%) do not require physicians to perform a minimum number of angiograms to show competency. Although almost half (44%) of hospitals responding say they have experienced stent privileging disputes, only 9% have created stent teams to resolve the issue.
Survey II  < continued from p. 3

### Network or stand-alone facility

- Part of a network: 70%
- Stand-alone facility: 30%

### Percentage of specialties with carotid artery stent privileges

- Interventional cardiologists: 73%
- Vascular surgeons: 80%
- Interventional radiologists: 61%
- Neurosurgeons: 14%
- Neurologists: 6%
- Interventional neuroradiologists: 15%
- Other: 3.5%

### Type of facility

- Academic medical center/teaching hospital: 29%
- Rural community hospital: 20%
- Nonacademic acute-care hospital: 51%

### Number of stents for competency

- 100+: 2%
- 60–100: 2%
- 40–59: 3%
- 25–39: 20%
- 10–24: 30%
- 5–9: 17%
- No specific volume: 27%

### Number of angiograms for stent competency

- 100+: 5%
- 75–100: 8%
- 50–74: 5%
- 30–49: 16%
- 10–29: 25%
- No minimum required: 42%

### Facilities experiencing stent privileging disputes

- Yes: 44%
- No: 56%

### Facilities with stent team

- Yes: 9%
- No: 91%
III. Number of physicians on the active medical staff at your hospital

To begin, 7.5% of hospitals surveyed have 50–100 physicians on the active medical staff, 14% have 101–199, 23% have 200–299, 7.5% have 300–399, 15% have 400–499, and 33% have more than 500 physicians. Interventional cardiologists, vascular surgeons, and interventional radiologists are the most likely to hold privileges for carotid artery stenting, regardless of the size of the hospital. Also, 100% of hospitals with 50–100 physicians on staff say they grant privileges to interventional neuroradiologists. The largest percentage of hospitals (70%) to say they have experienced privileging disputes falls in the 400–499 physician range, whereas the smallest percentage (20%) falls in the 50–100 and 200–299 ranges.

In terms of how many carotid artery stent procedures a physician must have performed in the past 12 months to be deemed competent, 60% of hospitals in the 50–100 and 300–399 physician-size ranges respond that they do not require a minimum number to hold privilege. Relatively equal percentages of hospitals at all ranges say they require 10–24 procedures per year. However, a majority of hospitals in all ranges do not require physicians to have performed a minimum number of angiograms to be granted carotid artery stenting privileges. Hospitals in the 101–199 (37.5%) and 200–299 (35.7%) range are the most likely to require 10–29 angiogram procedures for stenting competency. According to the survey, hospitals with more than 500 physicians are more likely to require a minimum number of procedures. Most hospitals have not created a stenting team.

1. Which of the following specialties are granted privileges to perform carotid artery stent placement in your hospital?
Survey III  < continued from p. 5

2. Has your medical staff experienced privileging disputes regarding which specialties should be granted privileges for carotid artery stents?

3. In order to be granted carotid artery stenting privileges at your facility, how many of these procedures must a physician have performed in the past 12 months for competency?
4. In order to be granted carotid artery stenting privileges at your facility, how many diagnostic cerebral angiograms must a physician have performed in the past 12 months to demonstrate competency?

![Graph showing the number of physicians with different ranges of diagnostic cerebral angiograms performed.]

5. Has your facility created a dedicated carotid artery stenting team for this procedure?

![Graph showing the number of physicians with dedicated carotid artery stenting teams.]
### IV. Number of carotid artery stent procedures performed per year at your facility (all physicians privileged at your location)

According to the survey, 46% of hospitals perform fewer than 25 carotid artery stents procedures per year, 30% perform 26–50, 13% perform 51–200, 7% perform 201–500, 2% perform 501–1,000, and 2% perform more than 1,000 procedures. Interventional cardiologists, vascular surgeons, and interventional radiologists are the most likely specialties to hold privileges for carotid artery stenting, regardless of the number of procedures performed at the hospital. The largest percentage of hospitals (100%) to say they have experienced privileging disputes falls in the 501–1,000 procedures per year range, whereas the smallest percentage (0%) are in the 1,000+ and 200–299 ranges.

In terms of how many carotid artery stent procedures a physician must have performed in the past 12 months for competency, 40% of hospitals in the less than 25 and 51–200 procedure range respond that they do not require a minimum number for competency. Relatively equal percentages of hospitals at all ranges say they require 10–24 procedures per year. A large majority of hospitals say they do not require physicians to perform a minimum number of angiograms to be granted stenting privileges, followed by the 10–29 range. However, 75% of hospitals in the 201–500 range require 10–29 angiograms, although 25% of this group says they require 75–100. Small percentages of hospitals in other number of stent procedure ranges also say they require 75–100 angiograms for stent competency. Again, most hospitals report that they have not created a stenting team.

1. Which of the following specialties are granted privileges to perform carotid artery stent placement in your hospital?
2. Has your medical staff experienced privileging disputes regarding which specialties should be granted privileges for carotid artery stents?

3. In order to be granted carotid artery stenting privileges at your facility, how many of these procedures must a physician have performed in the past 12 months for competency?
Survey IV  < continued from p. 9

4. In order to be granted carotid artery stenting privileges at your facility, how many diagnostic cerebral angiograms must the physician have performed in the past 12 months to demonstrate competency?

![Bar chart showing the number of procedures performed per year for different ranges.]

5. Has your facility created a dedicated carotid artery stenting team for this procedure?

![Bar chart showing the number of procedures performed per year for different ranges.]
V. Number of beds in your hospital

According to the survey, 4.5% of respondents have a facility bed size of 50–100, 21.5% have 101–150 beds, 8% have 151–200, and 66% of hospitals responding have more than 200 beds. Interventional cardiologists, vascular surgeons, and interventional radiologists are the most likely specialties to hold privileges for carotid artery stenting. Neurologists are privileged at 33% of the responding hospitals in the 50–100 bed range.

The largest percentage of hospitals (58.1%) to say they have experienced privileging disputes falls in the 200+ bed range; the smallest percentage (0%) are in the 50–100 range.

In terms of how many carotid artery stent procedures a physician must have performed in the past 12 months for competency, 100% of hospitals in the 50–100 bed-size range respond that they do not require a minimum number to hold stenting privileges.

However, 40% of hospitals in the 101–150 range require five to nine stent procedures per year, and 60% of this group require 10–24 stent procedures per year. A majority of the hospitals in all bed-size ranges do not require physicians to have performed a minimum number of angiograms in order to be granted carotid artery stenting privileges. Also, most hospitals have not created a carotid artery stenting team. The largest percentage (20%) to do so are at hospitals with a 151–200 facility bed-size.

1. Which of the following specialties are granted privileges to perform carotid artery stent placement in your hospital?
2. Has your medical staff experienced privileging disputes regarding which specialties should be granted privileges for carotid artery stents?

3. In order to be granted carotid artery stenting privileges at your facility, how many of these procedures must a physician have performed in the past 12 months for competency?
4. In order to be granted carotid artery stenting privileges at your facility, how many diagnostic cerebral angiograms must the physician have performed in the past 12 months to demonstrate competency?

5. Has your facility created a dedicated carotid artery stenting team for this procedure?
VI. What type of facility do you represent?

The largest majority of respondents (51%) were from nonacademic acute-care hospitals. Twenty-nine percent were from academic medical centers/teaching hospitals, and 20% were from rural community hospitals. As is the case with other demographics, academic and acute-care hospitals privilege interventional cardiologists, vascular surgeons, and interventional radiologists for carotid artery stenting procedures at equal percentages. A smaller percentage of rural hospitals were found to do the same. Neurosurgeons are the most likely specialty to hold privileges for carotid artery stenting at academic medical centers. Academic medical centers are the largest percentage (68%) of hospitals to report that they have experienced stenting privileging disputes, followed by nonacademic acute-care hospitals (39.4%). Finally, 84.6% of rural hospitals say they have not experienced a privileging dispute.

Meanwhile, rural community hospitals are the most likely (53.8%) not to require a minimum number of stent procedures per year for competency. Relatively equal percentages of hospitals of all types say they require 10–24 procedures per year, with the largest percentage (38.5%) of rural hospitals doing so. However, 38.5% of academic medical centers require 25–39 procedures for competency versus 7.7% of rural facilities and 16% of acute-care hospitals. Rural community hospitals are the most likely (61.5%) not to require a minimum number of angiogram procedures per year to maintain stent competency, and to require 10–29 procedures (38.5%). Significant percentages of academic (31%) and acute-care (41.9%) hospitals do not require a minimum number of angiograms. However, a relatively equal number of academic and acute-care facilities, 26.3% and 19.4% respectively, require 10–29 procedures. Close to 100% of the hospitals responding—no matter what type—have yet to create a carotid artery stenting team.

1. Which of the following specialties are granted privileges to perform carotid artery stent placement in your hospital?
2. Has your medical staff experienced privileging disputes regarding which specialties should be granted privileges for carotid artery stents?

![Bar chart showing percent of facilities experiencing privileging disputes by type of facility.]

3. In order to be granted carotid artery stenting privileges at your facility, how many of these procedures must a physician have performed in the past 12 months for competency?

![Bar chart showing distribution of minimum required procedure counts by type of facility.]

> continued on p. 16
Survey VI  < continued from p. 15

4. In order to be granted carotid artery stenting privileges at your facility, how many diagnostic cerebral angiograms must the physician have performed in the past 12 months to demonstrate competency?

5. Has your facility created a dedicated carotid artery stenting team for this procedure?
VII. Is your facility part of a healthcare system or network, or is it a stand-alone facility?

The largest majority (70%) of respondents to the survey were part of a healthcare system. Vascular surgeons are equally the most likely specialty to hold privileges for carotid artery stenting at both network (80%) and stand-alone (80%) facilities. A larger percentage of network facilities privilege interventional cardiologists (76.1%) for stenting, but stand-alone hospitals are more likely to privilege interventional radiologists (65%). Interventional neuroradiologists hold privileges at 19.6% of network hospitals, but only at 5% of stand-alone facilities. In terms of privileging disputes, 52.2% of network facilities have experienced a dispute, compared with 25% of stand-alone facilities.

Stand-alone facilities (31.6%) are more likely than network facilities (24.4%) not to require a minimum number of stent procedures per year for competency. Relatively equal percentages of both types of hospitals say they required five to nine and 10–24 procedures per year, although small percentages of both facility types require higher numbers of procedures for competency. However, stand-alone facilities (55.6%) are more likely than network facilities (37%) to require that physicians perform a minimum number of angiograms to be granted stenting privileges. Almost equal percentages of network (26.1%) and stand-alone facilities (22.2%) require 10–29 angiograms procedures for stenting competency. Close to 100% of hospitals responding—regardless of type—have yet to create a carotid artery stenting team.

1. Which of the following specialties are granted privileges to perform carotid artery stent placement in your hospital?
Survey VII  < continued from p. 17

2. Has your medical staff experienced privileging disputes regarding which specialties should be granted privileges for carotid artery stents?

![Graph showing privileging disputes by network or stand-alone facility.]

3. In order to be granted carotid artery stenting privileges at your facility, how many of these procedures must a physician have performed in the past 12 months for competency?

![Graph showing the number of procedures performed by network or stand-alone facility.]

For permission to reproduce part or all of this newsletter for external distribution or use in educational packets, contact the Copyright Clearance Center at www.copyright.com or 978/750-8400.
4. In order to be granted carotid artery stenting privileges at your facility, how many diagnostic cerebral angiograms must the physician have performed in the past 12 months to demonstrate competency?

![Graph showing the number of diagnostic cerebral angiograms performed in the past 12 months.]

5. Has your facility created a dedicated carotid artery stenting team for this procedure?

![Graph showing the percentage of facilities with a dedicated carotid artery stenting team.]

For permission to reproduce part or all of this newsletter for external distribution or use in educational packets, contact the Copyright Clearance Center at www.copyright.com or 978/750-8400.

© 2006 HCPro, Inc.
The information contained in this document is general. It has been designed and is intended for use by hospitals and their credentials committees in developing their own local approaches and policies for various credentialing and privileging issues. This information, including the materials, opinions, and research/data set forth herein, should not be adopted for use without careful consideration, discussion, additional research by physicians and counsel in local settings, and adaptation to local needs. The Credentialing Resource Center does not provide legal or clinical advice; for such advice, the counsel of competent individuals in these fields must be obtained.

Reproduction in any form outside the recipient's institution is forbidden without prior written permission. Copyright 2006 HCPro, Inc., Marblehead, MA 01945.