



Center for Clinical Standards and Quality /Survey & Certification Group

Ref: S&C: 13-26-CAH

DATE: April 19, 2013

TO: State Survey Agency Directors

FROM: Director
Survey and Certification Group

SUBJECT: Clarification of the Critical Access Hospital (CAH) Criteria for Rural Location and Mountainous Terrain Distance Standard

Memorandum Summary - CAH Guidance Updates

- ***Rural Location:*** The Centers for Medicare & Medicaid Services (CMS) is updating Chapter 2 and Appendix W of the State Operations Manual (SOM) to reflect the guidance issued in SC-11-33, July 15, 2011.
- ***Mountainous Terrain Criteria for Distance From Hospitals/Other CAHs:*** A CAH is eligible, based on location in mountainous terrain, to use the shorter minimum distance from a hospital/other CAH standard if over 15 miles of the roads on the travel route(s) from the CAH to any hospital or another CAH:
 - Are located in a mountain range; and
 - Have either of the following characteristics:
 - Consists of extensive sections of roads with steep grades (i.e., greater than 5 percent), continuous abrupt and frequent changes in elevation or direction, or any combination of horizontal and vertical alignment that causes heavy vehicles to operate at crawl speeds for significant distances or at frequent intervals; or
 - The roads on the travel route are considered by the State Transportation or Highway agency to be located in mountainous terrain based on significantly more complicated than usual construction techniques required to achieve compatibility between the road alignment and surrounding rugged terrain.
 - A letter from the State Transportation or Highway agency specific to the travel route(s) in question is required to support the claim of mountainous terrain.

A. Background

Among other requirements, CAHs are subject to the requirements concerning location in a rural area or treatment as rural at 42 CFR 485.610(b), location relative to other hospitals or CAHs at 42 CFR 485.610(c), and off campus location requirements at 42 CFR 485.610(e)(2). SC-11-33, released on July 15, 2011, addresses the method to determine whether the CAH is in a rural location or may be treated as rural. That guidance is now being incorporated into the Section 2256A and Appendix W of

the SOM. Similar to that guidance, this memorandum addresses the requirements regarding mountainous terrain.

B. Mountainous Terrain

With respect to a CAH's location relative to other hospitals or CAHs, the CAH must be located more than a 35-mile drive, or, in the case of mountainous terrain or in areas with only secondary roads available, a 15-mile drive, from a hospital or another CAH. We are further updating the guidance in Section 2256A of the SOM concerning the mountainous terrain standard for permitting a CAH to meet the shorter, >15-mile minimum distance from a hospital/other CAH standard under 42 CFR 485.610(c).

Specifically, in order to be considered "mountainous terrain" permitting use of the shorter standard, over 15 miles of the roads on any travel route(s) from the CAH to any hospital or another CAH must:

1. Be located in a mountain range, identified as such on any official maps or other documents prepared for and issued to the public; *and*
2. Have either of the following characteristics:
 - Extensive sections of roads with steep grades, continuous abrupt and frequent changes in elevation or direction, or any combination of horizontal and vertical alignment that causes heavy vehicles to operate at crawl speeds for significant distances or at frequent intervals;¹ *or*
 - Be considered mountainous terrain by the State Transportation or Highway agency based on significantly more complicated than usual construction techniques that were originally required to achieve compatibility between the road alignment and the surrounding rugged terrain. For example, because the changes in elevation and direction are abrupt in mountainous terrain, roadbeds may require frequent benching, side hill excavations, and embankment fills.²

A letter from the State Transportation or Highway agency confirming either of the above set of road characteristics specific to the travel route(s) in question is required to support the claim of mountainous terrain.

It is not uncommon for there to be roads (or sections of roads) through mountainous areas that do not meet the criteria for "mountainous terrain." When calculating the mountainous terrain travel distance to any /other CAH, subtract the total distance represented by those sections of the travel route that are not considered "mountainous terrain."

¹ *Mannering, F. L., Washburn, S. S., & Kilareski, W. P. (2009). Principles of Highway Engineering and Traffic Analysis. Hoboken, NJ: John Wiley and Sons, Inc*

² *Mannering, F. L., Washburn, S. S., & Kilareski, W. P. (2009). Principles of Highway Engineering and Traffic Analysis. Hoboken, NJ: John Wiley and Sons, Inc.*

The RO will review documentation submitted by the CAH applicant, as well as consult publicly available information (e.g., State transportation or highway department maps, U.S. Geological Survey maps, or Web-based map servers such as NationalAtlas.gov) in determining whether the CAH qualifies for the 15-mile standard based on mountainous terrain.

C. Rural Location

We are also taking this opportunity to update the regulatory text cited in the SOM for 42 CFR 485.610(b), found at Appendix W at Tag C-0162, to match the wording of the current regulation, and we are revising the interpretive guidelines here and in Chapter 2, Section 2256A, to reflect the guidance previously issued via SC-11-33, July 15, 2011 on determining whether a CAH meets the rural location requirement.

An advance copy of the revised SOM is attached. At a later date, the on-line SOM will be updated accordingly. The final update may differ slightly from the advance copy.

Questions about this memorandum should be addressed to Kianna Banks at kianna.banks@cms.hhs.gov.

Effective Date: Immediately. This policy should be communicated with all survey and certification staff, their managers and the State/Regional Office training coordinators within 30 days of this memorandum.

Training: The information contained in this letter should be shared with all survey and certification staff, their managers, and the State/Regional Office training coordinators.

/s/

Thomas E. Hamilton

Attachment - Advance copy of updated SOM

cc: Survey and Certification Regional Office Management

CMS Manual System

Pub. 100-07 State Operations Provider Certification

Department of Health &
Human Services (DHHS)
Centers for Medicare &
Medicaid Services (CMS)

Transmittal

(Advance Copy)

Date:

SUBJECT: State Operations Manual Chapter 2, Section 2256A, CAH Distance Criteria

I. SUMMARY OF CHANGES: Guidance is clarified concerning the criteria for determining whether a CAH meets the rural location requirements as well as whether a CAH applicant qualifies on the basis of mountainous terrain for use of the lesser, 15-mile standard for minimum distance from another hospital or CAH.

NEW/REVISED MATERIAL- **EFFECTIVE DATE*:** Upon Issuance
IMPLEMENTATION DATE: Upon Issuance

The revision date and transmittal number apply to the red italicized material only. Any other material was previously published and remains unchanged.

II. CHANGES IN MANUAL INSTRUCTIONS:
(R = REVISED, N = NEW, D = DELETED)

R/N/D	CHAPTER/SECTION/SUBSECTION/TITLE
R	Chapter 2, Section 2256A, Verification Criteria
R	Appendix W, §485.610(b)

III. FUNDING: No additional funding will be provided by CMS

IV. ATTACHMENTS:

	Business Requirements
X	Manual Instruction
	Confidential Requirements
	One-Time Notification
	Recurring Update Notification

*Unless otherwise specified, the effective date is the date of service.

2256A - Verification Criteria

(Rev.)

If the provider is a hospital, CAH verification requires that the RO review the facility file to determine if the prospective CAH is in compliance with the hospital CoPs in 42 CFR Part 482 at the time it made application for designation as a CAH (see [42 CFR 485.612](#)). If the provider is a closed hospital or a downsized hospital, it is not necessary that they meet hospital CoPs at the time of application or on conversion.

The RO will reverify compliance with 42 CFR 485.610(a) and (b) and has primary responsibility to verify compliance with 42 CFR 485.610(c) and (d).

Rural location

Among other requirements, pursuant to 42 CFR 485.610(b), all CAH applicants and existing CAHs must either be located in a rural area or treated as rural in accordance with 42 CFR 412.103 in order to be eligible for CAH designation. Under 42 CFR 485.610(b)(1)(i), a rural area is any area that is outside a Metropolitan Statistical Areas (MSA), as defined by the Federal Office of Management and Budget (OMB). ROs must consult the latest OMB Bulletin updating statistical area definitions and providing guidance on their usage. Specifically, List #1 in the Bulletin identifies all of the MSAs in alphabetical order. This list may be used to identify MSAs in the State. List #2 in the Bulletin provides a list of each MSA, along with the counties contained within that MSA. OMB Bulletins may be found at:

http://www.whitehouse.gov/omb/bulletins_default/

This is only the first step in determining whether a CAH applicant is located in a “rural area” or may be treated as rural.

- *Even if the CAH applicant is located outside an MSA and therefore is in a rural area, it is also necessary to determine that it is also not:*
 - *Located in an area that has been recognized as urban in accordance with 42 CFR 412.64(b), excluding §412.64(b)(3);*
 - *Classified as an urban hospital in accordance with 42 CFR 412.230(e); or*
 - *Redesignated to an adjacent urban area in accordance with 42 CFR 412.232.*

Financial staff in the RO should be able to provide information on whether the CAH applicant falls in one of the above three categories, since Part 412 is a regulation developed primarily for payment purposes.

- *Even if the CAH applicant is located in an MSA, it may nevertheless qualify to be “treated” as rural if it is a hospital that has been reclassified as rural in accordance with 42 CFR 412.103, i.e., it was reclassified based on;*
 - *Being located in a rural census tract of a MSA per the most recent version of the Goldsmith Modification or the Rural-Urban Commuting codes, as determined by the Office of Rural Health in the Health Resources and Services Administration. (See <http://www.hrsa.gov/healthit/toolbox/RuralHealthITtoolbox/Introduction/defined.html>);*

Or

- *It would qualify as a rural referral center or a sole community hospital if it were located in a rural area;*

Or

- *It is located in an area designated under any State law (including State regulation) as a rural area, or has been designated as a rural hospital under State law (including regulation).*

Financial staff in the RO is a source of information on whether the CAH applicant is a hospital that was reclassified in this manner.

Location relative to other facilities or necessary provider certifications:

In addition, the regulations at 42 CFR 485.610(c) specify that one of the following 3 distances from other facilities requirements must be met:

- 35-Mile Distance: The CAH must be located more than a 35-mile drive from any hospital or other CAH; or
- 15-Mile Distance: In the case of mountainous terrain or in areas with only secondary roads available, the CAH must be located more than a 15-mile drive from any hospital or other CAH; or
- No Distance Requirement: In the case of a CAH that was designated by the State as being a necessary provider of health care services to residents in the area before January 1, 2006, there is no minimum distance requirement.

In demonstrating that it meets the *standard for* more than a 35-mile drive, a CAH applicant must document that there is no driving route from the applicant to any other CAH or hospital that is 35 miles or less in length.

Application of the more than 15-mile drive standard, based on mountainous terrain.

Slope and ruggedness of the terrain around the CAH, together with absolute altitude (the distance above sea level), determine many of the fundamental characteristics of mountainous terrain.¹ However, being located at a high elevation does not, in and of itself, constitute “mountainous terrain,” nor does being located at the foot of a mountain or where mountains can be viewed. Further, the absolute altitude required to constitute mountainous terrain will vary in different regions. For example, the altitude of the Appalachian Mountains is considerably lower than that of the Rocky Mountains, yet the slope and ruggedness of the terrain in many portions of the Appalachians is mountainous. Furthermore, roads passing through mountainous terrain are characterized by certain typical engineering features. For the purposes of determining a CAH’s eligibility for the 15-mile drive standard based on mountainous terrain, the roads on the travel route(s) to hospitals or other CAHs must meet the following criteria:

- *Over 15 miles of the roads on the travel route(s) from the CAH to any hospital or another CAH must be located in a mountain range, identified as such on any official maps or other documents prepared for and issued to the public;*

and

- *Since being located within a mountain range in and of itself does not mean that the drive to any other hospital or CAH includes travel through “mountainous terrain,” the roads on the travel route(s) from the CAH to any other hospital or CAH must have either of the following characteristics:*
 - *Extensive sections of roads with steep grades (i.e., greater than 5 percent), continuous abrupt and frequent changes in elevation or direction, or any combination of horizontal and vertical alignment that causes heavy vehicles to operate at crawl speeds for significant distances or at frequent intervals.² (Horizontal alignment refers to the “straightness” of the roadway, vertical alignment refers to the roadway’s “flatness,” and crawl speed is the speed at which a truck has no power to accelerate on long, steep grades.^{3,4} Thus, roads in mountainous terrain are commonly described as winding and steep);*

or

- *Be considered mountainous terrain by the State Transportation or Highway agency, based on significantly more complicated than usual construction*

¹ United Nations Environment Programme World Conservation Monitoring Centre. (2002). Mountain Watch. Retrieved August 11, 2010, from http://www.unep-wcmc.org/mountains/mountain_watch/pdfs/.

² Mannering, F. L., Washburn, S. S., & Kilareski, W. P. (2009). *Principles of Highway Engineering and Traffic Analysis*. Hoboken, NJ: John Wiley and Sons, Inc

³ *Highway Capacity Manual: 2000 (U. S. Customary Units)* by Transportation Research Board (Dec. 2000). p 23-9.

⁴ Donnell, E. T., Ni, Y., Adolini, M., & Elefteriadou, L. (2001). Speed prediction models on two-lane rural highways. *Transportation Research Record*, 1751, 44-55.

*techniques that were originally required to achieve compatibility between the road alignment and surrounding rugged terrain. For example, because the changes in elevation and direction are abrupt in mountainous terrain, roadbeds may require frequent benching, side hill excavations, and embankment fills.*⁵

A letter from the State Transportation or Highway agency specific to the travel route(s) in question is required to support the claim of mountainous terrain based on either of these sets of road characteristics.

It is not uncommon for there to be roads (or sections of roads) through mountainous areas that do not meet the criteria for “mountainous terrain.” A CAH would qualify for application of the mountainous terrain criterion if there is a combination of mountainous and non-mountainous terrain between it and any other hospital or CAH, so long as there is no route to any hospital or other CAH with 15 or fewer miles of roads in mountainous terrain. When calculating the mountainous terrain travel distance to any hospital/other CAH, subtract the total distance represented by those sections of the travel route that are not considered “mountainous terrain.” For example, if the route to the nearest hospital consisted of 12 miles in mountainous terrain, followed by 5 miles in non-mountainous terrain, followed by 4 miles in mountainous terrain, then the requirement for a total of more than 15 miles would be met (12 miles plus 4 miles – or 21 miles minus 5 miles – yield 16 total miles of mountainous terrain).

Application of the more than 15-mile drive standard, based on secondary roads

To be eligible for the lesser distance standard due to the secondary road criteria under §485.610(c) the CAH must document that there are more than 15 miles between the CAH and any hospital or other CAH where there are no primary roads. A primary road is:

- A numbered federal highway, including interstates, intrastates, expressways or any other numbered federal highway; or
- A numbered State highway with 2 or more lanes each way; or
- A road shown on a map prepared in accordance with the U.S. Geological Survey’s Federal Geographic Data Committee (FGDC) Digital Cartographic Standard for Geologic Map Symbolization as a “primary highway, divided by median strip.”

A CAH may qualify for application of the “secondary roads” criterion if there is a combination of primary and secondary roads between it and any hospital or other CAH, so long as more than 15 of the total miles from the hospital or other CAH consists of areas in which only secondary roads are available. To apply the *secondary roads* criterion, measure the total driving distance *between the CAH and each hospital or CAH*

⁵ *Mannering, F. L., Washburn, S. S., & Kilareski, W. P. (2009). Principles of Highway Engineering and Traffic Analysis. Hoboken, NJ: John Wiley and Sons, Inc.*

located within a 35 mile drive and subtract the portion of *that drive* in which primary roads are available. If the result is more than 15 miles *for each drive to a hospital or CAH facility*, the 15-mile criterion is met.

The RO will review documentation submitted by the provider, as well as consult State transportation or highway department maps, maps of the U.S. Geological Survey, *and various Web-based map servers (e.g., NationalAtlas.gov)* to determine whether the provider meets the requirements of 42 CFR 485.610(c).

State Operations Manual

Appendix W - Survey Protocol, Regulations and Interpretive Guidelines for Critical Access Hospitals (CAHs) and Swing-Beds in CAHs

(Rev.)

C-0162

§485.610(b) Standard: Location in a Rural Area or Treatment as Rural

The CAH meets the requirements of either paragraph (b)(1) or (b)(2) of this section *or the requirements of either (b)(3) or (b)(4) of this section.*

(1) The CAH meets the following requirements:

- (i) The CAH is located outside any area that is a Metropolitan Statistical Area, as defined by the Office of Management and Budget, or that has been recognized as urban under §412.64(b), *excluding paragraph (b)(3) of this chapter;*
- (ii) The CAH has not been classified as an urban *hospital* for purposes of the standardized payment amount by CMS or the Medicare Geographic Classification Review Board under §412.230(e) of this chapter and is not among a group of hospitals have been redesignated to an adjacent urban area under §412.232 of this chapter.

(2) The CAH is located within a Metropolitan Statistical Area, as defined by the Office of Management and Budget, but is being treated as being located in a rural area in accordance with §412.103 of this chapter.

(3) Effective for October 1, 2004 through September 30, 2006, the CAH does not meet the location requirements in either paragraph (b)(1) or (b)(2) of this section and is located in a county that, in FY 2004, was not part of a Metropolitan Statistical Area as defined by the Office of Management and Budget, but as of FY 2005 was included as part of such Metropolitan Statistical Area as a result of the most recent census data and implementation of the new Metropolitan Statistical Area definitions announced by the Office of Management and Budget on June 3, 2003.

(4) Effective for October 1, 2009 through September 30, 2011, the CAH does not meet the location requirements in either paragraph (b)(1) or (b)(2) of this section and is located in a county that, in FY 2009, was not part of a Metropolitan Statistical Area as defined by the Office of Management and Budget, but as of FY 2010, was included as part of such Metropolitan Statistical Area as a result of the most recent census data and implementation of the new Metropolitan Statistical Area definitions announced by the Office of Management and Budget on November 20, 2008.

Interpretive Guidelines §485.610(b)

Rural location

Among other requirements, pursuant to 42 CFR 485.610(b), all CAHs must either be located in a rural area or treated as rural in accordance with 42 CFR 412.103 in order to be eligible for CAH designation. (The temporary provisions at 42 CFR 485.610(b)(3) and (4) have expired and no longer apply.)

Under 42 CFR 485.610(b)(1)(i), a rural area is any area that is outside a Metropolitan Statistical Area (MSA), as defined by the Federal Office of Management and Budget (OMB). The CMS RO will consult the latest OMB Bulletin updating statistical area definitions and providing guidance on their usage. Specifically, List #1 in the Bulletin identifies all of the MSAs in alphabetical order. This list may be used to identify MSAs in the State. List #2 in the Bulletin provides a list of each MSA, along with the counties contained within that MSA. OMB Bulletins may be found at:

http://www.whitehouse.gov/omb/bulletins_default/

This is only the first step in determining whether a CAH applicant is located in a “rural area” or may be treated as rural.

- *Even if the CAH applicant is located outside an MSA and therefore is in a rural area, it is also necessary to determine that it is also not:*
 - *Located in an area that has been recognized as urban in accordance with 42 CFR 412.64(b), excluding §412.64(b)(3);*
 - *Classified as an urban hospital in accordance with 42 CFR 412.230(e); or*
 - *Redesignated to an adjacent urban area in accordance with 42 CFR 412.232.*

Financial staff in the RO should be able to provide information on whether the CAH applicant falls in one of the above three categories, since 42 CFR Part 412 are regulations developed primarily for payment purposes.

- *Even if the CAH applicant is located in an MSA, it may nevertheless qualify to be “treated” as rural if it is a hospital that has been reclassified as rural in accordance with 42 CFR 412.103, i.e., it was reclassified based on:*

- *Being located in a rural census tract of a MSA per the most recent version of the Goldsmith Modification or the Rural-Urban Commuting codes, as determined by the Office of Rural Health in the Health Resources and Services Administration. (See <http://www.hrsa.gov/healthit/toolbox/RuralHealthITtoolbox/Introduction/defined.html>);*

Or

- *It would qualify as a rural referral center or a sole community hospital if it were located in a rural area;*

Or

- *It is located in an area designated under any State law (including State regulation) as a rural area, or has been designated as a rural hospital under State law (including regulation).*

Survey Procedures §485.610(b)

Confirm with the RO that a CAH *applicant or an existing CAH* meets the *rural* location requirement prior to scheduling the survey.