June 16, 2014

REFERENCE:  CMS-3277-P
Fire Safety Requirements for Certain Health Care Facilities, Proposed Rule

COMMENTS

Overall, Koffel Associates, Inc. supports the adoption of the 2012 Editions of NFPA 101® and NFPA 99. We do, however, offer the following comments:

Part 416.44 – Ambulatory Surgical Services

416.44 (b)(1)
… “regardless of the number of patients served.”

We do not support modifying the definition of ambulatory health care facility as proposed.

As done in the past for ambulatory surgical centers, CMS has enacted a more stringent definition by changing the requirement for four or more persons, to any number of persons. NFPA 101®, Life Safety Code®, defines a health care occupancy and an ambulatory health care occupancy as one in which four or more patients/residents are receiving care. The definition for a health care occupancy has remained essentially the same since the first edition of NFPA 101 (1963) and goes back to the 1961 Edition of the Building Exits Code. The Life Safety Code Handbook states that the basis of the four or more in the definition is because Paragraph “24.1.1.1 permits a living unit housing a family and up to three outsiders to be classified as a one-family dwelling.” This also introduces the concept that providing health care for up to three people in one’s home does not change the occupancy classification of the building and clearly allows for home health services.

Over the years, USA codes have defined health care occupancies, or more specifically hospitals, as having anywhere from one to more than ten occupants. During the development of the 2000 Edition of NFPA 101, Mayer Zimmerman, then with DHHS: Health Care Financing Administration, submitted two proposals to revise the definition of ambulatory health care facility by eliminating the “four or more” aspect of the definition thereby resulting an AHC being defined as one or more patients incapable of self-preservation. The proposals were rejected with the following Committee Statement:

“The submitter has not provided adequate substantiation to make the code requirement so strict. The level of risk when there are fewer than 4 patients is less because of the high staff-to-patient ratio. Staff can assist the small number of patients with evacuation so as not to need the defend-in-place features applicable to health care occupancies.”

The responsible NFPA Technical Committees for NFPA 99 and NFPA 101 are saying that the requirements for the equipment and systems directly related to providing patient care apply when one or more patients/residents are receiving such treatment or care. However, based upon a qualitative risk assessment, the additional requirements for buildings in which such care is provided (building
construction type, smoke barriers, fire protection systems, etc.) do not need to apply until there are at least four or more patients/residents who are not capable of self-preservation in the building. A change in the 2012 Edition of *NFPA 101* seems to confirm that position because portions of a health care facility may be classified as other occupancies when they are not intended to simultaneously provide services to four or more inpatients. The more rigid definition imposed by CMS will incur additional cost to the provider without any justification based on risk. We strongly recommend that CMS not adopt more rigid building and life safety requirements for ambulatory surgical centers with less than four qualifying occupants.

**416.44(b)(6)**

**We do not support reinserting the requirement for smoke venting for windowless anesthetizing locations.**

(6) In windowless anesthetizing locations, the ASC must have a supply and exhaust system that –

(i) Automatically vents smoke and products of combustion
(ii) Prevents recirculation of smoke originating within the surgical suite, and
(iii) Prevents the circulation of smoke entering the system intake

Comment: During the development of the 2012 Edition of the NFPA 99, the requirement for a form of “smoke control” in windowless anesthetizing and operating rooms that was present in the earlier editions of NFPA 99 was reviewed and it was decided to not retain the requirement. The requirement for a form of “smoke control” was included in previous editions of NFPA 99 and was adopted when many, if not most such locations, were not protected with an automatic sprinkler system. During this time, it was also common practice to use flammable anesthetizing gases. The 2012 Edition of NFPA 99 is a risk-based document, and it recognizes that the installation of quick response sprinkler protection in new health care facilities and the use of nonflammable anesthetizing gases significantly reduces the risk of serious injury from fire in these areas.

Another concern is caused by the actual proposed language and the lack of guidance on how these systems are to be designed. It is unclear if NFPA 99 is requiring a smoke control system meeting NFPA 92 requirements. It is often this very restrictive interpretation that is applied by the local jurisdiction. This interpretation makes the system more costly to design and install. We do not believe the potential cost of the “smoke control” in these areas is justified by the risk present in new health care facilities. We strongly recommend that this language not be added by CMS in their final adoption.

Lastly, it is not clear if the requirement would apply to existing ambulatory surgical centers. NFPA 99 contains language indicating that the construction related requirements typically do not apply to existing buildings. However, this requirement is now outside of the referenced standard and the application needs to be clarified. This is further compounded by the proposed, revised definition for an ambulatory surgical center as being one or more patients.

Should CMS decide that the requirement is justified and should remain and in recognition that not all ambulatory surgical centers are protected with an automatic sprinkler system, we recommend that an exception be provided for those facilities in which the windowless anesthetizing location is protected with an approved, supervised automatic sprinkler system. We would further recommend that the application be clarified to only apply to new facilities. Lastly, CMS should provide the design criteria by which such systems should be designed and evaluated for compliance to the requirement.
Part 418.41(b)(1)

We do not support modifying the definition of hospital as proposed.

As done in the past for ambulatory surgical centers, CMS has proposed to enact a more stringent definition by changing the requirement for four or more persons, to any number of persons. NFPA 101, Life Safety Code, defines a health care occupancy and an ambulatory health care occupancy as one in which four or more patients/residents are receiving care. The definition for a health care occupancy has remained essentially the same since the first edition of NFPA 101 (1963) and goes back to the 1961 Edition of the Building Exits Code. The Life Safety Code Handbook states that the basis of the four or more in the definition is because Paragraph “24.1.1.1 permits a living unit housing a family and up to three outsiders to be classified as a one-family dwelling.” This also introduces the concept that providing health care for up to three people in one’s home does not change the occupancy classification of the building and clearly allows for home health services.

Over the years, USA codes have defined health care occupancies, or more specifically hospitals, as having anywhere from one to more than ten occupants. During the development of the 2000 Edition of NFPA 101, Mayer Zimmerman, then with DHHS: Health Care Financing Administration, submitted two proposals to revise the definition of ambulatory health care facility by eliminating the “four or more” aspect of the definition thereby resulting in an AHC being defined as one or more patients incapable of self-preservation. The proposals were rejected with the following Committee Statement:

“The submitter has not provided adequate substantiation to make the code requirement so strict. The level of risk when there are fewer than 4 patients is less because of the high staff-to-patient ratio. Staff can assist the small number of patients with evacuation so as not to need the defend-in-place features applicable to health care occupancies.”

The responsible NFPA Technical Committees for NFPA 99 and NFPA 101 are saying that the requirements for the equipment and systems directly related to providing patient care apply when one or more patients/residents are receiving such treatment or care. However, based upon a qualitative risk assessment, the additional requirements for buildings in which such care is provided (building construction type, smoke barriers, fire protection systems, etc.) do not need to apply until there are at least four or more patients/residents who are not capable of self-preservation in the building. A change in the 2012 Edition of NFPA 101 seems to confirm that position because portions of a health care facility may be classified as other occupancies when they are not intended to simultaneously provide services to four or more inpatients. The more rigid definition imposed by CMS will incur additional cost to the provider without any justification based on risk. We strongly recommend that CMS not adopt more rigid building and life safety requirements for ambulatory surgical centers with less than four qualifying occupants.

The rational provided seems to compare the surgical units in a hospital to those in an ambulatory surgical center. However, revising the definition of a hospital is more problematic. As we understand the proposal, it is not limited to the surgical units in a hospital. As such, is it the intent that any facility providing overnight sleeping accommodations for one or more patients requiring medical care is a hospital? If so, is it the intent that all buildings in which home health care is provided for a person who is not capable of self-preservation be considered a hospital? As noted in the discussion provided in the related change to ambulatory surgical centers, the current definition in NFPA 101 allows for care being provided to a limited number of patients without the building meeting all the requirements for a hospital.
However, the equipment and systems related to the care being provided are still required to meet NFPA 99. This provision seems to be extremely excessive with no documented history of a fire problem.

482.41(b)(9)

We do not support reinserting the requirement for smoke venting for windowless anesthetizing locations.

(6) In windowless anesthetizing locations, the ASC must have a supply and exhaust system that –
(i) Automatically vents smoke and products of combustion
(ii) Prevents recirculation of smoke originating within the surgical suite, and
(iii) Prevents the circulation of smoke entering the system intake

Comment: During the development of the 2012 Edition of the NFPA 99, the requirement for a form of “smoke control” in windowless anesthetizing and operating rooms that was present in the earlier editions of NFPA 99 was reviewed and it was decided to not retain the requirement. The requirement for a form of “smoke control” was included in previous editions of NFPA 99 and was adopted when many, if not most such locations, were not protected with an automatic sprinkler system. During this time, it was also common practice to use flammable anesthetizing gases. The 2012 Edition of NFPA 99 is a risk-based document, and it recognizes that the installation of quick response sprinkler protection in new health care facilities and the use of nonflammable anesthetizing gases significantly reduces the risk of serious injury from fire in these areas.

Another concern is caused by the actual proposed language and the lack of guidance on how these systems are to be designed. It is unclear if NFPA 99 is requiring a smoke control system meeting NFPA 92 requirements. It is often this very restrictive interpretation that is applied by the local jurisdiction. This interpretation makes the system more costly to design and install. We do not believe the potential cost of the “smoke control” in these areas is justified by the risk present in new health care facilities. We strongly recommend that this language not be added by CMS in their final adoption.

Lastly, it is not clear if the requirement would apply to existing ambulatory surgical centers. NFPA 99 contains language indicating that the construction related requirements typically do not apply to existing buildings. However, this requirement is now outside of the referenced standard and the application needs to be clarified. This is further compounded by the proposed, revised definition for an ambulatory surgical center as being one or more patients.

Should CMS decide that the requirement is justified and should remain and in recognition that not all ambulatory surgical centers are protected with an automatic sprinkler system, we recommend that an exception be provided for those facilities in which the windowless anesthetizing location is protected with an approved, supervised automatic sprinkler system. We would further recommend that the application be clarified to only apply to new facilities. Lastly, CMS should provide the design criteria by which such systems should be designed and evaluated for compliance to the requirement.
We do not support reinserting the requirement for window sill height.

The 2012 Edition of NFPA 101 no longer requires an outside window for all patient sleeping rooms. As such, re-inserting a requirement for window sill height can be problematic. On June 4, 2014 a patient died jumping from a window of St. Luke’s Hospital in Bethlehem Township, PA. A search of the Internet will identify numerous similar instances of patients being injured or dying from falling or jumping out windows of health care facilities. The height of the window sill should be left to the registered design professional and the facility based upon the potential risk to the patients, visitors, and staff in the facility.

Additional Recommendation

Consistent with the discussion regarding categorical waivers in the Notice, we would recommend that CMS issue a new categorical waiver permitting an increased area of patient care non-sleeping suites as permitted in the 2015 Edition of NFPA 101. CMS already is accepting categorical waivers for patient sleeping suites based upon the 2012 Edition. The 2015 Edition of NFPA 101 permits a similar increase in the area of patient care non-sleeping suites. The increased suite area is also permitted in the 2015 Edition of the International Building Code (IBC). If the increased area is not permitted by CMS, there is a risk that facilities designed to the 2015 Edition of the IBC will not be in compliance with the CMS Conditions of Participation.

We do not support modifying the definition of a long term care facility as proposed.

As done in the past for ambulatory surgical centers, CMS has proposed to enact a more stringent definition by changing the requirement for four or more persons, to any number of persons. NFPA 101, Life Safety Code, defines a health care occupancy and an ambulatory health care occupancy as one in which four or more patients/residents are receiving care. The definition for a health care occupancy has remained essentially the same since the first edition of NFPA 101 (1963) and goes back to the 1961 Edition of the Building Exits Code. The Life Safety Code Handbook states that the basis of the four or more in the definition is because Paragraph “24.1.1.1 permits a living unit housing a family and up to three outsiders to be classified as a one-family dwelling.” This also introduces the concept that providing health care for up to three people in one’s home does not change the occupancy classification of the building and clearly allows for home health services.

Over the years, USA codes have defined health care occupancies, or more specifically hospitals, as having anywhere from one to more than ten occupants. During the development of the 2000 Edition of NFPA 101, Mayer Zimmerman, then with DHHS: Health Care Financing Administration, submitted two proposals to revise the definition of ambulatory health care facility by eliminating the “four or more” aspect of the definition thereby resulting an AHC being defined as one or more patients incapable of self-preservation. The proposals were rejected with the following Committee Statement:

“The submitter has not provided adequate substantiation to make the code requirement so strict. The level of risk when there are fewer than 4 patients is less because of the high staff-to-patient ratio. Staff can assist the small number of patients with evacuation so as not to need the defend-in-place features applicable to health care occupancies.”
The responsible NFPA Technical Committees for NFPA 99 and NFPA 101 are saying that the requirements for the equipment and systems directly related to providing patient care apply when one or more patients/residents are receiving such treatment or care. However, based upon a qualitative risk assessment, the additional requirements for buildings in which such care is provided (building construction type, smoke barriers, fire protection systems, etc.) do not need to apply until there are at least four or more patients/residents who are not capable of self-preservation in the building. A change in the 2012 Edition of NFPA 101 seems to confirm that position because portions of a health care facility may be classified as other occupancies when they are not intended to simultaneously provide services to four or more inpatients. The more rigid definition imposed by CMS will incur additional cost to the provider without any justification based on risk. We strongly recommend that CMS not adopt more rigid building and life safety requirements for ambulatory surgical centers with less than four qualifying occupants.

Unlike ambulatory surgical centers and hospitals, CMS has provided no rationale for this proposed revision. However, revising the definition of a long term care facility is more problematic than the proposed change for an ambulatory surgical center. Any facility providing overnight sleeping accommodations for one or more patients requiring nursing care is a long term care facility? If so, is it the intent that all buildings in which home health care is provided for a person who is not capable of self-preservation be considered a long term care facility? If an assisted living facility has one patient who is incapable of self-preservation, is it a long term care facility? Is there a duration for which the patient is incapable of self-preservation or is it any time a patient is incapable of self-preservation? As noted in the discussion provided in the related change to ambulatory surgical centers, the current definition in NFPA 101 allows for care being provided to a limited number of patients without the building meeting all the requirements for a hospital. However, the equipment and systems related to the care being provided are still required to meet NFPA 99. This provision seems to be extremely excessive with no documented history of a fire problem.

Summary

We note that changes similar to the ones identified above are proposed for other types of facilities as well. We believe that we have presented rational arguments for not including those revisions for the facilities discussed in the comment and would recommend to CMS that they consider the same comments as being applicable to other facilities as well. We also find it interesting that CMS has chosen to delete certain chapters of NFPA 99. We understand that CMS has, in a separate notice, proposed criteria regarding Emergency Management which may be the rational for deleting Chapter 12. We have not, however, seen a rational for deleting the other chapters which address critical aspects associated with the design and operation of health care facilities in a safe manner. Information technology systems are becoming increasingly critical in health care facilities and yet CMS is proposing to delete the chapter that contains requirements for IT systems. Security is also a critical concern in many health care facilities and it is not clear why those requirements are being deleted. We will admit that most of the requirements regarding plumbing systems will be handled by local plumbing codes but that assumes there is a plumbing code in the jurisdiction where the facility is being located.
Submitted by,

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President      Principal

Bill Koffel is President of Koffel Associates, a fire protection and life safety engineering design and consulting firm, recognized as an expert in the fire protection and life safety aspects of codes and standards. Headquartered in the Baltimore-Washington metropolitan area, the firm provides consulting; engineering design & construction administration; codes & standards development; seminar development & training; product testing & evaluation/representation; and litigation support to public and private clients worldwide. A major portion of the firm’s projects include design projects, Life Safety Assessments, and overall code compliance consulting for health care clients around the world. Bill remains active in the development process of the industry’s governing codes, standards and design guidelines including International Code Council (ICC), NFPA, Society of Fire Protection Engineers (SFPE) and Underwriters Laboratory (UL). As former code official with the Maryland State Fire Marshal’s Office, he was conducted licensure, certification, and accreditation surveys of various health care facilities. Bill serves on numerous NFPA Technical Committees including the Life Safety Technical Committee on Health Care Occupancies and serving as the Chair of the Life Safety Correlating Committee.

Sharon Gilyeat is a Principal of Koffel Associates. She is the managing Principal for many of the firm’s health care projects and is also a Life Safety Code Instructor for CMS.