Challenges Associated With Managing Suicide Risk in Long-Term Care Facilities

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Abstract: Little information about suicidal ideation and behavior in long-term care (LTC) facilities is available. Nonetheless, the implementation of the Minimum Data Set 3.0 requires that LTC facilities screen their residents for suicide risk and have protocols in place to effectively manage residents' responses. In this article, the authors briefly discuss the risk factors of suicide in the elderly and the problems that suicidal ideation and behavior pose in the LTC environment. The authors explain issues that arise when trying to manage suicide risk in the elderly LTC population with general, traditional approaches. These inherent issues make it difficult to develop an effective protocol for managing suicide risk in LTC facilities, leading the authors to propose their own framework for assessing and managing suicide risk in the LTC setting.

Key words: Suicide risk, suicide screening, suicide assessment protocols, suicidal behavior, suicidal ideation, long-term care, nursing home.

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In 2010, the Centers for Medicare & Medicaid Services implemented an updated version of the Minimum Data Set (MDS): the MDS 3.0.[1] The MDS is an assessment and screening tool that is used to evaluate the health and well-being of all residents in Medicare- and Medicaid-certified long-term care (LTC) facilities. The most significant changes in the MDS 3.0 are involvement of residents in the assessment process (via direct interviews) and utilization of standard protocols that are used in other care settings.[2] The MDS 3.0 requires residents to take a nine-item version of the Patient Health Questionnaire (PHQ-9),[3] a diagnostic tool for mental disorders, during their screening, rather than the two-item version of the PHQ (PHQ-2), which was administered per the criteria of the MDS 2.0. Per the MDS 3.0, residents are asked directly about death and suicidal ideation; item 9 from the PHQ-9 asks the following question: "Over the last 2 weeks, how often have you been bothered by thoughts that you would be better off dead, or of hurting yourself in some way?"

This change in the MDS presents unique challenges to LTC facilities. In this article, we identify these challenges and discuss a framework for managing them. We outline research in the field of suicide prevention, which collectively highlights that management of suicide risk in LTC residents is a complicated undertaking, and we provide a brief overview of how facilities might consider moving forward given the lack of empirically supported treatments for suicidal behavior in LTC residents. The intent of this review is to increase awareness about the importance of addressing LTC residents' positive responses to the suicidal ideation item on the PHQ-9 and other expressions of suicidal ideation, and to help LTC staff develop plans to address suicidal behaviors in their facilities based on recommendations outlined in *Promoting Emotional Health and Preventing Suicide: A Toolkit for Senior Living*

Communities,[4] a toolkit produced by the Substance Abuse and Mental Health Services Administration (SAMHSA), a division of the US Department of Health and Human Services.

Suicide Risk in LTC Facilities

Assessing the risk of death by suicide among LTC residents is a complex undertaking.[5,6] On the one hand, nursing home residents may be at a higher risk of suicide than community-dwelling older adults because they possess many of the characteristics that are known to influence risk in the general population, including psychiatric illness, social isolation, and functional impairment.[7] For example, more than 88% of LTC residents are aged 65 years or older, the majority of whom are widowed or single.[8] They also have high rates of chronic illnesses, functional impairments,[5] and psychiatric illness.[9] On the other hand, one could argue that LTC residents are at lower risk of death by suicide because all LTC residents suspected of having a psychiatric illness must be assessed for suicide risk, and staff members are often present 24 hours a day, making suicide more difficult to attempt than in unsupervised settings.

To date, studies examining the prevalence of suicidal ideation, suicidal behavior, and death by suicide in LTC residents have yielded mixed results. *Suicidal ideation* refers to thoughts of or planning for suicide, whereas *suicidal behavior* refers to deliberate nonfatal actions that result in self-injury.[10] When expressed to others, suicidal ideation might be considered a suicidal behavior and should be taken seriously.

Studies on the rates of suicidal ideation in the LTC population have demonstrated frequency rates ranging from 11% to 43%.[11-13] Little research has been conducted on the rates of suicide attempts in LTC.[5] Studies examining death by suicide among LTC facility residents have demonstrated rates ranging from 16.5 to 34.8 per 100,000 residents per year.[14-16] In comparison, the rate of death by suicide in community-dwelling adults in the United States aged 65 years and older was 14.9 per 100,000 in 2010 (the most recent year for which there are data).[17]

Even fewer studies have examined the risk factors of suicide in LTC residents. Some researchers have suggested that known risk factors of suicide in community-dwelling older adults likely apply to LTC residents as well.[5] These risk factors include the presence of a mood disorder or a medical illness, including illnesses that result in functional impairment and pain; social isolation; and recent life stressors.[7] There is some evidence, however, that there are also risk factors of suicide that are specifically characteristic of individuals in the LTC setting. Osgood,[18] for example, demonstrated that rates of suicidal behavior are higher in larger LTC facilities and in facilities with higher rates of staff turnover.

It is unclear whether suicide risk is higher in male or female LTC residents.[5] One study showed that female nursing home patients are less likely to commit suicide than men,[14] but according to a recent report by the Centers for Disease Control and Prevention, the rate of suicide among women aged 60 to 64 years increased by nearly 60% between 1999 and 2010.[19] A study by Mezuk and colleagues[20] showed that the rate of suicide among community-dwelling older men (aged ≥60 years) was higher than the rate among older men in LTC settings. It also found that the suicide risk in community-dwelling older adults has declined since 1990, but that the rate has not changed significantly in LTC settings.

According to a recent report by the Centers for Disease Control and Prevention, the rate of suicide among women aged 60 to 64 years increased by nearly 60% between 1999 and 2010.

Finally, evidence suggests that LTC residents who die by suicide use different methods than community-dwelling older adults. Jumping, hanging, drowning, and drug overdose are the most common methods used in LTC facilities; death by firearms, the most common method used by older adults in the community, are uncommon because firearms are less available in the LTC setting.[16]

Problems Posed by Suicidal Behaviors and Lack of Research on Suicide Risk in LTC Facilities

Although suicide rates in LTC facilities are low, suicidal behavior in LTC facilities is still problematic for several reasons. First, residents exhibiting suicidal behaviors are clearly in significant distress, and research has demonstrated that many risk factors of suicide in these individuals may be amenable to change.[7] Thus, assessment and management of suicide risk in LTC facilities is critically important to increase the well-being of residents exhibiting suicidal behaviors. Second, suicidal behaviors among LTC residents must be appropriately addressed because they create additional stress for staff and other residents. Finally, suicidal behaviors and deaths by suicide in LTC facilities may have a negative impact on the LTC community as a whole. Suicidal behaviors and deaths can be emotionally traumatic for other residents in LTC facilities, and it is possible that a death by suicide in an LTC facility might put other vulnerable residents of

the facility at risk for suicidal behaviors.[4] Despite the necessity of addressing suicidal behaviors in LTC facilities, no clinical trials, quasi-experimental studies, or empirical, systematic program evaluations have investigated how best to treat or manage suicide risk in this setting.

Universal screening is one potential approach to managing suicide risk in the community at large.[21] In 2004, the US Department of Health & Human Services' Agency for Healthcare Research and Quality (AHRQ) issued a set of guidelines for screening for suicide risk in primary care, which concluded that there is not enough research evidence to recommend general screening for suicide risk in these settings.[22] The AHRQ based its conclusions in this report on the following problems related to general screening for suicide risk: at the time of its review, (1) the validity of screening instruments for suicide risk was questionable; (2) there was insufficient evidence that treatment improves outcomes for individuals identified by screening as being at risk for suicide; and (3) there was insufficient evidence that screening for suicide risk was not harmful to patients.

These criticisms are equally valid for the recommendation that every LTC facility resident be screened for suicide risk. Nevertheless, the MDS 3.0 requires such screening, and all LTC facilities that rely on Medicare and Medicaid payment are required to administer the MDS 3.0. The major contention of the AHRQ report on screening in primary care is that it is contraindicated in situations where effective treatment for suicide risk is unavailable. The addition of a screening item for suicide risk in the MDS 3.0 mandates that LTC facilities have *effective* protocols for managing suicide risk in residents.

In a 2003 study that examined the charts of patients who died by suicide in psychiatric hospitals or immediately after discharge, 51% were on either 15-minute checks or on close observation.

Problems With Traditional Approaches to Managing Suicide Risk in LTC Facilities

Suicidal behavior has been perceived as operating on a continuum in which suicidal ideation leads to suicide attempt(s), which may in turn lead to death by suicide.[23,24] Despite an increase in research examining suicide risk across the lifespan, however, measuring and predicting suicide risk with any degree of accuracy is not currently feasible.[7] For example, there is a current lack of understanding regarding the difference between death ideation (eg, "I wish I were dead.") and active suicidal ideation (eg, "I want to take my life."). Some evidence suggests that death ideation may be a normal part of approaching the end of one's life, whereas other evidence suggests that death ideation is a risk factor for death by suicide.[25] The distinction is particularly important in LTC settings, where end-of-life issues are salient. Without a better understanding of how suicidal behaviors and risk factors are associated with an individual's suicide risk, it is difficult to know how to respond to suicidal behaviors and risk factors appropriately.

Many LTC facilities follow one or two approaches to managing perceived suicide risk in their residents: staff may place residents on 15-minute checks or on close observation; and/or staff may send residents to an emergency department or directly to inpatient psychiatric units. Although close observation and psychiatric hospitalizations are absolutely necessary interventions when individuals express the intent to imminently end their lives, both of these approaches are ineffective or inappropriate in situations when individuals exhibit some suicidal behaviors, such as suicidal ideation, but are only at low or minimal risk for imminent death by suicide.

To our knowledge, there are no clinical trials or quasi-experimental studies that demonstrate the effectiveness of 15-minute checks or close observation as an intervention for individuals who exhibit suicidal behaviors but are only at minimal to low risk of death by suicide in any setting, including LTC. Neither is it clear that these interventions are effective in preventing suicide in patients at immediate risk.[26] For example, in a 2003 study that examined the charts of 76 patients (aged 15 to 76 years) who died by suicide in psychiatric hospitals or immediately after discharge, 51% were on either 15-minute checks or close observation.[27]

Fifteen-minute checks and close observation can also be problematic for facilities because these protocols can be costly and difficult to remove once they have been implemented. To meet the standards of care, an individual must demonstrate either a significant decrease in suicide risk or some other improvement or change, which is often difficult for LTC staff to establish. Perhaps more troubling, research shows that there are no good standard procedures for how to conduct close observation.[28] Having patients on 15-minute checks or close observation results in large time demands on nursing staff and may even require increasing the number of staff members who work each shift. This can result in staff frustration and increased costs to both facilities and patients and families. Finally, several qualitative studies that examined patients' reactions to close observation in medical inpatient settings have found that this

approach can make patients feel uncomfortable, frustrated, and ashamed.[29,30] Given these problems, close observation should only be used in cases when an individual is at imminent risk for suicide. Because of the lack of effectiveness of 15-minute checks, we do not recommend this approach for individuals at minimal risk for death by suicide.

Unnecessary psychiatric hospitalizations also represent significant, avoidable costs for the healthcare system, patients, and their families.[31] Although it is undoubtedly true that in cases of high risk for imminent death by suicide, close observation and/or psychiatric hospitalization are warranted, the problems associated with these interventions make a strong case that alternative interventions should be employed in individuals at minimal or low risk of death by suicide. For example, research suggests that psychiatric hospitalizations often do not result in real improvements in suicide risk,[32] and that most inpatient psychiatric hospitalizations for self-harm often do not involve specific treatment goals, which may reduce the effectiveness of inpatient psychiatric hospitalizations for long-term, post-discharge suicide prevention.[32,33] Other findings show that if the psychiatric hospitalization stay is too brief, the patient's overall level of suicide risk might not decrease.[32,33] Psychiatric hospitalization may even be iatrogenic in some cases. In a 2009 review of 31 qualitative or quantitative studies that examined patients' experiences during psychiatric hospitalizations for self-harm, many individuals reported feeling as if the staff were not empathic.[34] Patients also reported several other negative experiences, including staff withholding treatment to punish them for self-harm, abuse at the hands of other patients, lack of staff understanding regarding self-harm, and inadequate follow-up care after hospitalization. Generally, unnecessary psychiatric hospitalization may harm patients because it may increase their exposure to stigma in their communities.[31] Finally, avoidable psychiatric hospitalizations may decrease the efficacy of treatment for psychiatric problems because they disrupt the continuity of care for patients.[32,33]

To create and implement an effective protocol for suicidal behavior in LTC settings, facilities must contend with the psychological reactions of their staff when faced with the possibility of managing some level of risk for suicide within the facility without immediately sending all residents who exhibit suicidal ideation, regardless of the level of risk for death by suicide, to emergency departments or psychiatric facilities. Several factors likely contribute to an overutilization of psychiatric hospitalization (ie, sending residents to emergency departments) by LTC staff. First, staff members might be overly apt to call emergency services to deal with residents expressing suicidal ideation because they fear legal liability. However, successful prosecution of malpractice lawsuits related to the death of a patient by suicide is unlikely when documentation reflects an adherence to standards of care.[32,35] In addition, staff members might be likely to immediately hospitalize any patient who expresses suicidal ideation due to fears about being perceived as being incompetent with regard to dealing with suicide risk[32] or fears about their potential bereavement following the loss of a resident to suicide.[36]

Most inpatient psychiatric hospitalizations for self-harm often do not involve specific treatment goals, which may reduce the effectiveness for long-term, post-discharge suicide prevention.

Although all of these potential fears and concerns of staff are warranted, we surmise that adequate training and implementation of a standardized protocol can enable them to handle residents with minimal to low risk for death by suicide without hospitalizing them. Indeed, while no studies to date have demonstrated the effectiveness of protocols to manage suicide risk in LTC facilities, it is clear that minimal to low suicide risk can be managed in outpatient clinics and primary care clinics.[37-39] In the following section, we discuss a framework for managing suicide risk specifically in LTC facilities.

Framework for Managing Suicide Risk in LTC Facilities

In 2011, SAMHSA released a free toolkit for administrators developing programs and protocols designed to increase the well-being of residents and to prevent suicide in LTC facilities.[4] The SAMHSA can be downloaded at **http://store.samhsa.gov/product/Promoting-Emotional-Health-and-Preventing-Suicide/SMA10-4515**. This toolkit provides detailed information about how to implement suicide prevention programs in LTC facilities using three distinct approaches: (1) the whole-population approach (ie, programs that may improve the well-being of every resident); (2) the at-risk approach (ie, protocols for recognizing warning signs for suicide risk and intervening to prevent suicide); and (3) the crisis-response approach (ie, programs designed to assist LTC residents and the staff with coping in the aftermath of a suicide). Although this toolkit has yet to be empirically validated, it was developed by a group of experts in the field of geriatric sui-

cide prevention and serves to synthesize much of what is currently known about risk factors of suicide among LTC residents and interventions that may appropriately address suicide risk in this population.

When a resident expresses suicidal or death ideation, whether in response to item nine of the PHQ-9 or to other situations, LTC staff must conduct a thorough suicide risk assessment before implementing any intervention.

Despite the overall usefulness of the SAMHSA toolkit for suicide prevention in LTC facilities, one limitation of the risk assessment protocol outlined in this document is that it does not provide information about how staff in an LTC facility can differentiate residents at minimal or low risk for death by suicide from LTC residents at high risk. This limitation is problematic because, as previously mentioned, different interventions should be applied based on different levels of suicide risk. Thus, when a resident expresses suicidal or death ideation, whether in response to item nine of the PHQ-9 or to other situations, LTC staff must conduct a thorough suicide risk assessment *before* implementing any intervention, including calling emergency services.

Few data exist about how to best conduct a suicide risk assessment with LTC residents; however, one assessment tool, the P4 screener, has recently been shown to be useful in assessing potential suicide risk in medically ill patients with depression.[40] The P4 screener consists of four questions that should be asked after a resident expresses suicidal ideation. The questions assess past suicide attempts, plans for suicide attempts, probability of completing suicide, and preventive factors. The screener assists clinicians in determining a person's level of suicide risk (minimal, low, or high) based on the way individuals respond to these four questions. Some evidence suggests that death ideation is normal at the end of life; however, other research indicates that expressing thoughts of death may be a risk factor for suicide.[25] Given the fact that we do not yet have a strong evidence base distinguishing normative death ideation from death ideation associated with suicide risk, we recommend conducting the P4 screener whenever a resident expresses thoughts of death or suicidal ideation. Staff should also consider administering measures of depressive symptoms, such as the PHQ-9,[3] and a measure of self-reported suicidal ideation, such as the Geriatric Suicide Ideation Scale (GSIS).[41] The GSIS is a 66-item multidimensional tool that assesses degree of suicide ideation, death ideation, loss of personal and social worth, and perceived meaning of life.

Once a resident's level of suicide risk (minimal, low, or high) has been determined, LTC staff need to take action to manage the resident's risk. The actions taken should be dictated by the resident's level of risk. The **Figure** serves as an example of a decision tree that might be used by LTC facility staff to manage different levels of suicide risk. Staff can also use the SAMHSA toolkit, which specifies how facilities might develop plans based on residents' level of risk.[4]

Our decision tree emphasizes thorough documentation. This is an important aspect of its use, as appropriate documentation increases the likelihood of preventing death by suicide at LTC facilities by improving communication between staff members. Our decision tree also assumes that LTC facilities have access to either psychological or psychiatric consultation; however, we acknowledge that many facilities do not have such resources available. We believe that, in the case of managing the care of residents at risk of suicide, it is essential that facilities have the capability to consult with a mental healthcare professional. Given its importance, when psychological or psychiatric consultation is not available, facilities might consider contracting with a mental healthcare professional for the sole purpose of securing specialized mental healthcare for residents at low or minimal risk of suicide. The SAMHSA toolkit includes more information about how to develop relationships with mental healthcare professionals.[4] Alternatively, such facilities might consider designating certain staff members (eg, social workers and nursing staff) who are willing to seek additional training on how to effectively assess and manage individuals with suicidal ideation.

In addition, the decision tree includes an emergency care plan meeting for all residents at risk of suicide. Several issues should be discussed at this care plan meeting. First, any mental health issues of the resident should be addressed. Effectively treating depressive symptoms, in particular, often results in marked reductions in risk of death by suicide.[38] The SAMHSA toolkit provides detailed information on addressing the mental health needs of LTC residents.[4] In some cases, it may be feasible to enlist family members to bring residents to mental healthcare specialists outside of the LTC facility. A safety plan should also be developed during this care plan meeting. If this plan includes close observation for an extended period of time, we recommend that a point in time be set for

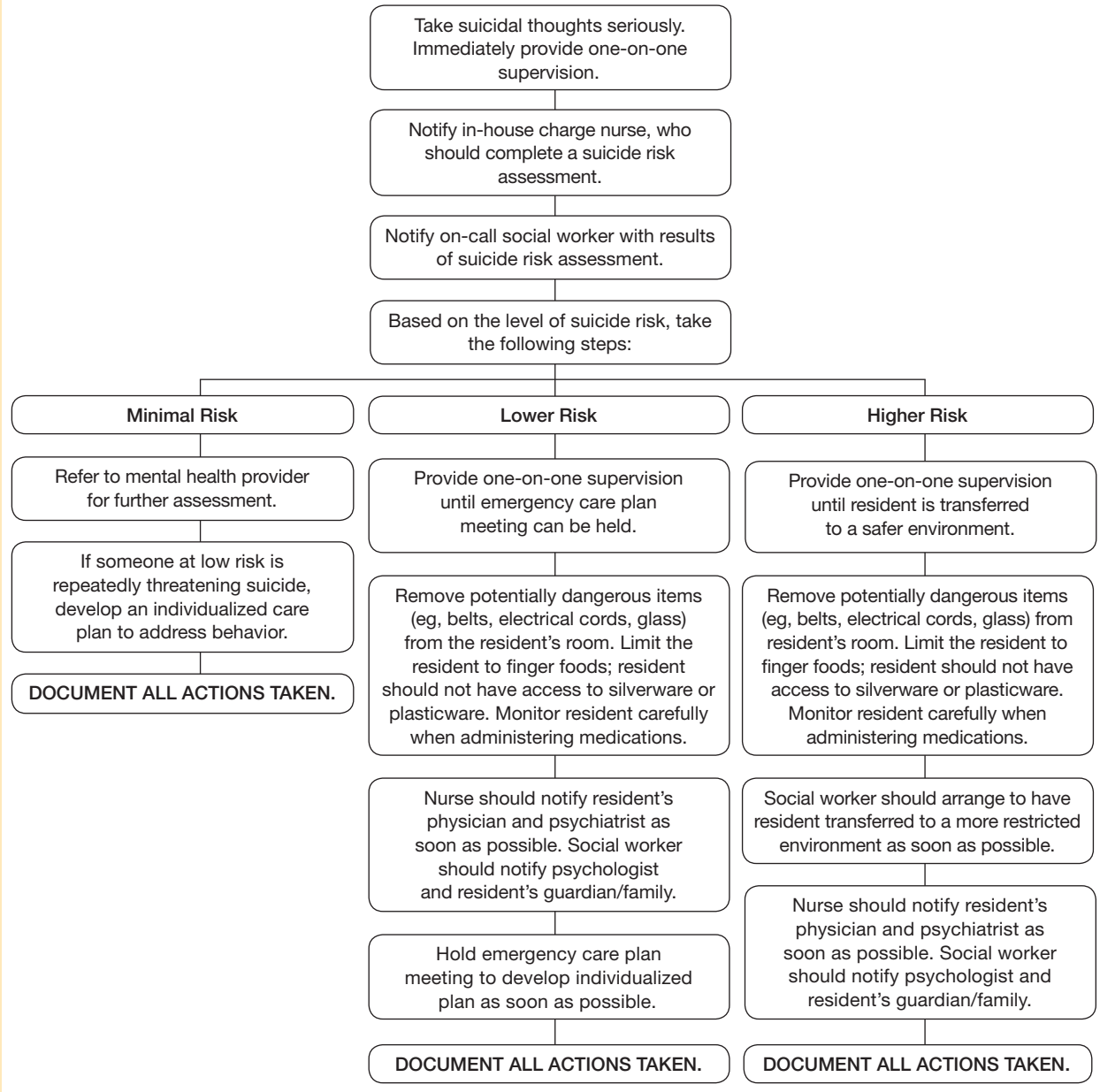

Figure. An example of a decision tree for addressing differing levels of suicide risk in a long-term care facility.

the reevaluation of the resident's risk of suicide using instruments such as the P4 screener,[40] the PHQ-9,[3] and the GSIS.[41] It is important that close observation not ensue indefinitely; unfortunately, however, there is not enough research examining the use of close observation for LTC residents at risk for suicide to explicitly recommend how it should be used and when it should stop. We recommend that staff at individual facilities consult with local mental healthcare professionals to develop explicit plans about when close observation should be utilized and the criteria that will be used to determine when close observation of an at-risk resident is no longer necessary. Finally, for some residents at both minimal and low risk, it may be necessary to spend some time determining the function (ie, purpose) of the suicidal ideation. For example, while all expressions of suicidal ideation indicate that residents are in some kind of distress, in some cases the behavior may be serving additional functions. For example, it is pos-

sible that a resident might express suicidal ideation out of extreme frustration or anger with staff. If after thorough analysis the staff believes this to be the case, we recommend spending time identifying the intended purposes of the behavior so that they can be addressed appropriately in a positive, structured behavior plan. For example, staff could, in some cases, offer the resident more adaptive ways to get his or her needs met. Staff might also actively work to meet the needs of residents in other ways, such as engaging the resident in one-on-one activities and involving family members to help meet the interpersonal needs of the resident.

Conclusion

The effective management of suicide risk in residents of LTC facilities is complicated; however, it is imperative that every LTC facility and nursing home have an effective protocol in place for managing suicide risk, especially with the advent of the MDS 3.0 and the potential suicide risks that the new MDS questions may reveal. Implementing a standardized protocol will not only reduce anxiety among staff members, but also improve the overall quality of LTC residents' care and reduce the morbidity and mortality from suicide. ◆

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