A Practical, Evidence-Based Approach for Means-Restriction Counseling With Suicidal Patients

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Assessing a patient’s access to potentially lethal means for suicide and taking steps to restrict access to means are common expectations for reasonable outpatient management of suicidal patients. Although scientific evidence supports means restriction as a suicide prevention strategy, means restriction continues to be infrequently utilized by clinicians, in large part because of the general lack of available training and guidance. The present article reviews the conceptual basis and empirical evidence for means restriction, discusses common barriers to means-restriction counseling, and provides practical procedures and tools (e.g., the means receipt, the crisis support plan) for accomplishing means-restriction counseling in routine clinical practice.

Keywords: suicide, means restriction, firearms

Restricting access to potentially lethal means for suicide, such as firearms or medications, is often mentioned as an important risk management strategy for working with suicidal patients in many treatment texts (Bryan & Rudd, 2010; Linehan, 1993; Rudd, Joiner, & Rajab, 2001; Wenzel, Brown, & Beck, 2009) and practice recommendations and guidelines (American Psychiatric Association, 2003; Berman, 2006; Bryan & Rudd, 2006), but the extent to which this strategy is discussed is typically so brief as to be of limited practical utility. The American Psychiatric Association’s (2003) 117-page Practice Guideline for the Assessment and Treatment of Patients with Suicidal Behaviors, for instance, dedicates approximately two pages to the issue, noting that clinicians should discuss availability of lethal means with their patients and document this discussion in their medical note but providing no concrete steps or tips for how to accomplish this or what specific points should be covered. This presents a problematic and troubling situation for clinicians: Practice standards consistently mention the importance of a risk management strategy that has not been clearly articulated or practically described anywhere in the clinical literature. Clinicians often find themselves wondering what they should do when a suicidal patient reports access to potentially lethal methods for suicide; therefore, they seek and require an empirically supported and clinically useful method for addressing access to lethal means. In this article, we review the literature on means-restriction and present a clinical protocol for means-restriction counseling that we have used successfully with suicidal patients.

Why Means Restriction?

Approximately 90% of first-time suicide attempters do not eventually die by suicide (Owens, Horrocks, & House, 2002). Although 20–25% of first-time attempters will make another nonfatal attempt, the overwhelming majority of suicide attempters will never attempt again and do not die by suicide, suggesting that increasing the odds of surviving a first suicide attempt would likely contribute to decreased suicide rates over time. The potential impact of means restriction is probably greatest for firearm-related suicide attempts, which have an 85% fatality rate and account for over half of suicides in the United States (Vyrostek, Annest, & Ryan, 2004).

To kill oneself, one must have the means for doing so. It is because of this very simple and undisputable fact that means restriction is often recommended as a risk management strategy. When assessing suicide risk, most clinicians tend to focus on the nature of the patient’s suicidal thinking (i.e., frequency, intensity, and duration of ideation; specificity of planning) and motivations (i.e., suicidal intent). Indeed, most practice recommendations and guidelines emphasize the centrality of intent, most likely because of suicide intent’s well-established link with suicidal behaviors and the considerable amount of attention this variable receives in the extant literature (e.g., Bryan & Rudd, 2006). However, many clinicians are unaware of conflicting findings regarding the link
between intent and suicidal behaviors. Several studies have demonstrated, for example, that suicidal intent has only a very weak relationship with the lethality of a suicide attempt (Brown, Henriches, Sosdjan, & Beck, 2004; Pirskola, Isometsä, & Lönnqvist, 2003; Swahn & Potter, 2001); this is, perhaps, due in part to the fact that many suicidal individuals have inaccurate expectations about the lethality of their chosen method (Beck, Beck, & Kovacs, 1975; Brown et al., 2004). In sharp contrast, availability of means demonstrates a strong relationship with the lethality of chosen methods (Eddleston et al., 2006; Peterson, Peterson, O’Shanick, & Swann, 1985). Availability of firearms in the home, for instance, doubles the odds for a death by suicide by a resident of the home even when adjusting for other confounding risk factors (Brent & Bridge, 2003; Brent et al., 1991; Brent et al., 1993; Kellermann et al., 1992).

The robust association of availability with suicidal behaviors is almost assuredly due to the extreme rapidity with which suicidal intent can fluctuate. Between 24–40% of suicide attempters who were interviewed while being treated in the hospital for their self-injury reported making the decision to attempt suicide within 5 min of the act (Simon et al., 2001; Williams, Davidson, & Montgomery, 1980), and 70% reported making the decision within the preceding hour (Simon et al., 2001). The highly variable nature of suicidal intent, implicated by these data, can significantly limit its clinical utility from a suicide risk assessment and management perspective. Augmenting the assessment of intent with means-restriction counseling can therefore be a critical clinical strategy, especially in the very earliest stages of treatment when suicidal desire is typically the highest and interventions have not yet had sufficient time to markedly reduce this desire.

What Is Means-Restriction Counseling?

It is important to clarify what is meant by means-restriction and to distinguish it from the linguistically similar but conceptually different means-restriction counseling. Means-restriction entails the actual process of limiting or removing access to potentially lethal methods for suicide or self-harm (e.g., locking up medications, removing a firearm from the home). Means-restriction counseling, in contrast, is a process in which a clinician educates patients and supportive others about the risks associated with easy availability of means; the clinician then collaboratively assists them in developing plans to limit the suicidal individual’s access to these means. The distinction between these two concepts is critical, as means-restriction counseling is well within the scope of clinical practice but the act of physically securing a patient’s lethal means (i.e., means restriction) in most cases is not.

To highlight the difference between these two concepts, consider the common problem of suicidal patients who own or possess firearms. Clinicians should, as a general practice, not seek to physically secure or remove a patient’s firearm themselves for a number of safety (e.g., having armed patients in the workplace) and legal reasons (e.g., firearm registration and possession laws). However, clinicians should routinely ask patients about firearms possession, engage them in a discussion about the risks of firearm possession when suicidal, and collaboratively develop a plan for maximizing the patient’s safety (to be discussed further later). Similar safety and legal issues arise with respect to other common methods for suicide; for example, storing knives or other weapons in the workplace can pose a threat to safety; storing patients’ medications in an office or facility that is not legally designated for such purposes could also pose liability hazards for clinicians.

In the context of the present discussion, means-restriction counseling entails two distinct but interrelated clinical actions, as outlined by the Harvard School of Public Health (2008): (1) assessing whether individuals at risk for suicide have access to a firearm or other lethal means and (2) working with them and their families and support systems to limit their access until they are no longer feeling suicidal. The first of these two actions—assessing for access to means—has received a reasonable amount of attention in the literature. It is the second of these actions—working to limit access to these means—that has been largely neglected in the clinical literature and is therefore of greatest concern to clinicians. In our experience, it is confusion about this second action that reduces the likelihood of clinicians accomplishing the first: “If I don’t know what to do to limit access to means, then I’d better not ask about it.”

Does Means-Restriction Counseling Work?

A large number of studies support the effectiveness of means restriction as a suicide prevention strategy when targeting methods that are highly lethal and common within a population (Beautrais, 2000; Mann et al., 2005). Within the United States, for example, the most frequently used method for suicide is by firearm, accounting for 52.9% of all suicides from the years 2000 to 2007, more than all other methods combined (Centers for Disease Control and Prevention, 2011). Stricter firearm regulations have consistently been found to be associated with decreased suicides by firearms, lending considerable support to means restriction as a suicide prevention strategy (for comprehensive reviews, see Beautrais, 2000; Mann et al., 2005). One particularly well-known example is the District of Columbia’s Firearms Control Regulations Act, which was associated with a 38% decrease in firearm suicide rates in the District of Columbia and a total suicide rate decrease of 22%, with no effect on neighboring counties unaffected by the law (Loftin, McDowall, Wiersema, & Cottey, 1991). Similar drops in suicide by firearm rates after implementation of stricter firearm laws have been observed in New Zealand (Beautrais, Fergusson, & Horwood, 2006) and Canada (Leenaars, Moksony, Lester, & Wenckstern, 2003). The effect of means restriction on suicide rates is not limited to firearms, however. When laws have been enacted restricting access to other lethal agents such as carbon monoxide, barbiturates, and pesticides, dramatic declines (50% or more) have also been seen (Beautrais, 2000; Gunnell et al., 2007; Mann et al., 2005; Nordenfelt, Qin, Helweg-Larsen, & Juel, 2006).

Critically, providing means-restriction counseling with patients and caregivers has been shown to significantly increase the likelihood of measures being taken to restrict the availability of multiple potentially lethal means from suicidal individuals. For example, of those parents who received means-restriction counseling in an emergency department, 86% reported locking up or disposing of medications, as compared with 32% of parents who did not (McManus et al., 1997). This difference remained significant even when accounting for the lethality of the index attempt. This effect has been found across a range of potential methods for suicide, including prescription medications (75% vs. 48%), over-
the-counter medications (48% vs. 22%), alcohol (47% vs. 11%),
and firearms (63% vs. 0%; Kruesi et al., 1999).

Why Don’t More Clinicians Conduct
Means-Restriction Counseling?

In a recent study, only 28% of emergency department nurses
reported providing means-restriction counseling to parents, although
80% of the sample had provided direct care for an adolescent who had
attempted suicide in the preceding 6 months (Grossman, Donnes, Kruesi, Pennington, & Fendrich, 2003). In another study, only 12% of
the parents of adolescents who attempted suicide with medications in
the home—and none with firearms at home—reported receiving
education or counseling about means restriction (McManus et al.,
1997). Among mental health clinicians, only 3% of pediatric patients
were assessed for firearm access by psychiatric residents in a psychi-
atriac emergency room (Giggie, Olvera, & Joshi, 2007), and only 22% of
psychologists reported they should provide means-restriction coun-
seling to patients (Sullivan, 2004). Given the clear and consistent
evidence supporting means-restriction counseling, why do so few
clinicians provide this intervention?

In 1967, Stengel proposed the displacement hypothesis (more
recently referred to as means substitution), in which he argued that
suicide could not be prevented through means restriction because
suicidal individuals could always gain access to alternate lethal
methods. Although Stengel did not base his hypothesis on empiric
 evidence, several studies have since identified significant
 effects of means restriction, even when controlling for critical
counting variables (Gunnell et al., 2007; Leenaars et al., 2003;
Nordentoft et al., 2006). Studies have also demonstrated that
patients tend to have a preference for a specific method and
generally do not switch methods (Daigle, 2005). Nonetheless, the
myth of substitution of means persists among many clinicians.

Clinicians also tend to have inaccurate perceptions about the
effectiveness of means-restriction counseling. For example, clinici-
ans estimated that less than half of their gun-owning patients
would take active steps to store their guns locked away and
unloaded if recommended by the clinician, and only one fourth
would completely remove the firearms from their homes (Price,
Kinnison, Dake, Thompson, & Price, 2007). This estimate is much
lower than the 63% of counseling recipients who have reported
taking steps to secure firearms when recommended to do so by a
medical provider (Kruesi et al., 1999). It is not surprising that
clinicians who view means-restriction counseling as ineffective are
five times less likely to provide it (Price et al., 2007).

The barriers to more widespread and routine implementation of
means-restriction counseling are arguably due primarily to a lack of
clinician education and training. As noted earlier, Grossman and
colleagues (2003) reported that 80% of emergency department nurses
had encountered a suicidal adolescent in the course of routine clinical
practice during the previous 6 months, but only 28% had provided
means-restriction counseling to the parents. Training in means-
restriction counseling by these nurses was associated with signifi-
cantly increased likelihood of providing counseling to parents, and
knowledge about how to dispose of medications and firearms were
associated with threefold and twofold increases, respectively, in
providing counseling. Among mental health professionals, the likelihood
of conducting means-restriction counseling decreases by 86.4% among clinicians who have not received training in means-restriction
counseling (Slovak, Brewer, & Carlson, 2008). The likelihood of
means-restriction counseling also decreased among clinicians who
were uncomfortable discussing firearms and who were not aware of
the risks associated with firearms in the home.

The relative lack of training in means-restriction counseling is not
surprising, given the extremely limited education and training in
suicide risk assessment and treatment in general among the mental
health professions (Bongar & Harmatz, 1991; Debski, Spadafore,
Jacob, Poole, & Hixson, 2007; Feldman & Freedenthal, 2006; Guy,
Brown, & Poelstra, 1991). Rigorous training is absolutely critical to
the effective delivery of care for suicidal patients (Rudd, Cukrowicz,
& Bryan, 2008), and it is associated with positive changes in mental
health clinicians’ practice patterns (Oordt, Jobes, Fonseca, & Schmidt,
2009). Training specific to means-restriction counseling has similarly
been associated with improvements in beliefs and attitudes about the
intervention (Slovak & Brewer, 2010), suggesting that more formal-
education in means-restriction counseling might increase the
likelihood of clinicians discussing means restriction with patients and
caregivers.

Practical Steps for Accomplishing Means-Restriction
Counseling in Clinical Practice

Tips and critical points for means-restriction counseling, includ-
ing specific recommendations for firearms restriction adapted from
the Harvard School of Public Health (2008), are presented in
Figure 1. Clinicians should be mindful that discussions about
means restriction have the potential to create an adversarial rela-
tionship with the patient, because it directly challenges the pa-
tient’s capacity to freely engage in suicidal behaviors, which
function as a problem-solving strategy for reducing psychological
suffering. Clinicians who recognize that the primary goal of the
suicidal individual is to not to die but rather to alleviate mental
suffering can circumvent this conflict by joining with the patient in
defining pain remediation as a common goal, thereby laying the
groundwork for the development of a nonadversarial, collaborative
therapeutic relationship (see Bryan & Rudd, 2010, for a thorough
discussion of this conflict and detailed strategies for resolving it).
It is therefore recommended that clinicians present means restric-
tion as a method for maximizing environmental safety to accom-
plish the shared goal of pain remediation. In our experience, most
patients are willing at least to discuss means restriction, even if
they are not initially willing to relinquish their access.

Presenting a menu of options for restricting access to lethal
means can be especially effective because it provides the patient
with a sense of control over the eventual plan. For example, the
following options can serve as a template for suicidal patients:

- Removing the means completely from the house (and other
  areas of access) by disposing of it;
- Removing the means completely by giving it to a supportive
  other authorized to possess the means legally;
- Locking the means up in a safe or another secured area with
  the combination or key secured by a supportive other (note that
  safes or locks designed with manual overrides in the event of lost
  or forgotten combinations or keys are inadequate).

Clinicians should educate patients on the benefits of options that
entail complete removal or restriction of access, but they should be
cautious not to coerce or argue too forcefully for any particular
option, as this could encourage patients to argue against the option


and create an adversarial treatment relationship. Simply hiding the means in the household or elsewhere is not sufficient, however, as hidden means can easily be found. For child or adolescent patients who live in multiple locations because of joint custody situations, means-restriction counseling should be provided to parents and caregivers in all households where the patient might reside or visit.

Clinicians should be aware that a request to temporarily remove or otherwise restrict access to firearms might be met with considerable resistance by patients with strong political or social beliefs related to firearm possession or patients from certain cultural groups or communities (e.g., rural, military, law enforcement). Reaffirming one’s commitment to the patient’s well-being and the goal to reduce suffering, and then presenting firearms restriction as one particular method for ensuring adequate safety to accomplish this goal, is a useful approach. If complete removal of firearms is unacceptable to the patient, additional alternatives include the following:

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<tr>
<th>I. Raise the issue</th>
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<tr>
<td>1. Suicide desire can increase very rapidly. When suicidal, controlling emotions and solving problems can be very difficult.</td>
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<td>2. Having access to lethal means can therefore be very dangerous.</td>
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<td>3. The patient’s primary goal in treatment is to reduce mental pain and suffering.</td>
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<td>4. Restricting access to means can reduce the chance of bad outcomes during crises.</td>
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<td>5. Developing a means restriction plan provides sufficient safety to achieve the goal of reducing pain.</td>
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<th>II. Conduct means-restriction counseling</th>
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<tr>
<td>1. Availability of means increases the chance that a suicide attempt will be fatal.</td>
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<td>2. Provide menu of options for restricting access to means:</td>
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<tr>
<td>a. Complete removal through disposal</td>
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<td>b. Complete removal by giving to a significant other</td>
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<tr>
<td>c. Restricting access by locking up in secured manner inaccessible to patient</td>
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<tr>
<td>3. Utilize motivational enhancement strategies to increase the patient’s willingness to have means completely removed or restricted from access, but do not argue with the patient about any particular method.</td>
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<td>4. For firearms: If complete removal of firearms is unacceptable, additional options:</td>
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<tr>
<td>a. Dismantle firearm and give critical piece to significant other;</td>
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<tr>
<td>b. Store firearm in tamper-proof safe secured by significant other;</td>
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<tr>
<td>c. Completely remove ammunition.</td>
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<td>5. The safest option is to completely remove the means (especially firearms) from the home until the situation improves.</td>
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<tr>
<td>6. Hiding unlocked means (especially firearms) is discouraged since they can be found.</td>
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<tr>
<td>7. In the case of joint custody situations for child or adolescent patients, ensure lethal means are secured in all homes where the patient might reside.</td>
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<th>III. Wherever possible enlist the support of a significant other</th>
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<tr>
<td>1. Provide means receipt</td>
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<tr>
<td>2. Invite patient to identify significant other for Crisis Support Plan</td>
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*Figure 1. Suggested approach for means-restriction counseling.*
• Dismantling the firearm and giving a critical piece (e.g., slide, barrel, recoil spring) to a supportive other;
• Storing the firearm in a tamper-proof firearms safe secured by a supportive other (i.e., keys or combinations inaccessible to the patient and no manual override function);
• Removing ammunition completely from the home.

Clinicians working with military or law enforcement personnel (or other career fields with weapon-bearing status) often have additional options at their disposal such as securing the weapon in an armory and/or contacting the patient’s commander or supervisor to remove and secure the firearm. We also recommend that clinicians ask about possession of multiple firearms, along with the locations of each, given that the majority (62%) of gun owners have more than one firearm on their property, including locations outside the home (e.g., garage, vehicle), with an average of 4.4 firearms per gun owner’s household (Carlson, 2005). Overall, clinicians should be careful not to minimize the personal sense of sacrifice that gun owners might feel when asked to temporarily restrict their access to firearms.

The Means Receipt

Developing a suitable plan for means restriction is not sufficient for effectiveness; implementation of the plan is also necessary. A simple and straightforward method for increasing the patient’s responsibility for enacting the plan is to provide them with a means receipt (see Figure 2). In the means receipt, the clinician and patient formalize the means-restriction plan by placing critical pieces of information in writing: the name of the supportive other identified for restricting or securing the means; contact information for the supportive other; the specific means to be restricted; and the agreed-to plan for restricting means. The means receipt also includes a section detailing the specific conditions under which the means are released or returned to the patient. This latter component is especially important for all concerned, as it clearly defines the criteria by which the patient is judged to be safe enough to discontinue the plan. For the suicidal patient, the release terms provide a number of benefits: (1) They denote the plan as temporary in nature, thereby reducing resistance to an intervention that can be perceived as limiting to a patient’s personal autonomy; (2) they reconfirm the message that suicidal crises are time limited in nature; and (3) they facilitate hope by communicating to patients that they will eventually improve enough so that a means-restriction plan is no longer warranted. For the supportive other being asked to restrict means, the release terms give them clear direction regarding the conditions under which they can return potentially lethal means to the patient. As such, clinicians should include as a release term some mechanism by which the supportive other receives confirmation of the termination of the plan by a clinician or other designated individual. Clinicians should provide a copy of the means receipt to patients and ask them to return it signed by the identified supportive other. Because the means receipt entails the possibility of contacting the supportive other, clinicians should additionally obtain and document the patient’s permission to potentially contact this individual.

![Figure 2. Sample means receipt.](image-url)
The Crisis Support Plan

The crisis support plan (CSP) is a risk management strategy similar to the crisis response plan (Rudd, Mandrusiak, & Joiner, 2006) that explicitly incorporates the involvement and support of a supportive other. The CSP is designed to increase the likelihood of patient adherence to risk management strategies and treatment recommendations and serves several primary purposes: (1) facilitating the process of restricting access to lethal means by enlisting the aid of a supportive other; (2) facilitating active involvement of a supportive other in the treatment process to provide support and to enact emergency procedures during crises; and (3) enhancing the patient’s sense of social support. Because the CSP is a collaborative effort between three parties, it can only be accomplished when a supportive other is available to participate during an appointment. Within the context of means-restriction counseling, clinicians can suggest that a supportive other accompany the patient to an appointment to accomplish this intervention. As can be seen in Figure 3, the CSP contains several key

![Figure 3. Sample crisis support plan.](image-url)
areas, and it should generally be approached with the following steps and procedures:

1. Educate the supportive other about the patient’s current risk level and risk management plan.
2. Identify specific supportive actions that the supportive other can take to help the patient, and review crisis management steps and skills already learned by the patient.
3. Provide means-restriction counseling to the supportive other so he or she understands the importance of this intervention.
4. Review emergency procedures to be taken in the event of a crisis or imminent suicide risk to including transport to a hospital and/or calling 911.
5. Review the plan and obtain buy-in by asking patients and supportive others to verbally review each section and ask if anything else should be added to the plan.

Keeping blank templates of the CSP on hand is a recommended strategy for increasing the ease and efficiency of this intervention. However, this is not to suggest that CSPs should not be individually tailored to each unique case; patients and supportive others should customize the plan as appropriate to maximize its likelihood for successful use. If a patient states that he or she has no supportive other to assist in means restriction, clinicians should nonetheless provide means-restriction counseling and document the established restriction plan.

**Generalizability of Recommendations**

The present discussion has admittedly weighed more heavily on firearms than other suicide means. However, the general approach described earlier is applicable to most, if not all, suicide methods that patients might consider. As noted previously, means restriction and means-restriction counseling have been found to be effective across various suicide means, cultural groups, and demographic subpopulations, and is feasible across the full range of clinical settings including outpatient mental health clinics, inpatient units, primary care clinics, and emergency departments. As noted earlier, there are clear expectations that clinicians will take active steps to limit at-risk patients’ access to potentially lethal means for suicide. This expectation is based on ample conceptual and empirical evidence supporting means-restriction counseling within outpatient clinical practice. Although many clinicians would agree that means restriction seems like a reasonable idea from a conceptual standpoint, limited training and guidance for implementing this intervention in a practical and safe manner has directly limited wider implementation. We hope that the steps and procedures presented in this article stimulate further discussion and provide practical, concrete steps for wider implementation of means-restriction counseling in routine clinical practice.

**References**


Gunnell, D., Fernando, R., Hewagama, M., Priyangika, W. D., Konradsen, ...