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THE PROVINCIAL SUICIDE CLINICAL
FRAMEWORK

A common strategy for assessing, treating, monitoring and documenting suicide prevention activities across British Columbia Health Authorities

VERSION 1.0

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PREPARED BY:

BC Mental Health & Addiction Services

An agency of the Provincial Health Services Authority

Acknowledgements

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Glossary of Terms

Aborted suicide attempt – Potentially self-injurious behaviour with evidence (either explicit or implicit) that the person intended to die but stopped the attempt before physical damage occurred (APA, 2003).

Brief assessment – For the purposes of this document, a brief assessment refers to a short assessment process (e.g. 5-10 minutes), perhaps using a standardized tool, in order to identify those who may require a more in-depth assessment.

Deliberate self-harm – Willful self-inflicting of painful, destructive, or injurious acts without the intent to die (APA, 2003).

Also referred to as **Self-mutilation/self-harming behaviours**, Self-harming behaviours include 'all behaviours involving deliberate infliction of direct physical harm to one's own body without any intent to die as a consequence of the behaviour [Centre for Applied Research in Mental Health and Addictions/Ministry of Health, (CARMHA/MoH), 2007[1]].

In-depth assessment – For the purposes of this document, an in-depth assessment refers to a comprehensive assessment process involving a thorough clinical interview to gather information regarding suicidal ideation, plan, current or previous attempts, diagnoses, and suicide risk.

Instrumental suicide-related behaviour/Parasuicide – Potentially self-injurious behaviour where there is evidence (either implicit or explicit) that the person did not intend to kill him/herself (e.g., no intent to die) and the person wished to use the appearance of intending to kill him/herself in order to attain some other end (e.g., to seek help, to punish others, or to communicate pain). Instrumental suicide-related behaviours, also called parasuicidal behaviour, can occur with injuries, without injuries, or with fatal outcome (e.g., accidental death)

'Interpreting parasuicidal behaviour as 'just manipulation' is both counter-therapeutic and potentially very dangerous, since a person can suffer a fatal outcome with these behaviours regardless of intent. Intent can be difficult to determine since ambivalence is often a key component to suicidal behaviours' (CARMHA//MoH, 2007).

Lethality of suicidal behaviour – Objective danger to life associated with a suicide method or action. Note that lethality is distinct from and may not always coincide with an individual's expectation of what is medically dangerous (APA, 2003).

Monitoring – For the purposes of this document, monitoring refers to consideration of environmental safety issues, as well as the client's response to treatment. Monitoring includes consideration of appropriate setting (e.g. inpatient, outpatient), hospital environmental safeguards, safety re-assessments (as needed), observation policies and procedures, no harm contracts, interdisciplinary management and education.

Self-harm intent – The purpose(s) or meaning(s) associated with hurting or harming the body, which lie outside the realm of social acceptability [Connors, 1996, as cited in Registered Nurses Association of Ontario (RNAO, 2009)].

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1   Definition adapted from O'Carrol et al., 1996 and Simon & Favazza, 2001

Suicidal behaviour – Self-inflicted actions with a nonfatal outcome, accompanied by explicit or implicit evidence that the person intended to die (APA, 2003).

Suicidal crisis – An acute increase in suicidality, which may involve thinking about, planning, intending, or attempting suicide (CARMHA/MoH, 2007).

Suicidal ideation – Thoughts of serving as the agent of one's own death. Suicidal ideation may vary in seriousness depending on the specificity of suicide plans and the degree of suicidal intent (APA 2003). Any self-reported thoughts of engaging in suicide-related behaviour (CARMHA/ MoH, 2007[2]).

Suicidal intent – Subjective expectation and desire for a self-destructive act to end in death (APA 2003).

Suicidal threat – Any interpersonal action (verbal or non-verbal) stopping short of directly self-harming that can reasonably be interpreted as communicating that a suicidal act or other suicide-related behaviour might occur in the near future (CARMHA/MoH, 2007).

Suicide – Self-inflicted death with evidence (either explicit or implicit) that the person intended to die (APA 2003).

'Expressions like 'successful suicide' and 'committed suicide' are strongly discouraged. Even the phrase 'completed suicide' which is commonly used to refer to a death by suicide is increasingly falling out of favour among those in the suicide prevention fields, as it continues to connote an accomplishment of sorts. 'Died by suicide' is the phrase that survivors of suicide (those who have lost a loved on to suicide) and practitioners in the field prefer, as it is the most neutral, clear, and straightforward way to describe this type of death' (CARMHA/MoH, 2007)

Suicide attempt – Self-injurious behaviour with a nonfatal outcome accompanied by evidence (either explicit or implicit) that the person intended to die (APA 2003).

Suicide attempt with injuries – An action resulting in non-fatal injury, poisoning, or suffocation where there is evidence (either implicit or explicit) that the injury was self-inflicted and that the person intended to kill him/herself (CARMHA/MoH, 2007).

Suicide attempt without injuries – A potentially self-injurious behaviour where there is evidence (either implicit or explicit) that the person intended to kill him/herself (CARMHA/MoH, 2007).

Treatment – For the purposes of this document, treatment refers to the development, implementation and monitoring of a comprehensive plan of treatment. The plan includes level of observation, diagnoses, therapeutic approaches (e.g. psychotherapy, psychotropic medications, electroconvulsive therapies), privileges, discharge planning and follow up to community services.

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2   Definition adapted from O'Carrol et al., 1996 and Simon & Favazza, 2001)

Executive Summary

The Provincial Suicide Clinical Framework (Framework) is intended to provide a common strategy for mental health and addiction services to align with best practice standards for suicide risk management. The Framework and its accompanying template is structured to provide clinical and administrative leaders across BC's Health Authorities (HA) with the background information and steps for developing a protocol incorporating best practice standards in suicide assessment, treatment, monitoring and documentation. These components are part of a new Accreditation Canada's Required Organizational Practice (ROP). The new ROP requires suicide risk assessment at regular intervals, treatment, monitoring and documentation policies and procedures for all clients in contact with mental health services. This Framework provides an overview of best and promising practice in suicide risk management and the template provides the steps that clinical and administrative program leaders will need to take to develop a clinical protocol that is appropriate for their patient population.

Eight primary sources are reviewed for best and promising practice in the area of suicide risk management: American Psychiatric Association (APA, 2003) Practice Guidelines for the Assessment and Treatment of Patients with Suicidal Behaviours, Centre for Substance Abuse Treatment (CSAT, 2009) Treatment Improvement Protocol (TIP), the American Academy for Child and Adolescent Psychiatry Practice Parameter for the Assessment and Treatment of Children and Adolescents with Suicidal Behaviour (AACAP, 2001), The Canadian Psychiatric Association supplement of the Canadian Journal of Psychiatry; Caring for the Suicidal Patient: An Evidence-Based Approach (CPA, 2007), The Royal Australian and New Zealand Psychiatric College of Psychiatrists Clinical Practice Guideline for the Management of Deliberate Self-harm in Adults [published by the New Zealand Guideline Group (NZGG) 2003], the Canadian Coalition of Seniors' Mental Health National Guideline for Seniors' Mental Health: The Assessment of Suicide Risk and Prevention of Suicide (Heisel et al., 2006), The National Institute for Clinical Excellence (NICE, 2005, 2006) and The Registered Nurses Association of Ontario Assessment and Care of Adults at Risk for Suicidal Ideation and Behaviour, Nursing Best Practice Guideline (RNAO, 2009).

Assessment

This Framework does not endorse a specific tool or method of assessing risk for suicide. Instead, psychiatric and nursing practice guidelines are summarized to provide a common foundation for HA representatives to select the best assessment protocol for their population. Representatives will ultimately need to weigh the risks, costs and benefits of selecting and using an instrument as part of a suicide risk management protocol for their respective sites and programs.

There is general agreement that, regardless of the individual approach a program may follow, the approach should have the following key points: The approach should be guided by peer reviewed, published research, risk and resilience should be considered in the context of multiple domains, both chronic and acute risk factors should be assessed, protective factors should be taken into account, current suicidal thinking should be thoroughly explored, and all these pieces should be considered in the context of making an informed judgment of an individual's level of risk.

The gold standard for a psychiatric assessment of suicide risk is a clinical assessment. This assessment should: Assess suicidal ideation, assess suicide plan, assess current or previous attempts, establish a multiaxial diagnosis, and estimate the suicide risk via acute, chronic and protective risk factors. A standardized tool may be used to aid the assessment, but should not replace it. The three steps recommended for suicide risk management for nurses and other health care providers are: 1) ensure safety of self and client, 2) conduct comprehensive risk assessment, and 3) mobilize resources for monitoring and treatment. For individuals with chronic or recurring self-injurious behaviours, each act needs to be re-assessed considering the context in which it occurred and the situational factors that may have led to the recent behaviours.

These steps for assessing suicide risk should be adapted as needed depending on the population at hand. For example, special considerations should be made for populations across various levels of care, (emergency, inpatient and outpatient groups), children and youth, geriatrics, and clients with co-occurring mental health and substance use problems. Unique issues in each of these populations are reviewed.

Treatment

A treatment plan should include level of care (e.g., inpatient, outpatient and day treatment), level of observation (levels of care and observation are reviewed in the Monitoring section, below), diagnosis, medications, privileges, discharge planning and follow-up to community services. The appropriate steps for treatment planning are: Collect data, identify range of treatment alternatives and select based on assessment and judgment of the individual circumstances, involve client and caregiver perspectives into the plan, and include existing treatment modalities. Next, review family and individual treatments, incorporate the most promising treatment into the process, choose appropriate levels of observation, supervision and privileges, and document the process. Nurses and other health care providers should utilize effective communication and mutual problem-solving techniques.

Therapeutic approaches should target the Axis I and Axis II diagnoses (as appropriate) and their specific symptoms using a combination of somatic therapies and psychosocial interventions when appropriate. Approaches can include psychotropic medications and electroconvulsive therapies. There is a substantial evidence base to support the use of psychotherapy in the treatment of non-psychotic depressive disorder and borderline personality disorder, both of which are associated with increased suicide risk.

Special population considerations need to be made across diagnostic categories, including concurrent disorders, and various populations, including youth and geriatrics. The AACAP (2001, p.28S) qualify that: …"it is the impression of many clinicians that the majority of (youth) suicide attempters and their families benefit from straightforward interventions dictated by the child or adolescent's mental state and family circumstances." For children and youth, family therapy is often advocated as the most appropriate means for intervening in suicidal behaviour and depression in youth. Psychotherapy should be considered and tailored to the child's needs, and Selective Serotonin Reuptake Inhibitors [SSRIs]) or lithium may be helpful for some children and youth.

Research suggests that the best way to decrease suicide risk among elderly individuals is to treat the underlying psychiatric disorder, which is typically depression. Research supports the use of SSRIs (e.g., Citalopram) and psychotherapy in the context of collaborative care for the treatment of major depressive symptoms in older adults.

Monitoring

Monitoring includes hospital environmental safeguards (features on the unit that limit patients' access to the means for self-harm), observation policies and procedures, interdisciplinary management and education. For patients identified at risk for suicide, the clinical team needs to determine the appropriate setting (e.g., outpatient, inpatient) and address immediate safety needs through safety interventions (e.g., specialized unit, level of observation). After ensuring the patient's immediate safety needs, the recommended steps are to establish therapeutic alliance, coordinate treatment planning with multiple clinicians and patient, monitor patient progress and response to treatment plan, re-assess (as needed) the patient's safety, psychiatric status and functioning, and initiate education to patients, family and significant others.

Nurses and other health care providers require effective communication and interviewing skills, awareness of warning signs, risk and protective factors, knowledge and use of a problem-solving approach, collaboration with the health care team (including knowing when experts should be consulted), standardized documentation, clear communication and guided decision-making. The organization should provide support and education for direct care staff to stay current with best and promising practice and develop professional competencies. In addition to basic education, other tools such as clinical supervision, mentoring and observation should be utilized to actively support novice direct care staff.

British Columbia Mental Health and Addiction Services (BCMHAS) recommends that inpatient units adopt a common observation policy and procedure. A suggested observation policy is presented using terminology from the New Zealand Guidelines Group (2003) and the National Institute for Clinical Excellence (2005, 2006). Having a common and standardized language regarding levels of observation should improve clarity regarding who can initiate changes to a patient's level, as well as explicitly link each level of observation to levels of risk.

Children and adolescents with acute suicidal ideation or attempts are frequently first evaluated and treated in an emergency setting, which provides an important triage function for subsequent inpatient or outpatient treatment. Discharge from an emergency setting can be considered if the clinician is satisfied that adequate supervision and support will be available in the home environment, and a referral is made to community mental health services. Older adults with more severe suicidal ideation and/or a history of self-harm behaviours have symptoms that are resolved more slowly, less completely and are more prone to relapse. As such, continued vigilance is needed for geriatric patients (and indeed, patients of all ages) throughout the period of recovery from depression.

Continuity & Transfer of Care

Effective suicide risk management requires explicit documentation policies and procedures at each stage of the patient journey, including transfer of care within and across agencies. Documentation is a standard of clinical practice and is an integral part of the assessment and care of clients at risk for suicidal ideation and behaviour. Clear documentation facilitates communication within the team and during transfer of care to another agency or organization. Transfer of care documentation practices and policies should include the degree of suicide risk, and treatment and monitoring strategies when appropriate. Policies and procedures related to these issues should be routinely audited to ensure compliance.

Although there is no consensus on a standardized way to document suicide risk management strategies, it is recommended that organizations develop policies to ensure that a systematic process is adopted. Each service will need to ensure that they have documentation policies and practices that cover screening results for every patient in contact with services, and when appropriate, the program's response to immediate safety needs (e.g., observation/security levels), clinical assessment results and treatment plan and on-going monitoring activities.

Putting it Together: Protocol Development

The Provincial Suicide Clinical Framework is intended to provide HA clinical and administrative leaders with the background information and steps for developing a suicide risk management clinical protocol that conforms to best practice, and complies with Accreditation Canada's new ROP. A protocol may be developed by following the steps outlined in the template, and using the overview of best and promising practice in suicide risk management, included as part of this Framework.

BACKGROUND

▸ Drivers & Linkages

▸ Framework Development

▸ ROP Requirements & Scope

▸ How to Use this Document

▸ Protocol Development Template

Disclaimer: This document is intended for health service providers to develop and implement an evidence-based suicide risk management protocol. It is not intended to prescribe a standard of care. Nothing contained in this document should be construed as providing professional advice. If professional advice is required, the services of a competent and qualified professional should be sought. Clinical decision making in a specific context remains the responsibility of attending professionals. Nothing contained herein should in any way be construed as being either official or unofficial policy of the British Columbia Mental Health Society Branch or the Provincial Health Services Authority.

1.0 Background

A call for a standardized, best practice approach to suicide risk management

The importance of preventing suicide and self-harm as a strategic priority in the enhancement of patient safety is demonstrated by its prominence in the planning and priorities of health organizations worldwide. Recently, the Canadian Patient Safety Institute (CPSI) and Ontario Hospital Association (OHA) commissioned BC Mental Health and Addiction Services to develop a background paper outlining current issues in patient safety across mental health settings (paper released in July, 2009). One of the key findings in that review was the need for a standardized approach in assessing suicide risk and implementation of evidence-based interventions; including the identification of empirically-validated suicide risk assessment tools and training.

The Provincial Suicide Clinical Framework is intended to provide a common strategy for mental health and addiction services to align with best practice standards for suicide risk management. The Framework and its accompanying template is structured to provide clinical and administrative leaders across BC's Health Authorities (HA) with the background information and steps for developing a protocol that incorporates best practice standards in suicide assessment, treatment, monitoring and documentation. These components are part of a new Accreditation Canada's Required Organizational Practice (ROP).

In 2009, Accreditation Canada rolled out a new patient safety goal: Organizations are to identify safety risks inherent in its client population. Similarly, reducing patient suicide was identified as a patient safety goal by the United States' Joint Commission on Accreditation of Healthcare Organizations (JCAHCO, 2008). The Australian National Mental Health Working Group (2005) set the reduction of suicide and deliberate self-harm as a priority area for improving patient safety in Australia. They described suicide as "catastrophic system failures" that undermine confidence in the mental health care system.

APA (2003) recognized the prevention of suicide in inpatient and residential settings as one of four priority areas for psychiatric practice. In their recommendations for APA leadership and practitioners, they committed to continue to develop suicide assessment/intervention guidelines, promoting knowledge exchange in regard to suicide, encouraging the establishment of suicide registries to provide meaningful data on suicides in health care, and promoting research on suicide.

The new Required Organizational Practice (ROP) for meeting Accreditation Canada's new safety goal is to assess all clients for risk of suicide at regular intervals, or as needs change, to address immediate safety needs, to identify and document treatment and monitoring strategies to ensure client safety. As such, the Regional and Provincial Health Authorities have a common interest in developing a framework that:

1. Aligns with best/promising practice,

2. Conforms to Accreditation Canada's tests of compliance for the new ROP, and

3. Responds to the unique risks and needs of diverse regions, sites, agencies and populations.

A Provincial Suicide Clinical Framework Steering Committee brought together mental health and substance use service representatives from the Provincial Health Services Authority and the 5 Regional Health Authorities. The purpose of the Committee was for the providers to share expert knowledge and collectively develop an overarching **Provincial Suicide Clinical Framework** (Framework) and its companion **Protocol Development Template** (Template). The Framework and Template are intended for use by clinical and administrative program leaders within each HA so they may review existing and/or develop a clinical protocol that responds to a unique population or program, while conforming to best/promising practice and ensuring ROP compliance practice.

The Framework includes an overarching **action roadmap** (section 10.0) for implementing a site or program specific protocol, with consultation from education, change management, communications, evaluation and risk management representatives.

1.1 Linkages

The current document is meant to assist mental health and substance use planners in aligning their services with Accreditation Canada's Required Organizational Practice related to suicide risk management. To accomplish that, best practice literature is reviewed in the areas related to those requirements.

1. The Framework is linked with the Prevention/Intervention/Postvention (PIP) Initiative for British Columbia, which was established in April 2008 to support community development on suicide response. The PIP initiative provides valuable information for the development of the Provincial Suicide Clinical Framework, particularly in their review of evidence-informed practice and practice-informed evidence.

2. The Ministry of Health (MoH) and the Centre for Applied Research in Mental Health and Addiction (CARMHA) have developed a number of publicly-available resources that provide excellent suicide risk management information and tools for use in a health care setting. These are useful resources that service providers may choose to incorporate into a suicide risk management protocol.

3. An important resource for those providing health services to children and youth is the Ministry of Children and Family's Preventing Youth Suicide website, which is updated annually following a review of the literature. It is a great source of recent, relevant literature and written specifically for child and youth mental health practitioners: http://www.mcf.gov.bc.ca/suicide_prevention/index.htm

2.0 Framework Development

The Framework was developed using the following information sources:

- Peer-reviewed research literature
- Best practice guidelines and practice parameters from the American Psychiatric Association, The Canadian Psychiatric Association, the American Academy of Child and Adolescent Psychiatry, the Canadian Coalition of Seniors' Mental Health, The Registered Nurses Association of Ontario, National Centre for Clinical Excellence, Centre for Substance Abuse Treatment and the New Zealand Guidelines Group.
- Gray literature from similarly situated mental health and addiction services
- Accreditation Canada
- Commission on Accreditation of Rehabilitation Facilities
- British Columbia Ministry of Health
- British Columbia Ministry of Child and Family Services
- General Practice Services Committee (a joint committee of the BC Ministry of Health, the BC Medical Association, and the Society of General Practitioners of BC)
- The Centre for Applied Research in Mental Health and Addiction (CARMHA)
- The Canadian Medical Protection Agency (CMPA)
- The Prevention/Intervention/Postvention Initiative (Ministry of Health)
- Data from a Province-wide environmental scan, initiated by the Provincial Suicide Clinical Framework Steering Committee, eliciting service provider input (including direct care providers, physicians, managers and directors)

2.1 Environmental Scan

A Province-wide environmental scan was initiated by the Provincial Suicide Clinical Framework Steering Committee. Through the scan, service providers across BC were asked to compare their current suicide risk management strategies with the ROP, and to identify their strengths and gaps in these strategies. These identified gaps and strengths were used to inform the structure of this document and the tools (e.g., protocol development template, Section 9.1) developed to assist leaders in developing their own suicide assessment, treatment, monitoring and documenting strategies.

The environmental scan was conducted via an online survey and was open to the regional Health Authorities: Fraser Health, Interior Health, Northern Health, Vancouver Coastal Health, and Vancouver Island Health. Leaders in the Provincial Health Services Authority had already completed a similar environmental scan and those data also informed the development of the Framework.

A total of 399 respondents across the regional health authorities completed the environmental scan. These respondents represented diverse levels of service, types of service, and service populations.

2.1.1 Environmental Scan Results

A complete report of the environmental scan results is available from BCMHAS Quality, Safety and Performance Improvement[3]. For the purpose of this document, a high-level summary of the main findings are provided, with a view of detailing how the results formed the development of the Provincial Suicide Clinical Framework.

Question: *In what areas do gaps appear when you compare your service with the ROP requirements (check all that apply)?*

Respondents answered the question above by selecting any number of the following choices: Clinical practice guidelines, follow-up, transition of care, documentation, monitoring and treatment strategies, safety needs, multidisciplinary assessment, re-evaluation as needs change, and assessing each client. The top three most commonly identified gaps in service across all regional health authorities were:

1. Transition of care

2. Follow-up after service delivery, and

3. Clinical practice guidelines.

Question: *What kind of end products would be most helpful to you for improving suicide risk management in your service, in preparation for next accreditation?*

Participants had the opportunity to select any number of the following options: Communication strategies, clinical education strategies, front line tool kits, review of structured assessment tools, clinical practice guidelines, implementation plan outline/template, or other. Two hundred and twenty-one people across the regional health authorities responded to the above question, and the respondents supported all the end products almost equally. The most commonly supported end product was a front line tool kit and a review of structured assessment tools.

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3   Contact Dr. Tristin Wayte, twayte@bcmhs.bc.ca

3.0 Drivers for Action

In response to the call for a standardized, best practice approach to suicide risk management, Accreditation Canada's The Required Organizational Practice (ROP) requires that appropriately-trained staff assess *all* clients for risk of suicide or self-harm at intake to the service, and monitor and treat those clients at a level appropriate to their needs. Clients are reassessed regularly throughout that client's contact with services, and the monitoring/treatment plan adjusted as required. All assessments, monitoring and treatment responses must be documented in clients' health records.

The ROP tests for compliance:

1. The organization assess each client for risk of suicide at regular intervals, or as needs change
2. The organization identifies clients at risk for suicide
3. The organization addresses the clients immediate safety needs
4. The organization identifies treatment and monitoring strategies to ensure client safety
5. The organization documents the treatment and monitoring strategies in the client's health record.

In summary, the organization needs to use a standardized, best practice approach to ASSESS, TREAT and MONITOR each client for risk of suicide, and DOCUMENT those activities in the client's health record.

3.1 Scope of the ROP

It is a Required Organization Practice (ROP) that all clients in contact with mental health services be assessed, treated and monitored for suicide risk, and those activities are to be documented. The following points are intended to serve as a general guide regarding the scope of this ROP:

- **Mental Health Services:** This ROP is intended for mental health services [including some emergency services (see 3rd bullet below), secondary and tertiary care], and are not intended for other health services under an Authority.

- **Addiction Services:** Each HA will need to determine if an addiction service under their Authority will be accredited through the Commission on Accreditation of Rehabilitative Facilities (CARF), Accreditation Canada, or both. Those services accredited through Accreditation Canada will be required to fulfill the ROP.

- **Emergency Services:** Mental health emergency services have many different service models across the HAs. For example, a mental health emergency room with designated staff, separate space and beds in a general hospital, clearly falls under this ROP. A general emergency room with designated beds for mental health clients may have those designated beds fall under this ROP. As well, a general emergency room with designated staff for mental health emergency clients will also likely need to comply with the ROP. A general emergency room with no designated beds, staff or space will not fall under this ROP. Each HA will need to review the models of their emergency mental health services in their respective HA, and determine on a case by case basis what is and is not included under the ROP.

- **Contracted Services:** The ROP targets direct service delivery only, so contracted services do not apply[4].

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4   In some cases, the contract language can include the requirement that the agency be accredited through Accreditation Canada. In this case, the ROP will apply.

4.0 How to Use this Document

This Framework is intended to be a broad and flexible document that is applicable for multiple populations and regions including: Emergency, Primary, Secondary and Tertiary services. No single suicide risk management strategy is appropriate across all services in all HA. As such, this Framework provides an overarching structure that HA representatives can use to develop service or program-specific protocols that best responds to the populations and programs it serves. By following the general structure of this Framework, service providers will conform to the requirements of the ROP.

This document has 5 major sections: Assessment, Treatment, Monitoring, Continuity/Transfer of Care and Putting it Together (protocol development tools and resources, an action roadmap and an evaluation framework). These sections provide a summary of best practice recommendations from leading clinical and professional organizations in the area of suicide risk management. However, as no single clinical protocol will be suitable for the variety of health services across the province, HA representatives are expected to review this document and use the template to develop and implement a site or program-specific protocol that meet the needs of their specific services and populations.

A series of multidisciplinary best practice documents are briefly summarized in the areas of Assessment, Treatment, Monitoring and Documentation in an effort to provide diverse clinical teams with a common foundation. HA representatives can develop their service or program-specific protocol by building on and refining this foundation, depending on what is most appropriate for their patient populations. To assist with the development of these protocols, special considerations for special populations are reviewed when appropriate: Children & Youth, Geriatric and those with concurrent disorders. Special considerations are also provided for various levels of care, including inpatient, outpatient and emergency services.

While programs and services across the province may select the most appropriate assessment tools and treatment strategies for their population, they should all be grounded in the same foundation of best practice for assessment, treatment, monitoring and documentation of suicide risk management. In addition, leaders and staff must be able to defend the appropriateness of their protocol to Accreditation Canada surveyors.

The final section, Action Roadmap, provides an overview of how to implement a clinical protocol, based on the overall structure provided by this document. Communications, education and change management experts have contributed to developing an action roadmap that maximizes the chance of successful implementation. The action roadmap is intended to be a general document for mental health and substance use services across the province. Clinical teams may use this and refine it to their individual sites or programs as needed.

4.1 Steps for using this document

1. **Environmental Scan:** Follow the 1st step in the Protocol Development Template (Section 9.1) and compare your service to the ROP requirements. Identify gaps in your services in regard to assessment, treatment, and monitoring suicide risk, and documenting those activities. Those gaps will provide the areas action in the next step.

2. **Develop Protocol:** Follow the 2nd step in the Template (Section 9.1) to review and/or develop a clinical protocol and using the best practice information provided here in suicide risk assessment, treatment, monitoring and continuity/transfer of care (Sections 5.0 through 8.0), and using available toolkits if appropriate (Section 9.0).

3. **Implement:** In collaboration with education, communication and change management experts in your service specialty, implement the protocol (Section 10.0).

4. **Evaluate:** Evaluate the process of implementation and re-assess and re-evaluate as needed.

The majority of this Framework focuses on assisting clinical and administrative program leaders in the second step: Developing a protocol that meets the needs of their program.

Steps for Aligning a Service with the Suicide Risk Management ROP Requirement

STEP 1	STEP 2	STEP 3	STEP 4	
SCAN current practices from your organization to identify gaps in best practice, using the 1st step in the Protocol Development Template (Section 9.1)	**REVIEW AND/OR DEVELOP** a protocol by following the 2nd step in the Template, incorporating best practice review in sections 5.0 to 9.0	**IMPLEMENT** the protocol, using the suggested action roadmap in section 10.0	**EVALUATE** the process of implementation, using the suggested evaluation framework in section 10.6	**RE-EVALUATE** each step as needed

5.0

ASSESSMENT

▶ Best Practice in Assessment

▶ "As Needs Change" & High-Risk Periods

▶ Multidisciplinary Best Practice Literature Review

▶ Assessment, Diagnosis & Population Considerations

5.0 Assessment

5.1 Best Practice in Assessment

Services are expected to align themselves to best practice in suicide assessment by the following ROP tests for compliance:

1. The organization assesses each client for risk of suicide at regular intervals, or as needs change

2. The organization identifies clients for risk of suicide

Accreditation Canada provides latitude for organizations to select the assessment tool, instruments or method that best meets the needs of the clients they serve (e.g. youth, adults). Organizations should be able to provide evidence to the Surveyors that they are consistently doing assessments and rationale for why they are using this particular approach.

As such, this Framework will not endorse a specific tool or method of assessment. Instead, psychiatric and nursing practice guidelines are summarized to provide a common foundation for users to select the tools most appropriate for their service. There is general agreement that, regardless of the individual approach a program may follow, the approach should have the following key points: The approach should be guided by peer reviewed, published research, risk and resilience should be considered in the context of multiple domains, both chronic and acute risk factors should be assessed, protective factors should be taken into account, current suicidal thinking should be thoroughly explored, and all these pieces should be considered in the context of making an informed judgment of an individual's level of risk (White, 2010).

A suicide risk assessment tool may be selected in order to screen and identify those coming into services. Nursing toolkits may also be useful for first-contact screening procedures; however the nursing procedures summarized here are those for ages 17 and older. Those who are flagged for potential suicide risk may be taken through a more in-depth assessment procedure in order to develop the appropriate monitoring and treatment response.

5.2 "As Needs Change" & High-Risk Periods

The ROP specifies that after the initial risk assessment, clients should be re-evaluated at regular intervals or as needs change. All sites and programs are given latitude to determine the appropriate intervals and under what clinical circumstances patients should be re-assessed for risk.

While latitude is provided to clinical teams to decide what is best for their patients, clinical expertise and research literature (Links, 2009; Troister & Links, 2008; Steele & Doey, 2007) point to a number of high-risk periods. It is therefore recommended that patients are assessed or re-assessed for suicide risk under the following circumstances:

5.2.1 Follow-up Contact, Assessment & Re-assessment

1. Any health care provider serving an individual who is suicidal is to follow up within **24 hours** (or sooner if required).

2. Patients should be assessed **upon return** from Unauthorized Absence (U/A) or Visit Leave (V/L) from inpatient services

3. Patients should be assessed or reassessed **24-48 hours** before discharge[5] from inpatient services for those with a history of suicidal behaviour.

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5   Links, P. (2009). Managing the risk posed by suicidal patients. Suicide Studies Unit, St. Michael's Hospital

4. In-person follow-up within **7 days** (or sooner if required) of discharge from inpatient services for those with recent suicidal behaviour.

5. Patients should be assessed and carefully monitored **within the first 30 days** following discharge[6] from inpatient services.

5.3 Multi-disciplinary Assessment Review

There is a large body of research literature on suicide and risk for suicidal behaviours in the general population and in those who receive mental health services. Many critical risk factors have been identified, key assessment procedures have been developed, and many suicide risk assessment tools have been validated, albeit with moderate or poor reliability and validity. This section is a summary of 8 primary sources:

1. American Psychiatric Association Practice Guidelines for the Assessment and Treatment of Patients with Suicidal Behaviours (APA, 2003).

2. Centre for Substance Abuse Treatment: Treatment Improvement Protocol (CSAT, 2009).

3. The Canadian Psychiatric Association supplement of the Canadian Journal of Psychiatry; Caring for the Suicidal Patient: An Evidence-Based Approach (CPA, 2007)

4. The American Academy for Child and Adolescent Psychiatry Practice Parameter for the Assessment and Treatment of Children and Adolescents with Suicidal Behaviour (AACAP, 2001).

5. The Royal Australian and New Zealand Psychiatric College of Psychiatrists Clinical Practice Guideline for the Management of Deliberate Self-harm in Adults (NZGG, 2003).

6. The Canadian Coalition of Seniors' Mental Health National Guideline for Seniors' Mental Health: The Assessment of Suicide Risk and Prevention of Suicide (Heisel et al., 2006).

7. The National Institute for Clinical Excellence (NICE, 2005 & 2006). The short-term management of disturbed/violent behaviour in inpatient psychiatric settings and emergency departments.

8. The Registered Nurses Association of Ontario Assessment and Care of Adults at Risk for Suicidal Ideation and Behaviour, Nursing Best Practice Guideline (RNAO, 2009).

Proviso

Mental health and addiction services takes a multidisciplinary approach to providing care, and most teams include psychiatrists, other physicians, nurses, nurse practitioners, social workers, counselors, to name a few. Best practice guidelines, such as those developed by RNAO, are used as a foundation for creating the current Framework and are meant to be applicable to all mental health and addiction service providers. This Framework uses language that is consistent with that found within these documents, so the reader should expect to see "nurse" used continually. This language is kept in order to recognize the work that this organization put into developing their best practice guidelines specific to nursing practice. However, it is acknowledged that many health professionals have core competencies regarding suicide assessment, treatment, monitoring, and documentation and the RNAO guidelines provide an excellent foundation for any mental health and addiction care service provider.

The Framework is designed to be tailored to meet the needs of various sites and programs. Therefore, groups adapting this Framework will need to review the following best practices, select and adapt the best approach for their patient population. This section reviews assessment parameters across multiple disciplines, and Section 5.4 speaks to special population needs.

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6   Troister, T. & Links, P. (2008). Predictors of Suicide Within One Year of Discharge from Psychiatric Hospitalization. Suicide Studies Unit, St. Michael's Hospital

5.3.1 Psychiatric Assessment

When the clinical situation allows, the assessment should cover current presentation of suicidality, psychiatric illness (e.g., mood), history, psychosocial situation, and individual strengths and vulnerabilities. When the clinical situation does not allow for a complete assessment, efforts should focus on the most salient and relevant issues and other factors may be followed-up at a later time.

The evaluation should:

1. **Assess Suicidal Ideation:** The nature, depth, timing and persistence of the desire and intent of these ideas.

2. **Assess Suicide Plan:** The lethality the patient expects from the plan, the level of detail and violence, access to means

3. **Assess Current or Previous Attempts:** The timing, intent, method and consequences of the attempts.

4. **Establish a Multi-axial Diagnosis:** Including mood problems, psychosis, and substance / alcohol abuse.

5. **Estimate Suicide Risk:** Knowledgeable assessment of acute and chronic risk and protective factors, and determine methods to mitigate or strengthen those risks or protective factors respectively.

In the American Psychiatric Association Practice Guidelines for the Assessment and Treatment of Patients with Suicidal Behaviors (2003), the authors note that the statistical rarity of suicide events makes them impossible to predict on the basis of risk factors. In these guidelines, the American Psychiatric Association (APA) recommends that scales can be used to *aid* a more complete psychiatric evaluation, but should not replace it, as "no study has identified one specific risk factor or set of risk factor as especially predictive of suicide or other suicide behaviour" (APA, 2003 p. 12). Risk factors are often additive, but also may be interactive and produce unique levels of risks across individuals. Determining suicide risk is ultimately a clinical judgment that can be supported with the use of a risk assessment tool.

> "The goal of a suicide assessment is not to predict suicide, but rather to place a person along a putative risk continuum, to appreciate the bases of suicidality, and to allow for a more informed intervention."
>
> (Jacobs et al.,1999, p.4)

The APA guidelines provide for an in-depth and comprehensive clinical assessment for suicide risk. The suggested assessment procedures include 47 open-ended and probing questions related to feelings about living, current thoughts about death and suicide, queries about intent, plans and means to carry out intentions. They also provide 20 general characteristics to evaluate in the psychiatric assessment, including current presentation, psychiatric illness, history, psychosocial situation and individual strengths and vulnerabilities. They list 57 risk factors associated with an increased risk of suicide, in areas such as psychiatric and physical illnesses, psychological features and demographic factors. Ten protective factors are listed that are said to mitigate risk, such as positive problem-solving skills and life satisfaction.

Links (2009) recommends the following approach to assessing suicide risk that, for the purpose of this document, is called the St. Michael's Hospital Protocol[7]:

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7 The clinical and demographic risk factors in the third and forth steps are adapted from the APA (2001) practice guidelines and the RNAO (2009) best practice guideline, as well as Link's (2009) summary.

How serious/severe is the suicidal intent?

- Is there a wish to die? (Passive thoughts that death would be welcome vs. a clear desire to actively seek death)
- Why does the individual want to die? Why now? What are the precipitants?
- Are thoughts of death present much or most of the time, or do they come and go? What makes them worse? Are they becoming more frequent and pervasive?
- Is there a plan? How well-formulated is it? (Vague thoughts of "taking pills" vs. gun)
- Has the individual "researched" ways to die?
- Is there a means? (Check for medications of high lethality, guns, access to a car, etc.)

Has there been a previous attempt?

- Inquire as to when they were "most suicidal"
- What was the lethality?

Are there other risk factors?

- Clinical Factors: Mood disorders, substance abuse, personality disorders (especially borderline), schizophrenia, impulsive/violent traits, current medical illness, hopelessness, impulsiveness and aggression.
- Demographic Factors: Older adult, male, poverty, First Nations (especially ages 14-24) or White, sexual or gender-orientation minority, single, social isolation, newly incarcerated, history of gambling.

Are there protective factors which might mitigate risk?

- Clinical Factors: No previous attempts, positive therapeutic relationship, impulse control, absence of substance use and/or depression, proven problem-solving skills, life satisfaction.
- Demographic Factors: Intact social supports, marital status and dependent children, active religious affiliation or faith, pregnancy, access to resources
- Assess the person's reasons for living: Feelings of responsibility for family, moral or religious objections to suicide, fear of disapproval are protective
  - > "When you're thinking about suicide, what helps you feel better, more hopeful about life?"
  - > "What's keeping you alive right now?"

How has the patient responded to the therapeutic interview?

- The clinical team should implement a monitoring protocol that is appropriate for the population at hand.

St. Michael's Hospital Protocol

Clinical assessment is considered to be the "gold standard" for suicide risk assessment, and a scale can be used in conjunction with a clinical assessment, but should not replace it (Links, 2009). See Appendices A and B for a review of the psychometric properties of the scales noted in the APA guidelines (for adults) and The American Academy of Child and Adolescent Psychiatry practice parameters (ACCAP, 2001, reviewed below).

The following sections are intended to guide professional practice among the multiple health disciplines who provide care and health services to mental health and substance use clients. Nursing professional practice has established comprehensive best practice parameters for suicide assessment and management, and these parameters are reviewed here.

5.3.2. Nursing and Other Health Care Provider Assessment

Nurses and direct care health professionals have a significant role in intervening when individuals express suicidal ideation and behaviour, and an ethical and legal responsibility to try to prevent a suicide where possible. Practice guidelines have been developed and put forward by the Registered Nurses' Association of Ontario (RNAO). *Assessment and Care of Adults at Risk for Suicidal Ideation and Behaviour* (RNAO, 2009) contains recommendations specifically for RNs and RPNs on best nursing practices in the assessment and management of adults (over the age of 17) at risk for suicidal ideation and behaviour. The focus of the guidelines is on best practice within the context of the individual provider-client relationship, and as such will not address primary prevention interventions.

The guidelines are meant to increase health care professionals' comfort, confidence and competence in suicide assessment, treatment and management, in order to enhance safety for their clients and lower the impact of suicide on society.

Warning Signs and Risk Indicators

Nurses and health care providers should be aware of warning signs and risk indicators that may suggest suicidal ideation or behaviour amongst clients even in the absence of expressed suicidality (Recommendation 6a, RNAO, 2009). Warning signs may be reported or observed by the client and/or their family, friends, community supports, medical records and mental health professionals.

Risk indicators are characteristics that have been studied in large populations and have been shown to be associated with an increased likelihood of suicide. Recognition of risk is a major component in promoting the safety of clients. Risk indicators include being male, being elderly, hopelessness, previous suicide attempts, and past and current psychiatric illness. Modifiable risk indicators (i.e., hopelessness, substance use) can be used to direct decision-making regarding intervention and support planning (for a full list of risk factors, see Appendix C).

WARNINGS

- Talking about suicide or death directly (e.g. I wish I was dead)

- Talking about suicide or death indirectly (e.g. "What's the point of going on?", "Everyone would be better off without me")

- Threatening suicide, describing or researching methods of suicide

- Formation of suicide plan

- Putting affairs in order (e.g., making or changing a will, giving money or possessions away)

- Purchasing or stockpiling medications, firearms, razors

- Exploring balconies, bridges, rooftops

- Change in personality or mood

- Self-neglect (e.g., change in appearance, including weight & appetite) or social withdrawal

- Engaging in risky behaviour

Holkup, Centre for Suicide Prevention, 2002; 2002a; NZGG, 2003

All warning signs (direct and indirect) should be taken seriously (Recommendation 1, RNAO, 2009). '*Taking seriously*' means: conducting a suicide risk assessment, discussing the assessment with other members of the client's health care team, creating a plan for safety and care as determined by the outcome of the assessment, and documenting the assessment.

Conducting a Risk Assessment

The nurse should first ensure his or her own safety, and attend to the physical safety of the client (Recommendation 5, RNAO, 2009). In attending to the safety of the client, the nurse should be alert to the physical setting and any item in it that may pose a threat to safety. If safety measures are implemented, the client should be kept informed and engaged in the decision-making process. Once safety is ensured, a comprehensive risk assessment is conducted (Recommendation 6, RNAO, 2009).

Step 1:
Safety of self and safety of client:

Examples of Potentially Hazardous items:

- clothing (e.g. belts, shoelaces), linens
- cords
- lighters
- medications
- plastic bags
- sharp or glass objects
- toxic substances

Step 2:
Comprehensive Risk Assessment

Elements of a Risk Assessment

1. **Conduct a Psychiatric Assessment**

   a. Presenting Problem – from the patient's perspective

   b. History of present illness – duration and severity of symptoms

   c. Past psychiatric history – hospitalizations, dates, locations, diagnoses

   d. Current and past medications

   e. Drug Allergies

   f. Substance use history

   g. Forensic history

   h. Family history

   i. Psychosocial history (emotional and sexual abuse, education, occupation, relationships, informal and formal support networks

   j. Nursing Diagnosis

2. **Inquire about suicidal ideation and behaviour (clinical interview)**

   k. Suicidal Ideation – ask the patient questions to illicit information about their thoughts on living and dying

   l. Plan – Inquire about the suicide plan

   m. Access to Means – does the patient have access to the chosen method?

   n. Previous attempts

   o. Lack or presence of protective factors.

3. **Obtain collateral information** – seek collateral information from all available sources including family, friends, community supports, medical records and mental health professionals. Consider confidentiality and relevant privacy legislation when doing so.

4. **Conduct a mental status exam** – include appearance, behaviour, attitude, affect, mood, psychomotor activity, speech, thought content, thought process, perception, orientation, insight, judgment, cognition

Example Interview Questions

- How has your mood been lately?

- Has anything been troubling you?

- Have you ever felt like life is just getting on top of you?

- Do you sometimes wish you could just make it all stop?

- Have you ever wished you were dead?

- Have you ever thought about taking your own life?

NZGG, 2003, in RNAO, 2009

Example Collateral Information Questions

- Are they their usual self?

- Have they made any comments that they would be 'better off dead'?

- Have there been any statements about 'things getting better soon'?

- Have you been worried about them? Do they seem down or depressed?

- Are they drinking more than usual?

NZGG, 2003, in RNAO, 2009

The risk assessment involves reviewing medical records, interviewing the client, gathering information from family or significant others, and potentially using valid and reliable assessment tools. It is important to note that assessment tools are only to be used as part of a comprehensive assessment and should not be used in isolation. In addition, the use of psychological scales for diagnosis should be reserved for clinicians with specialized training. For additional suggested questions for the assessment of suicidal ideation and plan, see Appendix D. For components of a mental status exam, see Appendix E.

Engaging in discussions regarding suicide can be difficult for the nurse. While teamwork and clinical supervision may be means by which a nurse may acquire support through these situations, it is also important to note that nurses must have the appropriate level of skill and knowledge to conduct these clinical assessments in a therapeutic way. In addition, the estimation of risk and decisions regarding the frequency of reassessment is best conducted through the use of clinical judgment, in collaboration with the health care team.

Step 3:
Mobilizing Resources

Once the client's level of suicide risk is assessed, the nurse mobilizes resources based upon the assessed risk and associated needs (Recommendation 7, RNAO, 2009).

Protocol for mobilizing resources:	Actions for mobilizing resources:
• The nurse assesses the level of risk • The nurse identifies emergent, urgent or elective resources based upon that assessed risk level. • The nurse mobilizes appropriate resources (formal and informal) • The nurse mobilizes appropriate resources directly if the risk is imminent • The nurse ensures supervised client transport by qualified personnel • In the event of a self-harm or suicide attempt, the mobilization of resources is for both psychological and physical assessment *RNAO Development Panel, 2008*	• Identification of key family members, friends, or members of a religious community, who can be available for on-site or telephone support • Improving the awareness of family and friends about emotional distress and risk of suicide • Accessing emergent and/or urgent mental health services • Identification of emergency services, such as 911, emergency medical services, crisis response services, mobile response and walk-in clinics available in the nurses' area of practice. *RNAO Development Panel, 2008*

The goal of mobilizing resources is stabilization of the immediate risk and symptom management of the ongoing risk. One component of risk stabilization is the development of a safety plan, which is developed with the input of the client to self-monitor feelings of hopelessness, helplessness and dysphoria. The safety plan includes attendance of the client by the nurse or other qualified personnel until a treatment plan is in place. In addition, a structured plan is developed to diffuse suicide method, regulate emotions, and develop basic skills of symptom management. Mobilizing resources frequently requires a team plan and response. When access to a team or other support personnel is not feasible, the nurse's priority is to maintain safety for the client and others.

In addition to providing resources and support to clients who may be suicidal, the nurse should identify other persons affected by suicide that may benefit from resources and supports, and refer as required (Recommendation 13a RNAO, 2009). The degree to which the nurse is involved in working with bereaved persons is varied and will be based on many factors.

The following chart provides a visual overview of the complete assessment process recommended by RNAO (2009).

Nurses should be aware of all direct and indirect warning signs and risk indicators

If warning signs/risk indicators are exhibited:

The nurse should attend to his/her safety and attend to the physical safety of the client

Once safety is ensured:

Conduct a comprehensive risk assessment

Elements:

1. Conduct a Psychiatric Assessment
2. Inquire about suicidal ideation and behaviour (clinical interview)
3. Obtain collateral information
4. Conduct a mental status exam

Mobilize resources based upon the assessed risk and associated needs

Actions:

- Identification of key family members, or friends who can be available for support

- Accessing emergent and/or urgent mental health services

- Identification of emergency services available in nurses area of practice

Warning Signs May Include:

- Talking about suicide or death directly (e.g. I wish I was dead)
- Talking about suicide or death indirectly (e.g. "What's the point of going on?")
- Formation of suicide plan
- Putting affairs in order
- Purchasing or stockpiling medications, firearms, razors
- Exploring balconies, bridges, rooftops

Risk indicators:

include being male, elderly, hopeless, previous suicide attempts, substance use, past and current psychiatric illness.

Potential Hazards:

clothing, cords, plastic bags, sharp or glass objects, medications, oxygen therapy devices

1. Psychiatric assessment components:

- Presenting Problem – from the patient's perspective
- History of present illness (duration, severity)
- Past psychiatric history (hospitalizations, dates, diagnoses)
- Current and past medications, drug allergies
- Substance use, forensic, psychosocial and family history
- Nursing Diagnosis

2. Example clinical interview questions:

- Has anything been troubling you?
- Have you ever felt like life is just getting on top of you?
- Do you sometimes wish you could just make it all stop?
- Have you ever wished you were dead?
- Have you ever thought about taking your own life?

3. Examples of questions for acquiring collateral information:

- Are they their usual self?
- Have they made any comments that they would be 'better off dead'? Any statements about 'things getting better'?
- Have you been worried about them? Do they seem depressed?
- Are they drinking more than usual?

4. Conduct a mental status exam:

Include appearance, behaviour, attitude, affect, mood, psychomotor activity, speech, thought content, thought process, perception, orientation, insight, judgment, cognition

5.4 Assessment & Population Considerations

5.4.1 Children and Youth

Similar to the adult literature, there exists a substantial evidence base of risk factors, causes, and characteristics of young people who attempt suicide. The main focus of this section is to highlight unique presentation of suicidality in youth. Readers are also encouraged to visit http://www.mcf.gov. bc.ca/suicide_prevention/index.htm, which provides an annual update of best practice literature related to suicide risk management for children and youth.

Risk and Protective Factors

As with adults and older adults, the risk factors associated with increased risk of suicide and related behaviours in young people are multiple, multi-dimensional and many are dynamic in nature. The overall risk for a particular individual is further complicated by the influence of protective factors, which may also fluctuate across the developmental course and environment.

Of young people who complete suicide, 90% have a pre-existing psychiatric disorder and many had experienced a traumatic event related to family or romantic relationship problems, academic difficulties, and/or conflicts with school or the law. These events may interact with a pre-existing mental disorder, and the compounded stress leads to higher risk [American Academy of Child and Adolescent Psychiatry (AACAP), 2001].

For a list of suicide high-risk factors and a checklist for an emergency room or crisis centre environment specific to children and adolescents see Appendix F. For a comprehensive list of risk and protective factors across multiple domains, see:

http://www.mcf.gov.bc.ca/suicide_prevention/pdf/table_1.pdf

AACAP (2001) published a practice parameter for the assessment and treatment of children and adolescents with suicidal behavior. More recently, the Canadian Psychiatric Association published a supplement to its Canadian Journal of Psychiatry, which included a chapter on etiology and risks among children and adolescents (Steele & Doey, 2007a).

Death by suicide in childhood is rare, likely owing to their cognitive immaturity in the ability to plan and carry out the act (Steele & Doey, 2007a); however children too may have thoughts of self harm, particularly if they have a family of history of suicide. Beginning at age 13, the risk for suicide increases, and is on par with adult risk by age 20[8]. Similar to the APA (2003) guidelines on assessing and treating clients with suicidal behaviors, the AACAP (2001) recommends that clinicians should take special note of the high risk factors for suicide in adolescents, and in particular which child and adolescent suicide attempters are at greatest risk for later suicide.

The research supports a comprehensive and integrative model of risk assessment that is responsive to children and adolescents and their families. It is important that young people and their families are seen for a risk assessment as soon as possible following a referral process. At a minimum, phone contact with the family within 24 hours of the referral should be made to discuss immediate issues and put a safety plan in place. If immediate contact cannot be made, the referral should be passed on to a crisis centre or an after-hours mental health service who can respond appropriately. Almost one-quarter of all suicide attempts among children and adolescents occur within 1 month of seeking services (Steele & Doey, 2007a) underlying the importance of screening for suicidality at intake to programs.

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8   Statistics Canada (2005). CANSIM, table 102-0551 and Catalogue no. 84F0209X. Last modified: 2009-07-06.

The process of suicide risk assessment is often a challenge for nurses and other health care professionals, especially when working with a child or adolescent population. Assessment of suicidal patients requires an evaluation of the suicidal behaviour and intent, as well as determination of risk for death or repetition. Clinicians should also ascertain the suicidality of depressed children and adolescents (i.e., whether and how often they think about suicide and whether they have ever attempted suicide).

Despite some differences in language and emphases, there is general agreement in the literature on the following points:

1. Efforts to assess potential risks for suicide should be **guided by the research** evidence.

2. **Ecological conceptualizations** of suicide risk and resilience which reflect multiple domains and move beyond narrow, individualistic understandings should be considered

3. Both chronic and **acute risk** factors should be assessed and documented.

4. **Protective factors** should always be considered alongside risks.

5. A thorough exploration of **current suicidal thinking** should be undertaken.

After carefully weighing all of the risk and protective factors, clinicians should make an informed judgment about the level of risk (mild, moderate, high, or imminent; White, 2010, Youth Suicide Risk Assessment and Clinical Documentation: Some Considerations for Policy and Practice; prepared for MCFD).

This assessment of suicidal patients includes inquiry into:

- The type of method used and the potential medical lethality of the method

- The degree of planning involved

- The degree to which the chance of intervention or discovery was minimized

- If there were previous suicide attempts

- If there is still a pervasive and frequent degree of current suicidal ideation

- The availability of firearms or lethal medications. If they are available, a recommendation for removal or more secure storage should be made as an imperative part of the assessment

- Whether anyone else was knowledgeable about the ideation or attempt

The AACAP give a list of key questions to ask children and adolescents who may be considering suicide. Questions include:

- Did you ever feel so upset that you wished you were not alive or wanted to die?

- Did you ever do something that you knew was so dangerous that you could get hurt or killed doing it?

- Did you ever hurt yourself or try to hurt yourself?

- Did you ever try to kill yourself?

- Did you ever think about or try to commit suicide?

Another approach in assessing suicidal intent is to evaluate motivating feelings, such as the need to manage intense psychiatric pain and distress. These feelings may arise from troubled interpersonal relationships, the desire to rejoin a dead relative, or to avoid an intolerable situation. If these motivations have not been satisfied by the time of the evaluation, serious suicidal intent may still be present.

The AACAP also suggests assessing and monitoring underlying conditions such as hopelessness, problematic coping styles and psychiatric illness. The conditions that may lead to suicidal behaviour include psychiatric diagnosis (particularly depression, mania or hypomania, mixed states or rapid cycling, or substance abuse), social or environmental factors such as isolation, anger and stress, cognitive distortions that accompany depression, inappropriate coping styles, and a history of family psychopathology or family discord. A history of rapid mood shifts is strongly associated with a risk for further suicide attempts. Recurring suicidal behaviour has been associated with hypomanic personality traits and cluster B personality disorders.

Assessment information should always be drawn from several sources and by varied developmentally sensitive techniques. This may include interviews, play and behaviour observation, and the use of standard, reliable, valid rating scales. The child or adolescent should be interviewed, as well as parents or guardians or other individuals who know the child/adolescent. However, there is often a disparity between child and parent reports, with children/adolescents being more likely to tell of suicidal ideation and suicidal actions than parents.

Current research in the area of youth suicide demonstrates a correlation between youth suicide rates and the contextual issues within families (Asarnow et al., 1987; Maine et al., 2001; Eggert & Thompson 2002; Ben-Zur, 2003; Turner & Butler 2003). Therefore, the qualified health care provider needs to build rapport with the youth and understand the self-harm behaviour in the context of the child or adolescents' family, as well as his or her social and school experiences.

Within the Emergency Department context, nurses and other qualified health care providers can conduct a psychosocial assessment and mental status exam if they are appropriately trained. See Appendix F for a checklist suggested for the emergency room context. The Risk of Suicide Questionnaire (RSQ) is a 4-item screening tool developed by Horowitz et al (2001) for use in an Emergency Department context. It includes items assessing current suicidal behaviour, past suicidal ideation, past self-destructive behaviour and current stressors, and has demonstrated high content validity (Folse & Hahn, 2009). Another tool many youth mental health practitioners have found helpful is IS PATH WARM, which is discussed in more depth in Section 5.5.1, below.

A comprehensive list (with summary reviews) of assessment tools for children and adolescents is provided in Appendix A. The AACAP (2001) caution that, while often useful, assessment tools and scales should not replace a more detailed clinical assessment. Scales tend to lack predictive value, and tend to be oversensitive and under-specific. The following table[9] helps to highlight key differences between suicidal adults and adolescents.

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9   Adapted from Ash, (2008). Suicidal Behavior in Children and Adolescents. Journal of Psychosocial Nursing, 46, 26-30, and supplemented by Steele & Doey, 2007a.

Table 1:

Key differences between adolescents and adults that impact assessment, treatment and monitoring for suicide risk.

Category	Adolescents, compared to Adults:
RISK FACTORS	Higher proportion of all deaths
	Re-attempts more likely, and closer together
	Ideation more common
	Aboriginal youth are at particularly high risk (5-6 times more likely than other Canadian youth[10])
	Disruptive behaviour disorders increase risk
	More powerful contagion effects
PSYCHOSOCIAL FACTORS	More impulsive
	Developing level of maturity (temperance, perspective and responsibility) will impact decision making
DIAGNOSTIC DIFFERENCES	Psychotic disorder less common, especially among younger adolescent
SYMPTOMS	Ideation is more likely to be denied
	More likely to misjudge lethality of means
TREATMENT	SSRIs require closer monitoring
	Family involvement is more important
LEGAL STATUS	If under age 16 and objects to treatment, can hospitalize with parental consent and without civil commitment process. Youth ages 16 and older require the same civil commitment procedures as adults.

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10   Kelly, F. (2007). Traditional and contemporary approaches to youth suicide prevention, National Youth Council, Assembly of First Nations.

5.4.2 Geriatrics

In 2006, The Canadian Journal of Geriatrics published national guidelines for seniors' mental health, which includes the assessment of suicide risk and prevention of suicide. These guidelines are presented in brief form here, and those developing a complete protocol for psychogeriatric populations should refer to the complete guidelines at the Canadian Coalition of Seniors' Mental Health website (www.CCSMH.ca). This review will focus on risk factors, assessment, treatment and monitoring issues that are *unique or present more or less often* in older adults. More recently, the CPA published a systematic review of the literature on risk factors and successful interventions in older patients (Grek, 2007), which is integrated into the discussion where appropriate.

A group developing a program-specific protocol should also refer to the multi-disciplinary assessment guidelines (Section 5.3 above) as there is no upper age limit to those recommendations. Older adults demonstrate many of the same risk factors as younger adults, including previous suicidal behaviour and ideation, and the presence of mood, psychosis and concurrent disorders. However, there are some important clinical differences regarding how risk for suicide is presented in older adults. For example, older adults may under-report depressive or suicidal symptoms. As well, older adults with depression may present for care with other types of symptoms, compared to younger adults.

Clinicians working in a geriatric psychiatry setting should be especially attuned to patients with comorbid disorders, including substance use and personality disorders. A person who presents with one or more of these risk factors who also present with rigid personality style or and non-adaptive coping strategies is at an increased risk. Perceived or actual medical illness increases risk for suicide in older adults, and suicidal intent should be carefully assessed in those wishing to hasten death. Life transitions that lead to greater dependence on others can put older adults at greater risk for suicide, as do negative life events such as financial, physical or social losses or housing changes. These life transitions are often concomitant with functional impairment, which is associated with risk for suicidal ideation and behaviour, as well.

Risk Factors for Older Adults

Adapted from National Guidelines for Seniors' Mental Health – The Assessment of Suicide Risk and Prevention of Suicide (2006)

PSYCHIATRIC

▶ Substance abuse, mood disorders and personality traits (i.e. high neuroticism, emotional instability, narcissism and non-adaptive coping styles)

PSYCHOSOCIAL

▶ Single marital status, living far from friends or relatives, seeing friends or relatives infrequently, employment change, housing change

▶ Lack of a sense of meaning and purpose in life

MEDICAL

▶ Impairment of the ability to carry out activities of daily living

▶ Visual impairment, seizure disorder, neurological disorder, cancer pulmonary disease, arthritis, bone fractures and moderate to severe pain

▶ *Perception* of physical illness

> ## Risk Factors for Older Adults – *cont'd*
>
> OTHER ISSUES RELATED TO RISK
>
> ▶ 75% of older adults told a family member or friend that they wished to die, but only 38% of older adults who died by suicide discussed these thoughts with a health care professional.
>
> ▶ Older adults are more likely to present with somatic *complaints or anxiety* as opposed to depressed mood
>
> ▶ The majority who complete suicide do not have severe or terminal physical illness
>
> ▶ Over 10% of older adults who die by suicide *do not* have a diagnosable mental illness

All of these risk factors should be balanced with the older adults' resiliency. Protective factors include having meaning and purpose in life, robust social support and good health practices.

Echoing recommendations by APA (2003) and AACAP (2001), the CCSMH (2006) acknowledge that the best way to assess suicidal risk in older adults is through careful evaluation, clinical judgment and establishing rapport with the patient. The professional group does endorse the use of well-constructed assessment tools to aid in the detection of risk or resiliency, so long as the administrator has the appropriate training and expertise.

5.5 Assessment & Diagnostic Issues

Mental health and addiction services should tailor the suicide risk assessment to ensure that it is sensitive and appropriate for their patient populations. It is recognized that that there are population variables that impact risk for suicide. For example, demographic suicide risk factors includes those who are male, First Nations (particularly First Nations youth), Caucasian, people who identify as gay, lesbian, bisexual, transgender or who are questioning their sexual orientation, or those experiencing poverty (chronic or acute). These (and other risk factors) should be noted in an assessment protocol, and are listed in full in Appendix C. The purpose of the current section is not to highlight these risk factors again, but to identify and address potential variability in assessment practices across DSM and ICM *diagnostic* categories.

Schizophrenia

In his systematic review of the literature regarding suicide and schizophrenia, Mamo (2007) notes that the highest risk period occurs during or soon after hospitalization. Health care professionals are advised to have a heightened level of suspicion during the first and last few weeks of hospitalization, and 6 months after discharge.

The risk for suicide among those with schizophrenia (4-13% death rate, 4-30% attempt rate) matches those with serious mood disorders (Inskip, Harris & Barraclough, 1998). In addition to the risk factors that are common across different diagnoses (impulsivity, hopelessness), risk factors specific to those with schizophrenia are concurrent disorders (discussed in the next section more fully), poor treatment adherence, fear of decompensation, severity of hallucinations, severity of delusional thinking, motor restlessness, high premorbid socioeconomic status and IQ, later age of onset, better cognitive functioning, recent hospitalization (and concomitant recent loss), and severity of parkinsonianism (Mamo, 2007).

The assessment of patients with schizophrenia should follow the standard laid out by APA or Links (above), taking special note of the special risk factors.

Concurrent Disorders

When investigating the relationship between suicide and addiction or concurrent disorders, the majority of the literature focuses on alcohol disorders combined with mental health problems. Of course, substance abuse and alcohol abuse often co-occur, making it difficult to distinguish the individual contribution of each to suicide (Murphy, 1988; Harris & Barraclough, 1998; Fowler, Rich & Young, 1986). Nevertheless, there is some knowledge on the relationship between suicide and other substance use disorders. Suicide is a leading cause of death among individuals with substance use disorders, with these individuals being approximately 10 times more likely to commit suicide than the general population, a risk that is further increased among those who are drug injectors (Wilcox, Conner & Caine, 2004). These authors identified a 13.5 fold elevated risk for suicide among those who are opiod-dependent, and a 16.9 fold elevated risk for suicide among those who use mixed drugs.

Among clients who abuse substances, there is an increased risk for suicide for those who are also bipolar (Weiss, Ostacher, Otto, Calabrese, Fossey, Wisniewski, et al., 2005; Goldberg, Garno, Portera, Leon, Kocsis, & Whiteside, 1999; Feinman & Dunner, 1996), bipolar combined with anxiety symptoms or cluster B personality disorder features (Garno, Goldberg, Ramirez, & Ritzler, 2005; McMain, 2007; Simon, Otto, Wisniewski, Fossey, Sagduyu, Frank, et al., 2004), or those with cluster B personality disorders (Kim, Sequin, Therrien, Riopel, Chawsky, Lesage, et al., 2005; Stone, 1990). APA (2006) report that clients with substance abuse disorders may experience suicidal ideation during major depressive disorder episodes or as a result of substance induced sadness. Substance use disorders may also complicate mood disorders (Goldberg, Singer, & Garno, 2001), which can increase susceptibility to treatment resistance, psychological impairment, and risk for suicide attempts (APA, 2003).

5.5.1 Risk Assessment and Concurrent Disorders

While individuals suffering from substance use disorders are at a higher risk for suicidal behaviour in general, these individuals often enter treatment when their abuse is out of control, during times of life crises, and during peaks of depressive symptoms, therefore further increasing their risk for suicidal behaviour (Ross, Teesoon, Darke, Lynskey, Ali, Ritter, et al., 2005) and increasing the need for suicide risk assessment upon intake in a treatment program (CSAT, 2009).

Risk Factors

Risk factors for individuals with addictions are similar to those for other populations discussed above, and are even more emphasized among those with concurrent disorders. Severe substance abuse, co-occurring mental disorders, and personality disorders or maladaptive traits are especially relevant to addictions populations (CSAT, 2009), as is loss of significant personal relationships (Johnsson & Fridell, 1997; APA, 2003). As per CSAT (1999), addictions clients who are poorly connected to other clients or have little therapeutic alliance, are making little progress throughout their addictions treatment, or are at a major transition point in their treatment, (e.g., moving from inpatient to outpatient or being discharged from a program), may be at an increased risk for suicide. Furthermore, when planned transitions break down, or if a client is terminated from addictions treatment due to poor attendance or relapse, this risk may be further increased (CSAT, 2009). Other times of stressful life events common among those with addictions or concurrent disorders may increase the risk of suicide, including relationship break-ups, traumas, legal events, job losses, financial crises, family conflicts or disruptions, and relapses, including times of intoxication (CSAT, 2009).

Clinicians working with substance use treatment clients are advised to be aware of the following suicide risk indirect warning signs, represented by the acronym IS PATH WARM, while recognizing that these warning signs may also be present in non-suicidal substance abuse clients (CSAT, 2009):

IS PATH WARM: Risk Factors

I – Ideation

S – Substance abuse

P – Purposelessness

A – Anxiety

T – Trapped (feels as if no escape)

H – Hopelessness

W – Withdrawal (social isolation)

A – Anger

R – Recklessness

M – Mood changes

Alcohol dependence presents a specific risk for suicidality, particularly in combination with major depression (Cornelius, Salloum, Mezzich, et al., 1995; Grant & Hasin, 1999). The presence of acute stressors related to risk for suicide, such as relationship problems, interpersonal disruptions, and onset of depressive episodes, often present among alcoholic individuals, lead to increased risk of reactive aggressive acts of suicide among alcohol dependent individuals (Conner et al., 2008). Furthermore, disinhibition resulting from alcohol consumption is a risk factor for suicide (Hufford, 2001; Wilcox, 2004).

Protective Factors

Potential protective factors identified by CSAT (2009) include identified reasons for living, being clean and sober, having trait optimism, attending 12 step support programs, attending religious and/or spiritual teachings against suicide, having a child in the home or childrearing responsibilities, an intact marriage, therapeutic alliance and employment.

One protective factor for those with alcohol dependence is full-time employment (APA, 2003). However, among alcohol abusing individuals who maintain full time employment or academics, particular risk for suicide occurs on weekends, which coincide with opportunities for bouts of heavy drinking (Pirkola et al., 2004).

5.5.2 Comprehensive Assessment & Concurrent Disorders

Similar to the comprehensive risk assessment outlined in section 5.3 above, APA guidelines (2006) suggest clients with addictions and concurrent disorders should be regularly and systematically assessed similar to any psychiatric patient, with questions being asked regarding current suicidal thoughts, lethality, plan, intent, method, history of attempts and aggression, family history of suicide, intensity of current depressive and other mood symptoms, current treatment and response, recent life stressors, substance use patterns, psychotic symptoms, and current living situation. As with clients who are not addicted to substances, addictions clients should be screened at intake and at specific points during treatment, while those with high risk factors should be screen regularly throughout treatment (CSAT, 2009).

The Centre for Substance Abuse Treatment (CSAT, 2009) created a Treatment Improvement Protocol (TIP), providing information on addressing suicidal thoughts and behaviours during treatment of substance abuse. As part of their protocol, CSAT (1999) provides a framework for substance abuse treatment professionals to utilize when addressing suicidal thoughts and behaviours among addictions clients. This framework, represented by the acronym 'GATE,' guides treatment providers to Gather information, Access supervision, Take responsible action, and Extend the action in regards to addressing suicidal behaviour.

Treatment Improvement Protocol: Steps for Clients at Risk for Suicide

GATE

G – Gather Information

A – Access Supervision

T – Take Responsible Action

E – Extend the Action

The first of these actions, 'gather information' addresses assessment issues in regards to addressing suicidality among addictions clients. Clinicians are advised to ask questions such as:

- "Tell me about your suicidal thoughts. How often do you have them? How strong are they? What makes them worse?" while remaining aware that statements such as

  - "I can't go through this again. If I relapse that's it."

  - "This is my last chance; if I relapse, I'm going to kill myself."

may represent an increase in risk among addictions clients.

The second action of GATE, 'access supervision,' outlines the importance of seeking supervision for treatment providers who may not have the appropriate mental health training to address suicidality, or of seeking consultation within a treatment team as best practice (CSAT, 2009).

When assessing risk of suicide among alcohol-dependent individuals, it is important to gather information regarding drinking habits, current social situation, psychiatric status, and presence of suicidal ideation and history of suicide attempts (Pirkola, Suominen, & Isometsä, 2004). Furthermore, Pirkola and colleagues (2004) suggest that when combined with current suicidal communication, the presence of two or more of the risk factors in the table below necessitates the monitoring of suicidal risk and may justify an inpatient stay.

Risk Factors among Alcohol-Dependent Individuals:

- Problematic alcohol use and possibly dependence

- Current active drinking

- Impulsive-aggressive behaviour, particularly when inebriated

- Affective symptoms such as depression, hopelessness, and mood swings

- Psychotic symptoms

- Recent adverse life events such as interpersonal loss or disruptions, and financial and legal problems

- Social isolation or poor social support

- Previous suicide attempts or communications

- Probable borderline personality disorder

- Family history of suicide or suicide attempts

- Change in the individual's social environment

- Change in the individual's mood

- Change in the individual's drinking status

Pirkola et al., 2004

Additional risk factors identified in APA guidelines (2003) include heavy drinking, serious physical illness, unemployment, living alone, and having made a suicidal communication (Murphy, Wetzel, Robins, & McEvoy, 1992). Patients who communicate suicidal ideation while intoxicated need to be immediately evaluated for suicide risk (Pirokola et al., 2004), as suicide attempts involving alcohol are often impulsive (Suokas & Lonnqvist, 1995).

5.6 Emerging Trends

No single risk factor can predict self-harm and suicide, because these behaviours are the result of a complex set of risk factors. These factors may act together in a multitude of ways that put a person at elevated risk, and may also combine with protective factors that further vary the presentation and ultimate risk of self-harm. There remains no certain combination of risk factors that can predict if or when suicidal behaviour will occur. Assessments need to be completed by experienced clinicians who use their rapport-building skills, ask probing questions, and use clinical judgment to determine risk.

There are some emerging trends regarding suicide risk that comes from anecdotal reports from direct care staff, community-based crisis response service providers, and published case reports. These trends are:

1. **Influence of internet:** There are internet sites that are devoted to providing information on how to commit suicide. Information includes lethality of different methods, how to access these methods, and some provide a forum to connect with other users of the site (Biddle, Donovon, Hawton, Kapur & Gunnell, 2008; Prior, 2004). When assessing risk, clinicians are encouraged to include probing questions about researching methods of suicide, and to consider that the internet has improved the accessibility of some methods.

2. **Sleeplessness and suicide:** There is emerging, but still controversial, evidence regarding partial and global insomnia and its relationship with suicide risk. In some cases, sleep disorders increase risk above and beyond the risk posed by depression alone (Bernert & Joiner, 2007). A recent review of the literature in this area stressed the importance of continuing research in the area before definitive conclusions are drawn (Bernert & Joiner, 2007).

TREATMENT

▸ Best Practice in Treatment

▸ Multidisciplinary Best Practice Literature Review

▸ Suicide PIP Review

▸ Treatment, Diagnostic & Population Considerations

6.0 Treatment

6.1 Best Practice in Treatment

Services are expected to align themselves to best practice in suicide treatment by the following ROP tests for compliance:

1. The organization identifies treatment and monitoring strategies to ensure client safety

2. The organization documents the treatment and monitoring strategies in the client's health record.

Similar to the assessment requirements, Accreditation Canada provides latitude for organizations to select and provide treatment that best meet the needs of the clients they serve (e.g. youth, adults) and services provided (e.g., concurrent disorder outpatient clinic; adolescent psychiatric inpatient unit). Organizations will need to provide evidence to the Surveyors that treatment is planned, implemented and documented according to best/promising practice parameters and responds appropriately to the client's unique needs.

The following sections provide an overview of treatment planning and best/promising practice in psychiatric and multidisciplinary treatment modalities. Following this, special considerations for different populations are provided.

6.2 Treatment Planning

Interventions for suicidal patients begin with a treatment plan that provides the structure and dosage for the client's individual therapeutic needs. The planning process should be a dynamic one that involves the therapist, client and other caregivers. The plan should take into account the client's risk for suicide (including protective factors), capacity to form a therapeutic alliance and range of treatment options. Choosing the most appropriate treatment modality requires knowledge of the risks and benefits of various interventions as well as an understanding of patient preference. It should be evaluated and re-assessed as needed or as new information becomes available (APA, 2003).

The treatment plan includes level of observation, diagnosis, medications, privileges, discharge planning and follow-up to community services. The Risk Management Foundation of the Harvard Medical Institutions, Inc (1996; Jacobs, 1999) recommends the following approach to treatment planning:

1. Collect data before planning

2. Identify range of treatment alternatives and select based on assessment and judgment of the individual circumstances

3. Involve client and caregiver perspectives into the plan, and include existing treatment modalities, family and individual treatments

4. Incorporate the most promising treatment into the process

5. Choose appropriate levels of observation, supervision and privileges

6. Document the process

6.3 Psychiatric Interventions

Therapeutic approaches should target the Axis I and Axis II diagnoses (as appropriate) and their specific symptoms using a combination of somatic therapies and psychosocial interventions when appropriate. The efficacy of anti-depressant treatment to lower suicide risk is inconclusive; however they are useful for those with acute depressive symptoms and for those with recurrent severe anxiety and depression. APA (2003) suggests using conservative quantities of anti-depressants with lower risk of acute overdose, such as an SSRI or other newer antidepressants, and monitoring closely. Short-term, benzodiazepine treatment (preferably long-acting agents) may be useful for those presenting with severe insomnia, agitation, panic attacks or psychic anxiety. This treatment should be monitored closely for disinhibition and interactions with other sedatives, and discontinued gradually after prolonged use. Trazodone, low dose of second generation antipsychotics and some anticonvulsants may have calming effects for those who are especially anxious or agitated.

For patients with bipolar disorder, long-term maintenance treatment with lithium salts is associated with a major reduction in the risk of suicide and suicide attempts, and there is moderate evidence that this treatment reduces the risk for those with major depressive disorder. The efficacy of anticonvulsants to lower suicide risk in mania and bipolar is not clear, however the risks and benefits of each medication, and the appropriate quantity should be weighed carefully; including the potential toxicity of lithium overdose.

For those with schizophrenia and schizoaffective disorders, clozapine treatment significantly decreases their risk of suicide attempts and possibly suicide. Of course, APA recognizes the risks associated with clozapine (agranulocytosis and myocarditis), and that these risks should be weighed carefully with potential benefits. This treatment is usually reserved for those whom do not respond to other antipsychotic treatment. Generally, second-generation antipsychotic medication is preferred to first generation antipsychotic agents.

For those with severe depressive illness (with or without psychosis), ECT is associated with rapid and robust treatment effects, including reduced suicidal thoughts. This treatment is also appropriate in some circumstances for patients with schizophrenia, schizoaffective disorders, and mixed or manic episodes of bipolar disorders, especially if catatonic features are present. There is no evidence that ECT reduces suicidality in the long-term, thus continuation or maintenance of pharmacological or ECT treatment should be considered after acute ECT course.

6.4 Psychotherapeutic Interventions

There is a substantial evidence base to support the use of psychotherapy in the treatment of non-psychotic depressive disorder and borderline personality disorder, both of which are associated with increased suicide risk (APA, 2003). Individuals with psychotic disorders and with substance use disorders (and thus at risk for suicidal thoughts and behaviours) may benefit from psychosocial treatments, which aim to reduce symptoms and improve functioning (APA, 2003).

Cognitive Behavioural Therapy (CBT) takes a problem-solving approach to correcting distorted emotions, behaviour and thinking. Meta-analytic studies have shown large effect sizes for improving depression (Butler, Chapman, Foreman & Beck, 2006) and reducing suicide risk (Tarrier, Taylor & Gooding, 2008; van der Sande, Buskins, Allert, van der Graaf, & van Engeland, 1997). CBT may decrease hopelessness (an important risk factor in suicide) and suicide attempts in depressed outpatients (APA, 2003).

Dialectical behaviour therapy (DBT) was developed for clients with borderline personality disorder (BPD) who show parasuicidal behaviours. DBT combines individual and group-based problem-solving interventions (Linehan, 1993). APA (2003) notes that this therapy is linked with modest decreases in self-injurious behaviours and suicide attempts among those with BPD, and there is some evidence that

DBT may reduce self-injurious behaviour in outpatients (Hawton, Arensman, Townsend et al., 1998). According to the 2001 Practice Guidelines for the Treatment of patients with Borderline PD, psychoanalytic/psychodynamic therapy has also demonstrated effective change in randomized controlled trials (Bateman & Fonagy, 1999, 2001). However it is important to keep in mind that one treatment approach may be more beneficial for a particular patient or a particular clinician than others. In a clinical overview by Zanarini (2009) 4 manualized psychosocial treatments for BPD are discussed, for an overview see table below.

Table 2 -

Overview of Four Manualized Treatments for Borderline Personality Disorder

TYPE OF THERAPY	THEORETICAL BASIS	THEORY OF BPD	FOCUS	REFERENCE
MBT Mentalization-based treatment	Psychodynamic	Difficulty in mentalization arouse because of difficulties in early attachment	Increase patient curiosity about and skill in identifying feelings and thoughts	Bateman & Fonagy (2008)
TBT Transference-focused psychotherapy	Psychodynamic	Excessive early aggression leads to split between positive and negative images of self and others that are unable to merge	Reduce symptomatology and self-destructive behaviour through modifying representations of self and others	Kernberg (1975) Clarkin et al. (2007)
DBT Dialectical behavioural therapy	Cognitive Behavioural	Core feature of BPD is emotional dysregulation	Skills group, individual therapy to reduce emotional lability	Linehan et al. (1991)
SFT Schema-focused therapy	Cognitive Behavioural	Four dysfunctional life schemas that maintain psychopathology and dysfunction	Range of behavioural, cognitive and experiential techniques focusing on therapeutic relationship, daily life outside therapy and past experiences	Young (2003) Giesen-Bloo et al. (2006)

The most consistent treatment outcome has been the reduction of self-harm and suicide attempts. There is no strong evidence that one treatment is better than another; however, it is clear the DBT and MBT are primarily aimed at reducing the frequency of physical self harm (Zanarini, 2009). Long term effects of these psychosocial treatments have been studied and shown to be effective in reducing a broad range of BPD symptoms. Bateman & Fonagy (2008) showed marked differences in medication usage. In a 5 year follow up after discharge, the treatment as usual (TAU) group used antipsychotic medication for an average three years, whereas the MBT group had used less than 2 months on average. Further at the end of the follow up period (8 years) 13% of the MBT group met diagnostic criteria for BPD compared to 87% in the TAU group. On the five-year follow up mark the MBT group showed a significantly lower level of suicidality (23%) compared to patients receiving TAU (74%).

6.5 Linkage – PIP Initiative for BC: Informed Practice Review

In April 2008, the Suicide PIP Initiative for BC was developed as a strategic effort to address suicide. One of the goals of the Suicide PIP initiative was to use a community development and action research approach to (among other objectives) complete an evidence-informed practice review of the academic and non-academic literature. A summary of their findings is included, as it appropriately expands the Framework's literature search parameters and includes broader stakeholder involvement. For purposes of brevity and focus, only those therapies that focus on intervention and postvention are included here. Interested readers are encouraged to view the full report at:

http://suicidepipinitiative.wordpress.com/publications/

A systematic literature search was conducted and included systematic reviews, narrative reviews, meta-analyses, evidence based guidelines and evidence based strategies from 2003 to 2008. Two reviewers assessed the literature and, based on inclusion and exclusion criteria, 60 synthesis studies were collated based on best and promising practices in the areas of interest. The results are presented in table 3.

Table 3:
PIP Evidence Informed Practice Review Findings

POPULATIONS	TYPE	BEST PRACTICES	PROMISING PRACTICES
Children and Youth	Intervention	Cognitive Behavioural Therapy (CBT) Dialectical Behavioural Therapy (DBT-A) Family Support Interpersonal Therapy (IPT-A) Skills Training	DBT Emergency Contact Cards Family Support Gatekeeper Training Group Therapy Multisystemic Therapy Peer Recognition & Response Phone Counseling Problem Solving Therapy (PST) Referrals Risk Assessment Safety Planning Substance Use Treatment
	Postvention	None Identified	Media Education Postvention Protocols
Adults	Intervention	Gatekeeper Training[11] Problem Solving Therapy (PST) Skills Training	DBT Family support Group therapy IPT Letter contact Medications
Older Adults	Intervention	CBT Gatekeeper Training IPT PST	Family support Gatekeeper training Medications Risk assessments

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11 A suicide prevention program that provides awareness and skills training to those in regular and non-clinical contact with various at-risk populations.

POPULATIONS	TYPE	BEST PRACTICES	PROMISING PRACTICES
Vulnerable and/or High Risk Populations*	Intervention	Medication CBT DBT PST	Peer and Youth Support Phone Counselling Gatekeeper training Risk assessment Substance Use Treatment
	Postvention	None Identified	Community Healing Plan Survivor Follow-up
All Populations	Intervention	CBT PST	DBT Family Support Follow-Up Medications Phone Counseling IPT
	Postvention	None Identified	Media Education

* Vulnerable/high risk populations include Youth aged 15-24 years, Aboriginal populations, mentally ill, persons bereaved by suicide, chronically ill or terminally ill, elderly, homeless, in custody, rural and remote, ethnic populations, gay/lesbian/bi-sexual and transgendered persons, abuse survivors and substance abusers

As is reflected in the literature review for the Provincial Suicide Clinical Framework, CBT is a best practice across the five populations examined for the purpose of the PIP initiative. Promising practice in the areas of intervention and postvention are DBT, family support, gatekeeper training, phone counselling and risk assessment. Unfortunately, literature on postvention was notably absent and led to significant gaps in understanding of postvention practices that could be used. Media education was suggested as a potentially promising practice in postvention.

6.6 Nursing and Other Health Care Provider Interventions

6.6.1 Client-centered, problem-solving approach

Nurses and other health care providers should utilize effective communication techniques, such as listening and validating, so that the client is able to convey his or her story and needs from their own perspective (Recommendation 9, RNAO, 2009). Expressions of respect, tolerance and an affirmation of the client's self-worth have been found to increase acceptance of treatment amongst suicidal clients. The specific needs of the individual can be identified by using a client-centered approach and working within a framework such as Maslow's Hierarchy of Needs (Maslow, 1943, in RNAO, 2009). Following the identification of needs, the health care professional should be actively involved with the client to develop strategies to meet these needs.

Possible strategies for affirming a client's self-worth:

- Encourage the client to be kind and understanding with themselves. Support the use of a diary to journal their thoughts and to positively reframe any negative thoughts

- When dialoguing with the client, acknowledge their strengths

- Work with client to set achievable daily goals and to accomplish them

- Help the client establish rewards for small accomplishments

- Assist the client to counteract negative thoughts with positive thoughts

RNAO Development Panel, 2008

Unmet needs may be addressed through:

- Facilitating access to services
- Counselling, medication and information
- Active outreach
- Encouragement of active participation in social environments, as appropriate
- Using collaboration and teamwork to ensure a consistent approach to care

The nurse or health care professional should use a mutual problem-solving approach to facilitate the client's understanding of how they perceive his/her own problems and generate solutions (Recommendation 10, RNAO, 2009). Taylor (2000, in RNAO, 2009) stated that the ability of a nurse to provide safe, competent care depends on good clinical problem-solving skills. Problem-solving therapy has shown promise in reducing repeated episodes of deliberate self-harm and improves self-management of triggers of impulsivity (Fontaine, 2003, in RNAO, 2009). A problem solving approach is depicted below (Muxlow & Hamer, 2007, in RNAO, 2009):

6.6.2 Problem Solving Approach

Identify Problem → Client's understanding of the problem, what is important, and contributing factors. Ask the client to describe what's happening, help he client break down the problem, and identify triggers ad patterns

Explore past attempts to address issue → Help the client identify what has worked in the past, and identify supports/resources/strengths

Explore alternatives/ challenges or barriers → For example, the role of medications to reduce anxiety, breathing and relaxation, identification of small steps that will provide a sense of control

Choose solution(s) → Focus on helping the client identify small steps, coping strategies, stress reduction, problem-solving and self-examination of results

Implement process → Identify when patient will "stop and think" and use collaboratively agreed upon action, journaling success and emotions, provide time limited therapeutic sessions

6.6.3 Knowledge of Treatment Modalities

The health care professional and nurse should have knowledge of treatment modalities that may be used to manage clients' risk for suicidal ideation and behaviour. This knowledge can inform client-centered interventions regarding advocacy, monitoring and health teaching, as appropriate (Recommendation 12, RNAO, 2009). Treatment modalities include psychotherapy, psychopharmacology, electroconvulsive therapy (ECT) and complementary or alternative therapies. Clients may be referred to persons who have specialized skills (i.e., RNs, psychiatrists, other allied health professionals). In regards to medication, it is important for the nurse to monitor, support and provide health teaching to the client and family related to the use of psychopharmacology as a potential treatment modality. In addition, close clinical monitoring of psychopharmacology use with suicidal clients is essential. This involves knowing the individual's baseline symptoms so that these symptoms can be compared with symptoms associated with adverse drug effects.

In keeping with a client centered and culturally safe approach, nurses should explore the client's knowledge and meaning of various treatment options. If a client is using complementary or alternative modalities (CAM), it is important for the nurse to explore the client's understanding and use of CAM in order to ensure that the client's safety is maintained, particularly with the additional use of conventional psychopharmacology. Culture-specific modalities should be considered and respected, while maintaining patient safety. Nurses should note that these culture-specific modalities may not be considered "alternative" by other groups (for example, medicinal plants used by First Nations).

For individuals with chronic or recurring self-injurious behaviours, each act needs to be re-assessed considering the context in which it occurred and the situational factors that may have led to the recent behaviours. Consultation and supervision with colleagues is recommended for managing patients with severe and recurring suicidality, especially in regards to their treatment plan, alternative treatments, and dealing with countertransference issues.

6.6.4 Therapeutic Relationship

The establishment of a therapeutic relationship between the health care professional and the client is considered essential for creating a context within which the professional can actively engage with the client to explore their needs and develop strategies to reduce suicide risk (Recommendation 2, RNAO, 2009). Within the therapeutic relationship, the nurse should work with the client to minimize the feelings of shame, guilt and stigma that may be associated with suicidality and mental illness (Recommendation 3, RNAO, 2009), as well as foster hope, as hopelessness is associated with an increased risk for suicide (Recommendation 11, RNAO, 2009).

Culture can greatly impact how issues of mental health, suicide and death are discussed and addressed in the context of the therapeutic relationship. Nurses and health care professionals should provide care in keeping with the principles of cultural safety/cultural competence (Recommendation 4, RNAO, 2009). This begins with a recognition that cultural competence involves acceptance and respect for the 'culture' of the client and for the associated differences, as well as advocacy for change in response to policies and practices that may be experienced as 'unsafe' by the client. Professionals should engage in reflective practice and obtain support to minimize the effect of their own potentially negative reactions to the client, their own feelings of hopefulness and/or hopelessness, and also be aware of the impact culture may have on the therapeutic relationship.

6.7 Treatment & Population Considerations

6.7.1 Child & Youth Treatment

In 2001, AACAP published practice guidelines for clinicians, which covers the epidemiology, causes, management and prevention of suicide in children and adolescents. This section briefly outlines the treatment recommendations, which is supplemented by Steele & Doey (2007b) and Macgowen (2004) where appropriate.

Treatment must encompass both the acute management of suicidal behaviour (discussed in the monitoring section, below), as well as treatment of associated psychiatric issues. There is a limited evidence-base regarding the most effective treatments for those presenting with suicidal ideation and/or behaviors. The AACAP qualify that:

> "…it is the impression of many clinicians that the majority of suicide attempters
> and their families benefit from straightforward interventions dictated by the child
> or adolescent's mental state and family circumstances." (2001, p.28s)

Much like the adult population, the management and treatment of underlying psychiatric conditions such as anxiety, mood disorders and ADHD should reflect current leading practice for these disorders (Steele & Doey, 2007b).

Psychotherapy

Psychotherapy is an important component the in the treatment of disorders associated with suicidal behaviour and should be tailored to the child or adolescent's particular needs. While relatively few empirical studies have evaluated the various models of psychotherapy, a helpful systematic review is provided by Macgowan (2004). This review is summarized here combining recommendations from AACAP (2001) and Steele & Doey (2007a). Readers are also encouraged to review the summary provided by MCFD: http://www.mcf.gov.bc.ca/suicide_prevention/empirically.htm

Cognitive Behavioural Therapy (CBT)

CBT has been shown to be an effective intervention for depressive symptoms; however, the efficacy of CBT in suicidal adolescents has not yet been examined. Nevertheless, Steele & Doey (2007b) note that CBT and fluoxetine has been helpful for suicidal ideation and depression. A CBT treatment manual modified for depressed adolescents has been created, but provides no evidence for the efficacy of CBT for teenagers who have attempted suicide. This intervention was reported to be as effective as systemic family therapy and nondirective supportive therapy in reducing suicidal ideation in depressed adolescents (Brent et al., 1997).

Interpersonal Therapy for Adolescents (ITP-A)

IPT-A is a time-limited psychotherapy that addresses interpersonal problems, and has been modified for use with depressed adolescents. There is evidence that IPT-A is an effective psychotherapy for depression in young people, and may be particularly helpful for depressed and suicidal adolescents presenting with interpersonal problems. Steele & Dooey (2007a) caution that while IPT-A can be useful in these limited contexts, there is no evidence that it reduces suicidal ideation or behaviors.

Dialectical-behavioural therapy for adolescents (DBT-A)

DBT has been shown via a randomized controlled trial to reduce suicidality in adults with borderline personality disorder (BPD). It has been adapted for use with adolescents by including family members in skills training and reducing the treatment duration. In a nonrandomized comparative-treatment study with adolescents who were suicidal and diagnosed with BPD, those in the DBT group had fewer psychiatric hospitalizations and demonstrated significant reductions in suicidal ideation when measured before and after treatment (Rathus & Miller, 2002).

Psychodynamic therapy

There are no studies that address the efficacy of this approach among young people with suicidal behaviours. Macgowan (2004) notes that psychodynamic therapy is likely the most commonly administered form and seems to encourage long-term involvement by the child or adolescent patient.

Family Therapy

Family therapy is often advocated as the most appropriate means for intervening in suicidal behaviour and depression. Suicide attempts have the power to disrupt the entire family system, but may also generate increased empathy and caring in a family (Berman & Jobes, 2001). A time-limited home-based family therapy intervention for suicidal children and adolescents has been found to have limited efficacy for children and adolescents without major depressive disorder (Macgowan, 2004).

Psychopharmacology

While medication may be essential in stabilizing and treating the suicidal child and adolescent, administration should be monitored by a third party who can report any unexpected change of mood, increase in agitation or emergency state, or unwanted side effects, and who can regulate dosage.

Selective Serotonin Reuptake Inhibitors (SSRIs) are the preferred psychopharmacological treatment for childhood and adolescent depression, with caution that all youth on SSRIs must be watched for any increase in agitation or suicidality. For children and adolescents with bipolar disorder, lithium and other mood stabilizers (e.g., valproate and carbamazepine) should be prescribed before antidepressant medication.

Nurse and Other Health Care Professional Competencies (Youth)

Core clinical competencies in the treatment of suicidal youth include: the capacity to develop a strong therapeutic alliance; crisis management skills; collaborative risk assessment and safety planning skills; knowledge and competence in the use of empirically supported treatments; and an ability to constructively involve families in treatment. All of these competencies should be provided within a well-coordinated service delivery system (Berman, Jobes & Silverman, 2006).

6.7.2 Geriatric Treatment

The treatments described under the general treatment section (sections 6.3 to 6.6 above) are generally appropriate for older adults, although no upper age is provided by APA (2003). In the interest of assuring coverage for different populations while maintaining brevity, treatment-related issues for geriatric patients are highlighted here.

Treatment Planning

Datto and colleagues (2006) report that older adult primary care patients (i.e., those who are likely mentally competent) can accurately self-report overall change in depressive symptoms, which can be used to inform depression treatment decision-making.

Psychopharmacology

Research suggests that the best way to decrease suicide risk among elderly individuals is to treat the underlying psychiatric disorder, which is typically depression (Garand, 2006). Effective treatments appear to moderate several important correlates of completed suicide, namely the severity of depressive symptoms and suicidal ideation (Post, 2007). Research supports the use of serotonin-specific reuptake inhibitors (e.g., Citalopram) and psychotherapy in the context of collaborative care for the treatment of major depressive symptoms in older adults (including, but not limited to, suicide ideation). Suicide ideation was found to remit more rapidly with this combined treatment, compared to "treatment as usual" (Heisel et al., 2006).

There are no studies that show Electroconvulsive Therapy (ECT) is effective for the amelioration of suicidal thinking or behaviour in older patients. However, Reiss & Tishler (2008) and Pearson & Brown (2000) recommend evaluating the pros and cons of using ECT with residents who exhibit treatment-resistant depression.

Attention to the potential association between antidepressant pharmacotherapy and suicidality is important in geriatric psychiatry: The elderly have the highest rates of completed suicide, and their preference for primary care-based treatment for depression translates into a high likelihood of pharma-cotherapy being employed in their treatment (Post, 2007). While the vast majority of patients treated with SSRI antidepressants do not attempt suicide, in rare instances these drugs appear to incite suicidal

ideation during the first weeks of therapy. It is recommended that clinicians reserve SSRI antidepressants for patients with established indications, monitor them closely after commencing treatment, and inform patients and their families of the possible emergence of suicidality during the first month of therapy (Juurlink et al., 2006).

Psychotherapy

While trials of combined antidepressants and/or psychotherapy have shown a reduction in suicidal ideation, it is not possible to discern the respective unique effects of medication and psychotherapy. No randomized controlled trials of psychotherapeutic interventions were found for the prevention of suicidal behaviour or death by suicide in older adults (Heisel et al., 2006). However, depressive symptoms in older adults are significantly improved through Interpersonal Psychotherapy (IPT) (Hinrichsen, 2008; Pearson & Brown, 2000) and cognitive therapy (Pearson & Brown, 2000). When using cognitive therapy within this population, therapists need to challenge hopelessness and other self-defeating thinking, and aim to increase recognition of meaning and purpose in life (Pearson & Brown, 2000; Heisel, 2006).

Therapeutic Relationship

Establishing a therapeutic relationship might be difficult with suicidal older adults who have difficulty establishing trusting relationships. The relationship can be enhanced by actively attending to client expressions of thoughts and feelings, by being genuine, and by taking one's time and not rushing the therapeutic process. These elements can help contribute to a person feeling heard and respected, and can help contribute to the older client feeling connected (Heisel et al., 2006). In light of research linking hopelessness with suicidal ideation, nurses and other health care providers should explore strategies to assist older persons find and maintain meaning and purpose in their lives (Heisel et al., 2006).

6.8 Treatment and Diagnostic Issues

Schizophrenia

The principle goals of treatment for patients with schizophrenia are to reduce depressive and psychotic symptoms, address comorbidities, alleviate demoralization and despair and instill hope. The latter two are fundamentally psychosocial and interpersonal issues and should be dealt with in the context of psycho-therapies, even though the literature primarily focuses on pharmacologic interventions (Mamo, 2007). These interventions are covered more fully in the previous sections, and will not be repeated here. However, the majority of the evidence on these interventions comes from studies among those with mood disorders, and Mamo (2007) emphasizes that direct evidence among those with schizophrenia is lacking. There is evidence that a combined therapeutic approach to managing suicidality in those with schizophrenia is effective for improving symptoms (Grawe, Falloon, Widen & Skogvoll, 2006), but the independent role of psychosocial therapies has not been systematically studied in the context of improving suicide-related outcomes (Mamo, 2007). Writing for the CPA, Mamo acknowledges the importance of "borrowing" interventions based on evidence accumulated that focus on related outcomes (e.g., reduction of hopelessness) or from other population bases (e.g., mood disorders), when it is the best available evidence.

Concurrent Disorders

Very few controlled studies exist to guide the treatment of suicidal thoughts and behaviours among patients with substance abuse disorders (Cornelius, Salloum, Lynch, Clark & Mann, 2001). However, the following psycho-pharmaceutical treatment suggestions are noted in APA guidelines (2006), while specifically noting that caution should be used when providing suicidal patients with potentially toxic medication.

Alcohol consumption increases risk for suicide by simultaneously limiting the communication of intent (APA, 2003; Hayward, Zubrick & Silburn, 1992; Suominen, Isometsa, Henriksson, Ostamo & Lonnqvist, 1999), increasing impulsivity, decreasing inhibition, and impairing judgment (Marzuk & Mann, 1988). Therefore, the patient should be made aware of the elevated risk of suicide during periods of alcohol intoxication (Pirkola et al., 2004).

A high proportion of alcohol dependent clients are at risk for future re-attempts. Therefore after his or her acute physical care, prevention of future attempts should be an immediate therapeutic goal (Pirkola et al., 2004). Treatment providers should focus on circumstances and motivations surrounding the attempt as well as the individual's attitude towards surviving the attempt, paying particular care to comments regarding being disappointed about surviving the attempt or returning to similar circumstances prior to the attempt, such as continuing to drink (Pirkola et al., 2004).

6.8.1 Psychopharmacology

Among clients with schizophrenia and addictions, Clozapine has the ability to reduce the risk of suicidal behaviours (Meltzer, Alphs, Green, Altamura, Anand, & Bertoldi et al., 2003). Due to the possibility of major side effects and therefore required blood monitoring, most experts would suggest Clozapine as a second line agent. Among individuals with substance use disorders in combination with panic disorder, depression or obsessive-compulsive disorder, antidepressants, such as SSRIs are often utilized and successful in treating suicidal patients (Cornelius, Salloum, Thase, Haskett, Daley, Jones-Barlock et al., 1998). However, caution should be used if clients are given tri-cyclic antidepressants as an alternative to SSRIs due to the potential for overdose in a suicide attempt (CSAT, 2005). Similarly, when utilizing Benzodiazepines to treat individuals with personality disorders in combination with substance use disorders, caution should be used due to the potential for overdose in suicide attempts (Lekka, Paschalis, & Beratis, 2002). APA guidelines (2006) suggest monitoring the use of prescribed medications among these clients by dispensing medications in limited amounts with a limited number of refills, and by using random or frequent toxicology screening.

When treating risk for suicide among alcohol dependent individuals, use of both pharmacologic and psychotherapeutic interventions are usually recommended, although there is a lack of empirical evidence demonstrating an additive effect of this combination of therapies (Thase, Salloum, & Cornelius, 2001; Petrakis, Gonzales, Rosenheck, et al., 2002). Potential pharmacologic options include Naltrexone or Nalmefene to control/reduce drinking, SSRIs to treat depression, and valproic acid or lithium to treat bipolar disorder; however, the use of benzodiazepines is not usually recommended among this population (Pirkola et al., 2004).

6.8.2 Psychotherapeutic Interventions

In terms of psychotherapeutic interventions, any intervention that successfully addresses major risk factors such as severe substance abuse has the potential to reduce suicidal behaviours (CSAT, 2009). In particular, it is noted that abstinence should be a primary goal of any suicidal client with addictions or concurrent disorders (Weiss & Hufford, 1999; Cornelius, Salloum, Lynch, Clark, & Mann, 2001), as risk for suicide will decrease for most clients when they achieve abstinence (CSAT, 2009).

Within addictions treatment, family involvement and commitment to treatment should be encouraged. Relapse prevention is supported when focusing the client's attention to treatment attendance, recovery goal setting, homework completion, medication compliance, which potentially reduces suicidality (CSAT, 2009). Cognitive behavioural therapies (CBT) may be effective in addressing immediate risk factors for drinking, as well as symptoms of affective disorders or impulsive behaviours (Pirkola et al., 2004).

MONITORING

▸ Best Practice in Monitoring

▸ Immediate Safety Needs

▸ Observation Policies & Procedures

▸ Interdisciplinary Management & Education

▸ Monitoring, Diagnostic & Population Considerations

7.0 Monitoring/Psychiatric Management

7.1 Best Practices in Monitoring and Psychiatric Management

Services are expected to align themselves to best practice in suicide monitoring by the following ROP tests for compliance:

1. The organization addresses the clients immediate safety needs

2. The organization identifies treatment and monitoring strategies to ensure client safety

3. The organization documents the treatment and monitoring strategies in the client's health record.

The APA guidelines (2003) provide suggestions for the management of patients who are deemed to be at risk for suicidal thoughts, plans or behaviour. Psychiatric management should cover the following points (when the clinical situation allows):

1. Determine appropriate setting (e.g., outpatient, inpatient) and address immediate safety needs through safety interventions (e.g., level of observation)

2. Establish therapeutic alliance

3. Coordinate treatment planning with multiple clinicians and patient

4. Monitor patient progress and response to treatment plan. Re-assess safety, psychiatric status and functioning as needed

5. Encourage treatment adherence and provide education to patients, and where indicated, family and significant others

7.2 Immediate Safety Needs

The organization is responsible for addressing patients' immediate safety needs. These needs may be addressed via policies and procedures related to observation or security levels, and ensuring the facility has environmental safeguards in place that minimize opportunities for patients to self-harm. The strengths and limitations of observation policies and environmental safeguards are briefly reviewed here, and suggestions are provided at the end of the section.

7.2.1 Environmental Safeguards

In this context, environmental safeguards are features on the unit that limit patients' access to means for self-harm (Cardell, Bratcher & Quinnett, 2009). A series of reviews noted that hanging and jumping from high places were the most common methods used to commit suicide, and restricting access to these (and other common) means should be a patient safety priority (Hawton, 2007; Lieberman, Resnik & Holder-Perkins, 2004; Mills, DeRosier, Ballot, Shepherd, & Bagian, 2008; Yeager et al., 2005). Based on a review and analysis of how inpatients utilize their physical environment to self-harm, the Joint Commission (1998) provided a series of recommendations to make the physical environment of inpatient units safer. A more recent review of environmental hazards at Veterans Hospitals (Mills et al., 2008) and a review of the research literature (Cardell, Bratcher & Quinnett, 2009) echoed the Joint Commission's recommendations:

1. Remove and replace breakaway hardware, especially door handles

2. Weight-test all breakaway hardware

3. Block patient access to sharp objects and other harmful items

4. Remove curtains and rods

5. Eliminate shoelaces, belts and safety razors (shave high-risk patients or observe while shaving)

6. Replace doors with accordion or pocket doors when code allows

7. Build stainless steel boxes around plumbing fixtures

8. Implement weekly safety rounds

7.2.2 Revisiting As Needs Change & High-Risk Periods

As discussed in the assessment section above, the ROP specifies that after the initial risk assessment, clients should be re-evaluated at regular intervals or as needs change. Of course, assessment and monitoring strategies are not mutually exclusive, so the suggestions in section 5.2 are re-iterated here.

While latitude is provided to clinical teams to decide what is best for their patients, clinical expertise and the extant research literature (Links, 2009; Troister & Links, 2008, Steele & Doey, 2007) point to a number of high-risk periods. It is therefore recommended that patients are assessed or re-assessed for suicide risk under the following circumstances:

Follow-up Contact, Assessment & Re-assessment

6. Any health care provider serving an individual who is suicidal is to follow up within **24 hours** (or sooner if required).

7. Patients should be assessed **upon return** from Unauthorized Absence (U/A) or Visit Leave (V/L) from inpatient services

8. Patients should be assessed or reassessed **24-48 hours** before discharge[12] from inpatient services for those with a history of suicidal behaviour.

9. In-person follow-up within **7 days** (or sooner if required) of discharge from inpatient services for those with recent suicidal behaviour.

10. Patients should be assessed and carefully monitored **within the first 30 days** following discharge[13] from inpatient services.

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12 Troister, T. & Links, P. (2008). Predictors of Suicide Within One Year of Discharge from Psychiatric Hospitalization. Suicide Studies Unit, St. Michael's Hospital

13 Links, P. (2009). Managing the risk posed by suicidal patients. Suicide Studies Unit, St. Michael's Hospital

7.2.3 Observation Policies and Procedures

The APA (2003) best practice guidelines on the assessment and management of patients with suicidal behaviours suggest that observation levels should change according to the assessed risk level and clinical judgment. These authors note that in emergency or inpatient settings, the patient's immediate safety needs may require one-to-one observation, continuous closed circuit television monitoring, and physical or pharmacological restraints.

To what extent do observation practices prevent inpatient suicides? APA (2003) notes there is no evidence these precautions reduce suicide risk in the long term, but they do delay suicide and allow for treatment initiation. However, in Janofsky's (2009) review of relevant research, 20-66% of inpatients who commit suicide did so under intermittent or continuous checks (including one-on-one observation; see Busch, Fawcett & Jacobs, 2003; Dong, Ho & Kan, 2005; Gournay & Bowers, 2000; Martin, 2000; Meehan et al., 2006).

The fact that suicides still occur while patients are under observation is a troubling gap in suicide risk management of inpatients. In his review of the qualitative studies in the area, Janofsky (2009) identified a lack of clarity around observation terminology. That is, within health systems (and even within units) staff are often not clear about observation practices and how to implement them. In a failure mode effects analysis[14] (FMEA) of *observation policies* and procedures at Johns Hopkins Hospital's psychiatric inpatient unit, Janofsky (2009) noted that communication between physicians, nurses and those charged with observing patients was the most critical observation failure. Communication was stymied by nursing workflow, observer discomfort with communicating patient behaviour changes to nurses, unclear documentation requirements for staff and inconsistent nurse-observer expectations. At Johns Hopkins, the team responded to these potential failures by developing an observer feedback form that aided communication between observers and nurses, and allowed for documentation of patient behaviour or symptom changes, and the effectiveness of interventions.

Another potential failure identified at Johns Hopkins Hospital was the decision-making process as to *when* a patient should be initiated and/or removed from constant observation (Janofsky, 2009). This decision is particularly difficult when a patient demonstrates some risk factors but not others, and the best practice literature offers no suggestions for how to resolve these "gray-zone" cases.

Some of these issues may be resolved by using consistent terminology and practices across programs. The New Zealand Guidelines Group (Boyce, Carter, Penrose-Wall, Wilheim & Goldney, for the Royal Australian and New Zealand College of Psychiatrists, 2003) and the National Institute for Clinical Excellence (NICE, 2005, 2006) published clinical practice guidelines for the management of adult deliberate self-harm, which includes suggested observation levels for those at varying degrees of risk. The Clinical experts in adolescent mental health services will need to determine if these observation practices will be appropriate for their population.

The level of support and observation that began when suicide risk was identified should be **adapted as required**, to reflect the client's changing suicide risk (Recommendation 8, RNAO, 2009). This should be determined by clinical judgment and collaboration with the health care team. The observation should be set "at the least restrictive level, for the least amount of time within the least restrictive setting" (CRAG, 2002, in RNAO, 2009).

Using consistent terminology and practices across sites may reduce inconsistent practice and improve patient safety. Two professional groups have published guidelines explicitly link levels of observation with risk of self-harm and suicide; the New Zealand Guidelines Group (2003) and the National Institute for Clinical Excellence (2005, 2006). These two documents are combined in table 4.

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14   FMEA is a method to analyze physical environments and human processes to see where errors could occur, so to identify safety improvement priorities before errors occur.

Table 4:
Suggested Levels of Observation Policy

LEVEL OF OBSERVATION	DETAILS
General Observation	• Not specified by NZGG, other than "required for all psychiatric patients" • According to NICE, location of patient should be known to staff, and • Conduct a mental state assessment once per shift to assess mood and behaviours associated with risks of disturbed or violent behaviour.
Intermittent Observation	• Observations made at a minimum of every 10-20 minutes • Interval between observations varied to ensure the person cannot predict the exact time of the next observation • Use when a person is at significantly increased risk of suicide compared to average psychiatric inpatient • Appropriate level of observation for patients who, while not at immediate risk for suicide, have the potential for that risk, have previously been at risk, or when the extent of risk is uncertain
Same room and in sight	• Constant visual observation on a 1:1 basis • Nurse is in the same room and in sight of the person • Use when a patient is at high risk for suicide expressing active suicidal intent, and the person may have carried out an act of deliberate self harm in the past or has unpredictable psychotic states
Within Reach	• Requires observation within reach of the person for safety purposes • More than one nurse may be required. • Use when a person is at extremely high risk of suicide and is expressing active suicidal intent. • He/she may have recently carried out an act of deliberate self-harm, have unpredictable psychotic states, and/or be impulsive and aggressive.

NZGG recommends the following **procedures** in tandem with the observational policy:

1. Regularly review the mental state of the individuals under such close observation. This should be done formally at the nursing handover at the end of each shift.

2. Senior nursing and psychiatric staff should review the level of observation at least daily when the overall management plan is reviewed.

3. The levels of observation and changes to this should be documented separately in the clinical notes, with counter-signatures from senior staff and the responsible clinician. The documentation will include date, time and signature, level of observation, stop date and role of each person signing.

4. Changes to closer levels of observation may be initiated by any senior clinical team member.

5. Reduction of the level of observation must be approved by two senior members of the clinical team.

The effectiveness of environmental safeguards and observation policies and procedures to reduce suicide rates is somewhat contentious (e.g., Cutcliffe and Stevenson, 2008). Of course, safeguards and policies are not mental health and addiction service providers' sole response to suicide risk; assessment and treatment should be part of a comprehensive strategy to address suicidality.

7.2.3 No-Harm Contracts versus Safety Plans

No harm contracts are generally discouraged by professional and academic associations, for a number of reasons. First and foremost, there is no evidence that they prevent suicide and do not protect clinicians from malpractice litigation (McConnell Lewis, 2007). Therefore the value of 'no suicide contracts' is questionable (Steele & Doey, 2007b, see also APA, 2003) and they should not be relied upon. They are especially discouraged for patients who are agitated, psychotic, impulsive, or under the influence of intoxicating substances. These contracts are not recommended in many settings and populations, including child and youth services, emergency settings or with newly admitted or unknown patients (APA, 2003).

A collaborative and pragmatic **Safety Plan** is an emerging leading practice among mental health and addiction service providers. Through a collaborative process between the client and professional, the clients' coping strategies and avenues of support are articulated. The safety plan covers access to means to attempt suicide, and a list of supporters whom the client can call on in case of crisis. The professional and client can also problem solve regarding potential barriers or obstacles of using the plan.

7.3 Interdisciplinary Treatment Planning & Education

Effective monitoring and care is best achieved when nurses work in collaboration with the interdisciplinary team and the client, family and community. Nurses and other health care providers may initiate and participate in a debriefing process with other health care team members as per organizational protocol (Recommendation 13b, RNAO, 2009). The nurse should also seek support through clinical supervision when working with adults at risk for suicidal ideation and behaviour (Recommendation 14, RNAO, 2009). The importance of such supervision provides an opportunity for reflection and support while enhancing knowledge and professional abilities.

In addition to clinical supervision, nurses and other health care professionals who work with individuals at risk for suicide must have the appropriate knowledge and skills acquired through education curricula, ongoing professional development opportunities and orientation to new work places (Recommendation 15, RNAO, 2009). Nursing education curriculum, specifically, should incorporate content on mental health issues, including suicide risk reduction and prevention, in a systematic manner to promote core competencies in mental health practice (Recommendation 16, RNAO, 2009).

> **Psychiatric management skills for nurses and other health care professionals**
>
> - Effective communication skills
>
> - Effective interviewing skills
>
> - Awareness of warning signs, risk and protective factors
>
> - Knowledge and use of a problem-solving approach
>
> - Collaboration with the health care team, including knowing when experts should be consulted
>
> - Use clinical practice guidelines to assist with standardized documentation, clear communication and guided decision-making

It is strongly recommended that in addition to basic education, other tools such as clinical supervision, mentoring and observation be utilized to actively support novice nurses. The Canadian Association for Suicide Prevention (CASP) suggests that training of health care professionals and the promotion of effective clinical and professional practice are important elements of a national strategy for suicide prevention (CASP, 2004, in RNAO, 2009).

7.4 Monitoring & Population Considerations

7.4.1 Child and Youth Psychiatric Management

Children and adolescents with acute suicidal ideation or attempts are frequently first evaluated and treated in an emergency service. It is here that the mental health professional provides the important triage function of referring suitable patients for subsequent treatment. Emergency room and other crisis staff should establish a relationship with the suicidal individual and family and stress the importance of treatment. Clinicians should be prepared to admit those who attempt suicide who also express a persistent wish to die or who have a clearly abnormal mental state (AACAP, 2001). Steele & Doey (2007b) recommend hospitalization should be considered if the youth is unable to form a therapeutic alliance, to guarantee his or her safety, to be truthful, to regulate his or her emotional and behaviour, or found to be lacking family and social supports.

Outpatient or day treatment can be used when the child or adolescent is not likely to act on suicidal impulses, when there is sufficient support at home and when there is someone who can take action if the young person's behaviour or mood deteriorates (Steele & Doey, 2007b).

If a child or adolescent is admitted as an inpatient, then treatment should continue until his or her mental state or level of suicidality has stabilized. There is no evidence that exposure to other suicidal psychiatric inpatients will increase the risk of suicidal behaviour (AACAP, 2001). Determining when a patient is ready for discharge from the hospital should include an evaluation of the severity of existing suicidal ideation and intent. Attention to clearly dysfunctional family patterns or parental psychiatric illness may improve the child or teenager's later outpatient care.

Discharge can be considered if the clinician is satisfied that adequate supervision and support will be available over the following few days, and if a responsible adult has agreed to 'sanitize' the environment by securing or disposing of potentially lethal means (e.g., medications and firearms). Because the value of 'no suicide contracts' is questionable (Steele & Doey, 2007b, see also APA, 2003) they should not be relied upon. Instead, a safety plan should be developed in collaboration with the youth, which can be used in case of a future suicidal crisis. The safety plan capitalizes on existing social supports (including 24 hour back up) and limits to confidentiality is explicated. If possible, an appointment should be scheduled for the child/adolescent to be seen for a fuller evaluation before discharge from an acute observation room, and the clinician treating the child/adolescent should be available over the next few days to the patient and family (AACAP, 2001).

7.4.2 Geriatric Psychiatric Management

While the APA (2003) guidelines do not specify an upper age limit, psychiatric management and monitoring issues that may be unique or more common in geriatric psychiatry are reviewed here. Of course, similar to all other age groups, the suicidal patient's safety must first be ensured (Reiss & Tishler, 2008). This involves removing objects that can be used for self-harm (e.g. stockpiled medication, guns, ropes, belts, sharp objects) from the patients' room.

Once a patient has initiated treatment, it is important to monitor outcome and compliance with therapy (Reiss & Tishler, 2008). Individuals with more severe suicidal ideation and/or a history of self-harm behaviours were found to have symptoms that resolved more slowly and less completely. In addition, these individuals were more prone to relapse. As such, continued vigilance is needed throughout the period of recovery from depression (Heisel et al., 2006).

Therapeutic Relationship

Establishing a therapeutic relationship might be difficult with suicidal older adults who have difficulty establishing trusting relationships. The relationship can be enhanced by actively attending to client expressions of thoughts and feelings, by being genuine, and by taking one's time and not rushing the therapeutic process. These elements can help contribute to a person feeling heard and respected, and can help contribute to the older client feeling connected (Heisel et al., 2006). In light of research linking hopelessness with suicidal ideation, health care providers should explore strategies to assist older persons find and maintain meaning and purpose in their lives (Heisel et al., 2006).

Providers working with suicidal clients should never work in isolation. Suicide prevention requires a team approach, one that is interdisciplinary and involves one or more mental health professionals. Timely note-keeping is essential for monitoring risk, especially in team or clinic settings (Heisel et al., 2006). Good notes include detailed information on risk assessment, interventions, consultations, and client reactions/responses and outcomes. Safety strategies should include specific instructions for accessing assistance when needed, including from co-workers, supervisors, registered mental healthcare practitioners, crisis and emergency workers, and the police.

7.5 Monitoring and Concurrent Disorders

Individuals with addictions may experience life crises unique to this population such as: substance use relapse, treatment transitions and discharges, which are known to increase risk for suicidal behaviour, thus highlighting the necessity of ongoing monitoring during treatment (CSAT, 2009). Clients with substance use disorders who are an acute danger to themselves may require hospital level care (APA, 2006). At times of risk, level of care can be temporarily increased, which, for outpatients, can include increasing the number of telephone checks or referring to day treatment (CSAT, 2009).

In the event of substance use relapse, a detailed safety plan should be created and should outline actions to take in regards to emerging suicidal thoughts and behaviours (CSAT, 2009). It is important to note that some substance use disorder clients will continue to be at risk for suicidal behaviour even when abstinent, especially those with concurrent diagnoses of depression, personality disorders, major psychiatric illnesses or those with unresolved life difficulties or trauma histories (Conner, Duberstein, Conwell, Herrmann, Jr., Cox, Barrington et al., 2000).

The final action of CSAT's (2009) framework GATE is to "extend the actions". There is a common misconception that after acute suicide issues are addressed the problem is solved, however, among concurrent disorder or addiction clients in particular, setbacks, particularly relapse can occur and subsequently increase suicide risk, particularly if suicidal behaviours coincide with acute substance use (CSAT, 2009). Therefore, clients should be reassessed and closely monitored for suicide risk in the event of relapse, which should include safety plan development, updating the addiction treatment plan in relation to current suicide concerns, and the encouragement of continued use of a supportive program such as a 12-step program to maintain sobriety (CSAT, 2009).

Monitoring adherence to medication is also important among individuals with concurrent disorders as medication non-compliance frequently occurs in those with substance use disorders; depression and suicidal thinking can be exacerbated in these clients, with medication non-compliance leading to further exacerbation of these symptoms (APA, 2006).

Particular challenges can arise when monitoring long term risk for suicide among alcohol dependent individuals, such as coordinating services for psychiatric and substance abuse treatment as these services are often segregated, as well as monitoring needs that emerge suddenly, due to excessive drinking and impulsivity among this clientele (Pirkola et al., 2004).

8.0

CONTINUITY & TRANSFER OF CARE

▸ Policies & Practices

▸ Transfer of Care Issues

▸ Organization & Physician Liability

8.0 Continuity/Transfer of Care

8.1 Best Practice in Continuity/Transfer of Care

Services are expected to align themselves to best practice in clinical care by the following ROP tests for compliance:

1. The organization documents the treatment and monitoring strategies in the client's health record.

The results of the environmental scan identified issues around continuity, transfer of care and follow-up as critical gaps in suicide risk management across many service providers and across most HAs. These issues depend almost entirely on effective policies and practices, especially those related to documentation.

Documentation is a standard of clinical practice and is an integral part of the assessment and care of clients at risk for suicidal ideation and behaviour. Clear documentation facilitates communication within and across clinical teams, as well as ongoing judgment regarding re-assessment and observation.

Although there is no consensus on a standardized way to document suicide risk assessments, it is recommended that organizations develop policies to ensure that a systematic process is adopted. Using a structured assessment is an important way of ensuring key assessment information is not overlooked, and may also lead to the collection of valuable information for evaluation and quality monitoring purposes. Organizations are responsible for implementing policies regarding the systematic documentation of suicide risk assessments (RNAO, 2009). Of course, timely note-keeping is essential for monitoring risk, especially in team or clinic settings.

8.2 Continuity & Transfer of Care Policies and Practices

It is recommended that each service has documentation policies and practices that cover the following points:

1. Brief screening results for every patient in contact with services, and *when appropriate*;

   a. The program's response to immediate safety needs, such as observation or security levels

   b. Clinical assessment results and treatment plan

   c. On-going monitoring activities

2. Transfer of care documentation practices and policies for all patients, which include degree of suicide risk, and treatment and monitoring strategies when appropriate.

8.2.1 Organization Liability: From Referral to Transfer of Care (and Back)

Each HA is accountable for providing and documenting safe and effective mental health and substance use services within its jurisdiction. However, there are some circumstances when the degree of liability of each HA becomes blurred. Patient care is routinely transferred between the one agency and another due to citizenry movement, shared service agreements, and the various levels of care provided by each HA and other community providers. This section aims to provide clarity regarding each health care provider's responsibilities at all points along the patient journey. Every provider should follow a professional and personal ethical code to respond to patients' needs regardless of his or her legal liability. In essence, follow the credo, "When in doubt, shout!"

There are some patient groups and circumstances where service providers will need to adjust their response so to ensure that patients remain safe. An agency will also need to make certain that other providers (within or across HA) are aware of when liability begins and ends.

Agencies are strongly urged to develop transfer of care documentation practices and policies for all patients, and include suicide risk assessment results, treatment and monitoring strategies in that documentation.

8.2.2 Physician Liability

Once a referral is submitted, the receiving physician has the higher degree of responsibility for ensuring patient safety. The psychiatrist who last consulted with the patient is responsible for following up on any concerns, and should refer, treat and monitor as per the site or program's policies or protocols related to suicide prevention.

The Canadian Medical Protection Agency (CMPA) provides risk management recommendations for policy, health care institutions and physicians in the context of physician liability during transfer of care. While the CMPA does not make explicit recommendations regarding suicide risk management, they provide clarity around "who is responsible for what," which will help reduce potential risks to patients, physicians and institutions.

> The CMPA warns that courts may interpret physician accountability from the moment the referral is accepted. As such, the CMPA recommends that Health Authorities establish clear accountabilities and communicate those accountabilities across their services.

The CMPA recommends the following procedures:

Referring physicians:

1. Should note the date of appointment with the consulting physician, and determine if this timing is due for significant clinical concern.
2. Consider ongoing appropriate care for patient while on waitlist.
3. Warn patient about the signs and symptoms for which to seek additional care.
4. Communicate with consulting physician any significant clinical change in patient.
5. Attempt to negotiate an earlier appointment if clinical condition necessitates, or exceeds benchmark. If not possible, consider referring elsewhere.
6. Document assessment and attempts to arrange earlier appointment.
7. Monitor patients and re-prioritize.
8. Communicate patient's needs to institutions, consulting physicians, and others as required.

Consulting physicians:

1. Notify referring physician of the appointment date

2. If, at time of referral, wait time exceeds the benchmark, consider declining and referring elsewhere, and notify appropriate institution the wait times are beyond expectations and the need to refer elsewhere.

3. If wait times of the existing patients begins to exceed benchmarks, consider informing the patients and discuss consequences of continuing to wait, discuss alternative treatment options, if available, and offering possible referral elsewhere.

4. Be aware of any legislation or institutional requirements with respect to managing wait times.

5. Monitor patients and re-prioritize queues as ongoing responsibility.

6. Communicate patients' needs to care providing institutions, primary care providers and others as required.

7. Document all actions.

8.2.3 Transfer to Primary Care

Often, the care of a recently suicidal patient will be transferred from Emergency, Tertiary or Secondary services to his or her general practitioner (GP) for follow-up. This section discusses two issues that can emerge as a result of this type of transfer:

1. The patient does not have a GP, and/or

2. The GP lacks information and support to provide safe and effective care to a recently suicidal patient.

The BC College of Physicians and Surgeons recently provided some guidance to psychiatrists who work in Emergency, Secondary and Tertiary services regarding discharging a patient with no GP to the community.

> "The serious shortage of family physicians available to accept new patients has made walk-in clinics a necessary choice for many patients. Patients in this population should be discharged with clearly written discharge instructions which would include the use of walk-in clinics if no family doctor is available."
>
> BC College of Physicians & Surgeons
> In response to query by Dr. Rivian Weinerman, Chief Psychiatrist,
> Royal Jubilee Hospital, Victoria, December 2009

As well, the College's policy on the standard of care for walk-in clinics explicates the responsibilities of physicians for patients with ongoing health needs:

> "Patients, who attend the same clinic on three or more occasions for a similar or related complaint, particularly if they do not have an identified family physician, are assumed to be receiving all their care from that clinic. In such circumstances, a longitudinal patient medical record must be created detailing all physician patient interactions so that the treating physician, and other physicians working at the same clinic, may access and benefit from the information documented in the record. This also means that the

> attending physician(s) must accept responsibility for chronic disease management (e.g. diabetes, hypertension, or depression), for health maintenance (e.g. cardiovascular risk assessment, Pap smear, or mammography), and for other aspects generally included in traditional primary care. The Medical Director of the clinic is responsible for ensuring that this practice occurs."

And,

> "Where a patient attends a clinic for ongoing care on an episodic basis, it is preferable to identify a "most responsible physician" for that patient. Encouraging patients to obtain the majority of their care for chronic conditions such as diabetes, asthma, or hypertension from one physician will promote a proactive strategy for chronic disease management[15]."

There is anecdotal evidence that many GPs either do not receive enough information to do an appropriate follow-up, or, when they do receive detailed assessment, treatment and monitoring strategies, do not know how to develop and implement an appropriate protocol. As such, HAs are encouraged to include links and information as part of their transfer of care documentation.

Fortunately, there are some excellent resources available for general practitioners who are providing primary care support for clients with mental health problems, including suicidal ideation or behaviour. The Vancouver Island Health Authority (2009) released a comprehensive package for primary health care providers, which includes referral forms, a depression screening tool, an algorithm for service decision making, an algorithm for initiating antidepressant therapy, and a manual for cognitive behavioural interpersonal therapy.

The following links lead to documents within the Impact BC website, and are highlighted here for their relevance to managing depression and suicidal ideation and behaviour in a primary care setting.

1. A practice support program provides BC physicians with learning modules on a variety of practice issues. For mental health, there are learning modules (include pre-work, learning sessions and action periods) that cover mental health and substance use issues:

   http://www.impactbc.ca/practicesupport

2. A page dedicated to diagnostic screening assessment tools, clinical guidelines and data collection tools:

   http://www.impactbc.ca/practicesupport/mentalhealth/tools

3. A practice guide for primary care physicians to improve the capacity of GPs to incorporate cognitive behaviour therapy skills to screen and treat patients during regular patient appointments:

   http://www.impactbc.ca/files/documents/MH_-_Practice_Guide.pdf

   and also includes a step-by-step overview of the process:

   http://www.impactbc.ca/files/documents/Mental_H-_Step-by-step_Guide.pdf

   http://www.impactbc.ca/files/documents/Mental_H_-_Algorithm_CBIS_linked.pdf

4. CARMHA/MoH (2008) have released this helpful guide for primary care providers for the assessment, support and treatment of depression, anxiety, early psychosis and substance use, available here:

   http://www.health.gov.bc.ca/library/publications/year/2008/fpg_full.pdf

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15   BC College of Physicians and Surgeons Resource Manual, Walk-in Clinic – Standard of Care, October, 2009

Continuity & Transfer of Care

Chart 2 below provides an overview of how organizations are required to respond to suicide risk at each stage of the patient journey.

Chart 2:
Patient Journey and Required Organizational Response

OTHER JURISDICTION

YOUR AGENCY

OTHER

PATIENT JOURNEY

- Return to other jurisdiction
- Referral to your agency
- Redirect
- Your agency triages referral
- Your agency Assumes
- Accept
- Care Initiated
- Outpatient
- Inpatient
- Transitioning
- Other agency assumes patient care
- Discharge/Follow-up

SUICIDE RISK MANAGEMENT

- Inter-HA and inter-agency due diligence to flag risk to referral source and/or coordinate emergency f/u by another agency or HA
- Brief Assessment
- Lower Risk
- Higher Risk
- In-depth assessment
- Re-evaluation as needs change
- Treatment and Monitoring
- Inter-HA and inter-agency due diligence to flag risk to referral source and/or coordinate emergency f/u by another agency or HA

Your agency is accountable for providing and documenting safe, continuous care

PUTTING IT TOGETHER

▶ Protocol Development Template

▶ Decision Matrix

▶ Available Clinical Toolkits

▶ Action Roadmap

▶ Evaluation Template

9.0 Putting it Together

The Provincial Suicide Clinical Framework is intended to provide mental health and addiction services leaders with the background information and steps for developing a suicide risk management clinical protocol that aligns with best practice and complies with Accreditation Canada's new ROP. This next section provides the practical steps to develop a clinical protocol for use in a particular site or service (e.g., adult concurrent disorder outpatient clinic, adolescent inpatient unit).

Accreditation Canada provides latitude for services to conduct suicide risk management activities that best meets the needs of the clients they serve (e.g. youth, adults). Organizations should be able to provide evidence to the Surveyors that they are regularly assessing for risk and a rationale for why they are using a particular approach.

9.1 Protocol Development Template

Best practice in suicide risk management is to assess, treat and monitor all clients in mental health and addiction for risk of suicide, and document those activities in the patients' charts. An inter-Health Authority Steering Committee was struck to develop a Framework and companion Template to assist clinical programs across the province to standardize their risk management protocols. Since no single protocol would be appropriate across all patient populations, clinical and administrative program leaders will need to develop a clinical protocol that is appropriate for the population they serve. This clinical protocol can be developed by using the following template.

Instructions:

This template has four sections (assessment, treatment, monitoring, and continuity/transfer of care) with two steps each. In each section the user conducts a gap analysis by comparing the target service to the ROP test for compliance. Second, the user should refer to the best and promising practice literature review in the Framework to identify the most appropriate response for the service.

Assessment

Protocol Development Template

STEP 1: GAP ANALYSIS					STEP 2: AREAS OF ACTION		
ROP Tests for Compliance	**Current Practice**	**Analysis**				**Brief Assessment**	**In-Depth Assessment**
The organization assesses each client for risk of suicide at regular intervals, or as needs change The organization identifies clients for risk of suicide	What assessment protocol(s) are already in place?	Does the current protocol meet the test for compliance?		WHO		Who will perform and document the brief assessment?	Who will perform the in-depth assessment?
	When are those at risk of suicide re-assessed?			WHERE		Where in the chart will the brief assessment be documented?	Where in the chart will the brief assessment be documented?
	List policy numbers			WHEN		How is suicide risk communicated within the agency? How is suicide risk communicated across agencies?	When will an in-depth assessment be required? If other, describe:
	Where in the patient chart is the assessment information documented?	Fill in areas of action, where applicable		WHAT		List relevant continuity/ ToC policies	What physician assessment will be used, if any?

Treatment

Protocol Development Template

STEP 1: GAP ANALYSIS					STEP 2: AREAS OF ACTION	
ROP Tests for Compliance	**Current Practice**	**Analysis**				**Brief Assessment**
The organization identifies treatment and monitoring strategies to ensure client safety The organization documents the treatment and monitoring strategies in the client's health record.	What treatment protocol(s) are already in place?	Does the current protocol meet the test for compliance?		WHO		Who will document the treatment plan?
	List policy numbers			WHERE		Where in the chart will the treatment plan be documented?
	Where in the patient chart is the treatment information documented?	Fill in areas of action, where applicable		WHEN		What are the best practice options or clinical pathways for your population?

Putting It Together

Protocol Development Template

STEP 1: GAP ANALYSIS					STEP 2: AREAS OF ACTION	
ROP Tests for Compliance	Current Practice	Analysis				Monitoring
The organization assesses clientts' immediate safety needs.	What treatment monitoring protocol(s) are already in place?	Does the current protocol meet the test for compliance?		WHO		Who can initiate or change an observation level? Who will document monitoring activities (select up to two)?
The organization identifies treatment and monitoring strategies in the client's health record.	What observation policies/ protocols are already in place?	Fill in areas of action, where applicable		WHERE		WWhere in the chart will monitoring activities be documented?
	List monitoring policy numbers			HOW		How will patient progress or decompensation be re-assessed / monitored?
	Where in the patient chart is the monitoring information documented?			WHEN		When will patients be re-assessed for risk?
				WHAT		List monitoring policies

Continuity & Transfer of Care

Protocol Development Template

STEP 1: GAP ANALYSIS					STEP 2: AREAS OF ACTION	
ROP Tests for Compliance	Current Practice	Analysis				Continuity/Transfer of Care
The organization identifies clients for risk of suicide	How is suicide risk communicated within the agency?	Does the current protocol/ policy related to documentation ensure patient safety in regards to suicide risk management?		WHO		Who is responsible for communicating suicide risk within the agency? Who is responsible for communicating suicide risk across agencies?
	How is suicide risk communicated across agencies?			WHERE		Where in the chart will continuity/ToC communication be documented?
The organization documents the treatment and monitoring strategies in the client's health record.	List policy numbers			HOW		How is suicide risk communicated within the agency? How is suicide risk communicated across agencies?
		Fill in areas of action, where applicable		WHAT		List relevant continuity/ToC policies

9.2 Decision-Support Matrices

In order to develop the most appropriate clinical protocol for a service site, clinical and administrative leaders will need to select the best suicide risk management assessment and treatment tools. The following matrices provide *summary overviews* of brief assessment tools, and in-depth assessment and treatment protocols, broken down by service level and population. Where applicable, click on the hyperlink to take you to its location in this document. The majority of the brief assessment tools are found in Appendix A and B.

Table 5:
Brief Assessment Tool Matrix

	CHILDREN	ADOLESCENTS	ADULTS	GERIATRIC
Urgent/Emergency	Child Hopelessness Scale	Beck Hopelessness Scale	Beck Hopelessness Scale	None identified
Inpatient/Day		Risk of Suicide Questionnaire	Scale for Suicide Ideation	Hamilton Rating Scale for Depression (Suicide Item)#
Tertiary Care		Beck Suicide Intent Scale**	Beck Suicide Intent Scale**	Geriatric Suicidal Ideation Scale
			Linehan Reasons for Living Inventory++	(Heisel & Flett, 2006) ##
Outpatient/ Community	Child Suicide Potential Scales	Beck Hopelessness Scale	Scale for Suicide Ideation	ung Depression Scale ##
	Hopelessness Scale for Children	Hopelessness Scale for Children	IS PATH WARM	Geriatric Suicidal Ideation Scale
		IS PATH WARM	SAD PERSONS	SAD PERSONS
Withdrawal Management	None identified	IS PATH WARM	Beck Hopelessness Scale	None identified
			IS PATH WARM	
Residential Programs	Identified	Suicide Probability Scale*	Scale for Suicide Ideation	Geriatric Suicidal Ideation Scale
		IS PATH WARM		

* Tested on group home adolescents but the properties are not strong; see complete review in Appendix A.

**Only for those who have attempted suicide.

++ Not tested in an emergency environment.

\# The properties are not strong, see complete review in Appendix B.

\#\# Not reviewed in appendices; see reference list for sources.

Table 6:
Assessment Protocol Matrix

	CHILDREN/ADOLESCENTS	ADULTS	GERIATRIC
Urgent/Emergency	AACAP Protocol	APA Protocol St. Michael's Hospital Protocol NZGG Clinical Toolkit (Assessment) RNAO Protocol	CCSMH Protocol
Inpatient/Day			
Tertiary Care			
Outpatient/ Community		APA Protocol CARMHA Clinical Toolkit (Assessment)	
Withdrawal Management	None identified	Treatment Improvement Protocol (CSAT) (Assessment)	None identified
Residential Programs			

Table 7:
Treatment Protocol Matrix

	CHILDREN/ADOLESCENTS	ADULTS	GERIATRIC
Urgent/Emergency	Medication Cognitive Behavioural Therapy (CBT) Dialectical Behavioural Therapy (DBT) Family Support Interpersonal Therapy (IPT) Skills Training	Medication RNAO client-centred problem solving CBT Gatekeeper Training Skills Training DBT	Medication RNAO client-centred problem solving CBT Gatekeeper Training IPT
Inpatient/Day			
Tertiary Care			
Outpatient/ Community			
Withdrawal Management	None identified	CSAT Treatment Improvement Protocol (Treatment)	None identified
Residential Programs	None identified	None identified	None identified

9.3 Online Clinical Toolkits

There are a number of excellent resources that mental health and addiction service providers may wish to draw upon for developing a clinical protocol. The following clinical toolkits cover a broad range of service levels (emergency, outpatient, inpatient), but are only applicable for adult services. Youth service providers may find helpful the family handout published by the NZGG (item #7 below). These resources are publicly available and online.

9.3.1 Government of British Columbia Resources

The Ministry of Health (MOS), the Ministry of Child and Family Development (MCFD) and the Centre for Applied Research in Mental Health and Addiction (CARMHA) have developed a number of publicly-available resources that provide excellent suicide risk management information and tools for use in a health care setting. These are useful resources that service providers may choose to incorporate into a suicide risk management protocol. Implementing these resources alone, however, would not ensure a service is compliant with Accreditation Canada's ROP related to suicide risk management. To ensure compliance, a service needs to follow the steps of this Framework, as illustrated in Chart 1, above.

1. "Working with a Client who is Suicidal" is a comprehensive document that provides planners and direct care providers with recommended assessment and treatment practices for working with adults at risk for suicide. The complete tool kit is available for download from here:

   http://www.health.gov.bc.ca/library/publications/year/2007/MHA_WorkingWithSuicidalClient.pdf

2. MCFD developed the Preventing Youth Suicide website, which is updated annually following a review of the literature. It is a great source of recent, relevant literature and written specifically for child and youth mental health practitioners.

   http://www.mcf.gov.bc.ca/suicide_prevention/index.htm

3. "Working with the Suicidal Patient: A Guide for Health Care Professionals" is a 2-page tool for the assessment and management of suicidality in adults, available here:

   http://www.comh.ca/publications/resources/pub_wwsp/WWSP.pdf

4. "Coping with Suicidal Thoughts" is a brief worksheet intended for those who are experiencing suicidal thoughts, have a suicide plan, or who have recently attempted suicide. The worksheet is available here:

   http://www.comh.ca/publications/resources/pub_cwst/CWST.pdf

9.3.2 New Zealand Guidelines Group Resources

The New Zealand Guidelines Group has similarly published some helpful tools for mental health and addiction service providers, related to suicide risk management.

1. The Rapid Assessment of Patients in Distress a brief assessment tool for use in a general emergency room:

   http://www.nzgg.org.nz/guidelines/0005/Appendix_1_RAPID_Tool.pdf

2. The Assessment and Management of Suicidal clients in an Emergency Department includes helpful suggestions for assessment, sedation, discharge and handover procedures, and a **triage protocol:**

   http://www.nzgg.org.nz/guidelines/0005/Suicide_Summary.pdf

3. An assessment and management algorithm is available for acute assessment settings:

   http://www.nzgg.org.nz/guidelines/0005/ACF67B.pdf

4. An assessment tool for general use in mental health services is available here:

   http://www.nzgg.org.nz/guidelines/0005/Appendix_2_Assessment_Risk.pdf

5. A tool for examining a person's mental state is available here:

   http://www.nzgg.org.nz/guidelines/0005/Appendix_3_Mental_State_Examination.pdf

6. The Psychiatric/Psychosocial Assessment Tool is intended to assist psychiatrists and psychologists as part of a clinical assessment:

   http://www.nzgg.org.nz/guidelines/0005/Appendix_4_Psychiatric_Psychosocial.pdf

7. A handout for families and caregivers of a person who may be at risk for suicide, to ensure a safe home environment:

   http://www.nzgg.org.nz/guidelines/0005/Appendix_5_Safe_Home.pdf

8. A helpful list of risk factors for clinicians to consider:

   http://www.nzgg.org.nz/guidelines/0005/Appendix_7_Risk_Factors.pdf

10.0 Action Roadmap

> Today, clinicians, administrators and policy-makers alike are expected to make decisions based on evidence, an expectation that brings with it specific requirements including the availability and accessibility of evidence, the ability to implement change, and the availability of supports to maintain it.

The action plan developed for this initiative is intentionally broad so that it can be adapted for use at heterogeneous sites. It is an evidence-informed road map of the steps to implementation for those developing a clinical protocol for a specific population.

10.1 Evidence- based Change: Background

In the last two decades, the call for evidence-based practices has gained prominence and status in clinical care, in healthcare systems, and in broader government agencies. Evidence-based practice refers to the application of interventions for which there is scientific evidence consistently demonstrating efficacy in improving client outcomes. Among the early promoters of evidence-based practice was Archie Cochrane, who, in the 1950's, began three decades of work to advance the use of randomized controlled trials to better inform medical practice. This work culminated in the Cochrane Collaboration, an internationally recognized and accessed source of systematic reviews of high-quality research to inform clinical decision-making. (Azrin & Goldman, 2005; Davidoff, 1999). Today, clinicians, administrators and policy-makers alike are expected to make decisions based on evidence, an expectation that brings with it specific requirements including the availability and accessibility of evidence, the ability to implement change, and the availability of supports to maintain it.

> There is no one intervention that can be applied to all changes in all settings, but there is sufficient evidence to conclude that evidence-informed change can be achieved using comprehensive approaches that are tailored to the unique contexts and barriers to change.

Challenges in Implementing Evidence

The production of evidence has increased exponentially in the past two decades with advances in technology, theories and methods of communication. The translation into practical changes, however, has not been keeping pace. It can take up to a decade or more to incorporate evidence into practice (Corrigan, Steiner, McCracken, Blaser & Barr, 2001; Miller, Sorensen, Selzer, & Brigham, 2006) Even changes on a smaller scale, such as discrete clinical practices, have challenged researchers, administrators, and individual clinicians to view change as a process rather than as a discrete product.

The literature on implementing evidence-based change is replete with descriptions of the barriers and challenges that contribute to the poor transfer of knowledge into practice (Grol, 1997; Grol & Grimshaw, 2002; Mueser et al. 2003; Torrey et al. 2002). Corrigan and colleagues (2001) identify barriers at both the individual and organizational level. A basic lack of knowledge and skills, combined with work-related variables such as burn-out, make individual service-providers ill-equipped to incorporate change into practice. Furthermore, organizational barriers including poor leadership, a change-averse culture, insufficient collegial support and bureaucratic constraints, contribute to a negative rather than nurturing context to introduce change.

In spite of all of these challenges, change is possible. In a review of over two hundred assessments of guideline dissemination and implementation strategies for evidence-based changes, Grol & Grimshaw (2003) noted that most interventions had some effects and highlighted differences across interventions including more evidence for professional-oriented interventions than on those aimed at the organization or the patient. As well, interventions targeted at specific obstacles to change seem to be more effective than interventions that are not. The authors do caution that there is no one intervention that can be applied to all changes in all settings, but that there is sufficient evidence to conclude that evidence-based change can be achieved using comprehensive approaches that are tailored to the unique contexts and barriers to change.

10.2 Change Management Theory

Change management refers to the theory and application of organizational and leadership practices that foster and minimize barriers to change. Change management originated in business drawing from multiple disciplines including sociology, psychology, and policy. The theory and application evolved after World War II with the growth of increasingly complex organizations undergoing rapid and extensive changes (Iles & Sutherland, 2001). The literature on change management is substantial and there are multiple models, tools and approaches, only some of which have been evaluated. These vary as well according to the type of change targeted (e.g.: planned versus emergent change, episodic versus continuous change). [16]

A common feature of managing change is the emphasis on project management as an approach and tool to structure work. Typically, the project management process is defined by five stages:

1. Defining the project's goals

2. Planning to meet targeted objectives

3. Leading implementation

4. Monitoring progress

5. Completing and sustaining the project (Iles & Sutherland, 2001)

> "If implementation is thought about quite separately from the planning and design of a change initiative, then it is likely that the initiative will already have failed"
> -Iles & Sutherland, 2001

Too often, project managers are brought in at the stage of implementation, missing important opportunities to be a part of, and inform, the defining and planning stages. This may be in part due to the fact that change is often viewed as a concrete, static event, rather than a process that begins with the idea and shared understanding of the need for change.

William Bridges (2003), in his book *Managing Transitions*, highlights this often overlooked aspect of introducing change. He argues that change itself is situational; but leading up to, during and following the changes are transitions that are psychological and personal. Ignoring the transitions will produce superficial changes that do not actually address the targeted outcomes. Bridges emphasizes a three step process in which 1) individuals are assisted in letting go of old ways and identities, 2) an "in-between" time is allowed to provide time for realignment and repatterning, and 3) individuals come out of the transition and make a new beginning. Both the steps of project management and respect for transitions are incorporated into the implementation model presented here. Using a change management perspective to address the challenges inherent in implementing evidence-informed changes will ensure a strategic and comprehensive approach to translating knowledge into practice.

10.2.1 Leadership

> "In establishing high-quality programs, especially in new areas, there is no substitute for leadership."
> - Torrey et al. (2002)

Leadership is highlighted here as it is deemed a critical and requisite component in the literature for both evidence-informed practice and change management (Bridges, 2003; Drake et al., 2001; Panzano & Herman, 2005; Prochaska, Prochaska & Levesque, 2001; Rycroft-Malone, Harvey, Seers, Kitson, McCormack et al., 2004). Leadership can either be the facilitator or the rate-limiting step when implementing change. Leaders adopting a "just do it" approach are likely to encounter resistance and poor outcomes due to weak infrastructure planning and inadequate readiness at both the organizational and individual levels. In contrast, leaders who approach change holistically, as a process that is both contextual and personal, will be better equipped to motivate, integrate and sustain change.

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16   Refer to Iles and Sutherland (2001) for a comprehensive review of the literature and evidence on change management.

Who is a Leader?

The term leadership is applied broadly here to be inclusive of the various roles that facilitate the introduction of evidence-informed change. Depending on the scope of the change initiative, a leader or leaders may emerge from a variety of levels. While it is important that there be strong, involved top-level leadership, particularly for more complex changes, the principles and steps outlined here can be applied by anybody who is in a position to plan, motivate, introduce and sustain change. Rycroft-Malone et al. (2004) suggests key characteristics that will enhance a leader's effectiveness to achieving these goals. Designated leaders should have knowledge of the project, a degree of status to bestow credibility, particularly in the eyes of senior staff, a position to manage others and co-ordinate the project, a positive and enthusiastic approach and good communication skills. It is important to assure that, when introducing change, you have the right leaders with the right leverage and skills to have an impact.

10.3 BCMHAS Change Model

"Evidence based medicine should be complemented by evidence-based implementation."
- Grol, 1997.

The model proposed below was developed within BCMHAS and has evolved through the application of a number of change initiatives. This model positions implementation within a framework of processes designed to plan, launch, and support change in a way that not only increases the likelihood that it will be effective and sustainable, but that will contribute to a more engaged and engaging system environment.

The phases of the BCMHAS Change Model (see below) are presented in a sequential order; however, it is acknowledged that the process of change itself is fluid, as will be movement between the phases. It may be necessary to return to a previously completed phase, to spend considerably more time in one phase than another, or to skip a phase altogether depending on the context and the scope of the change. It is recommended, however, that each phase be considered to ensure that no areas are overlooked.

BCMHAS Change Model
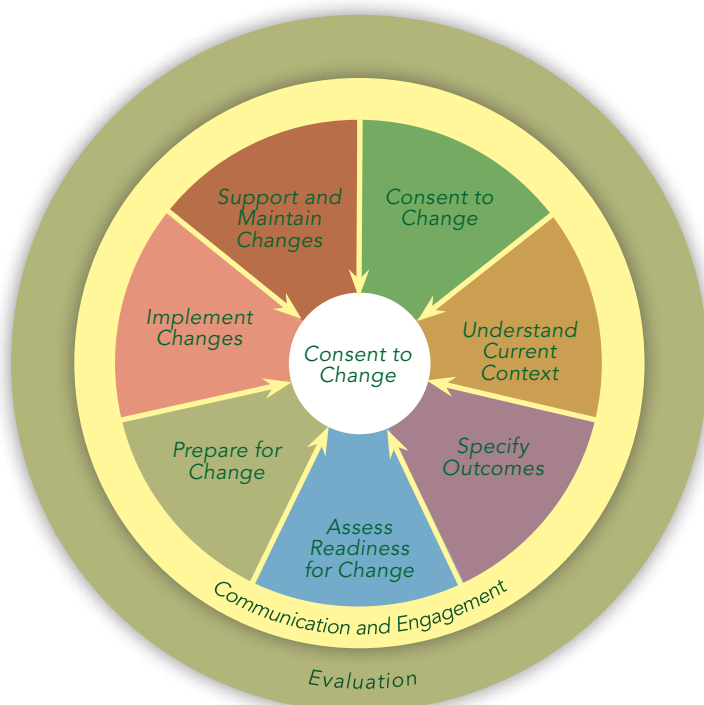
Leaders are encouraged to enter the model at the consent to change phase to ensure that all involved stakeholders have an understanding of all available evidence, including the potential impact on resources, other services/infrastructure, and stakeholders. This phase closes with a transparent commitment to move forward and support change. Following this, leadership must have a thorough understanding of the current context, including the barriers and challenges related to change, the stakeholders involved at all levels, and the current values of the system and its players. This understanding encourages a better informed – and often overlooked – contextual and individual perspective that can serve to facilitate stakeholder engagement, investment, and ownership. From this preparatory groundwork, leaders are better positioned to identify specific outcomes that will organize and structure the process. With these details, the project team can begin to assess readiness for the specified change and to do the necessary work to cultivate readiness by aligning policies and practices to support the change and deliver targeted behavioural and attitudinal interventions. Once the change has been introduced, no matter how minor or complex, efforts should be made to ensure that the change is supported and maintained.

Evidence-informed change (as opposed to practice) is intended to be inclusive of the broader scope of changes at a variety of levels, (e.g.: person, organization, system), and for a variety of results (e.g.: changes in practice, policy, organizational structures). The model presented is constructed broadly to be applicable to all targeted changes informed by evidence.

10.4 Application of the Change Management Model to the Framework

This application centres on preparing, implementing and maintaining changes in the context of suicide risk management. The previous steps suggested by the model (consent to change, understanding current context, specifying outcomes and assessing readiness for change) are required pieces that each program undertakes within the organization. The application of the final three steps is illustrated in Figure 4.

As part of understanding the change context, a program conducts a gap analysis and develops a clinical protocol using the Protocol Development Template (Section 9.1, above). The areas of action that emerge in assessment, treatment, monitoring and documenting (continuity and transfer of care) provide the types of change to be implemented. For example, as shown in Figure 4, a change in the area of treatment requires protocol and policy changes, as well as clinical education for staff. The target of the change will depend on the areas and types of change. The application stresses the importance of evaluation and continuous quality improvement to ensure that changes are maintained over time.

Implementing & Maintaining Change

Preparing For Change

Implementing Change

Support & Maintain

Areas of Change

Types of Change

Change Plan

Target

Assessment	Tool/Clinical Assessment Selection	**Educate** Tool Training	Psychology Psychiatry Nursing Allied Health Care
Treatment	Treatment Protocol Selection	**Educate** Treatment Protocol Training	
Monitoring			
Transfer/ Continuity of Care	**Policy/Procedure** Referral, assigned duties, patient movement, documentation, observation	**Educate/ Communicate** Policy/ Procedure	Psychology Psychiatry Nursing Allied Health Care Administrative Leads Clinical Leads

Communicate ROP Awareness

Evaluate Education

Communicate Implementation

Evaluate Chart Audit

Continuous Quality Improvement

10.5 Quality Improvement Theory and Tools

Quality Improvement (QI) provides a theory and set of tools that complement change models to accelerate the pace of improvement and provide practical skills to those executing change (Langley et al.,2009). QI tools can be particularly advantageous when adapting practices or protocols for a local environment. One of the central tenets of QI theory is the need to test how new practices will best work within a local context before implementing permanent change. The following section will highlight some key QI concepts and tools that may be useful when implementing a suicide risk assessment protocol across services. Those interested in exploring QI methods in more depth to assist with protocol implementation are encouraged to seek input from their health authority's quality and safety experts.

10.5.1 Rapid Cycle Testing and the Model for Improvement

At the core of QI methodology is the concept of using short testing cycles to learn how to best implement a change (Langley et al.,2009). A framework called the Model for Improvement, based on the teachings of quality pioneers Walter Shewhart and W. Edwards Deming, is widely used in healthcare to assist with the rapid cycle testing. The model provides a simple but powerful framework for guiding change efforts because it can help those involved see signs of early success, and can decrease resistance and anxiety about large changes occurring without staff involvement (Nelson, Batalden & Godfrey, 2007).

The model starts with three fundamental questions:

1. ***What are we trying to accomplish?*** An improvement team uses this question to set a specific and measurable aim to help guide their work. (e.g. By December 2010, all new patients seen in X facility will have a physician assessment documented in their chart).

2. ***How will we know a change is an improvement?*** Teams pre-define a set of measures that will tell them explicitly that their approach to change has resulted in success. (e.g. percent of audited patient charts that have a physician assessment documented)

3. ***What changes can we make that will result in improvement?*** With this guiding question, teams brainstorm ways to incorporate a change into their local environment. (e.g. a team may decide to try a reminder system to ensure assessments are consistently performed and documented.

After answering the 'three questions', the model incorporates Plan-Do-Study-Act (PDSA) cycles to turn ideas into action, in a rapid fashion. PDSA cycles are used to test changes, on a small scale, to learn how successful the approach is before implementing a change on a wider scale:

Plan: A plan to carry out a small test of the change, specifying who will do what, when and where. A prediction is made by the team on what will be the result of the test.

Do: The plan is carried out, with any observations and problems documented

Study: Compare what happened with the prediction of the team. Data is used to determine if the test was successful but the methodology is kept simple (e.g. the data collection may involve asking the staff for their impressions, or using a pen and paper tick-sheet to document compliance with a new process).

Act: Decide on how to improve upon the change, and plan the next test.

Iterative and Sequential cycles: PDSA test cycles should initially be done on a very small scale, to accelerate learning and to minimize the amount of resistance and effort required for early stages of learning. For example, initially a test may be done with only one or two care providers, or with patients seen on one morning. As knowledge increases, and the improvement team becomes more confident in the success of their changes, testing will include more people and a wider set of circumstances.

10.5.2 Process Management: Implementing Protocols and Guidelines

The Provincial Suicide Clinical Framework provides a template for organizations to build a protocol for suicide risk assessment, recognizing the need for each organization to adapt and modify the protocol to suit their local context. Specific to protocol implementation, the Model for Improvement can be used to test processes such as the best way to communicate changes to staff, physicians, and clients; processes for how to update flow diagrams or other decision aids; and other processes for how to standardize new practice into daily work (Langley at al. 2009; Nelson, Batalden & Godfrey, 2007).

QI approaches also underpin "process management" approaches for the application of knowledge into practice. Process management refers to an organization's system for modifying and implementing evidence-based guidelines or protocols (James, 1993). Perhaps most notably, Intermountain Health Care in Utah has demonstrated strong success in improving quality and reducing costs using an approach they refer to as Clinical Management (Intermountain Healthcare Institute for Healthcare Delivery and Research, 2010).

Intermountain's approach may be looked to for guidance in this endeavour. It is an approach that takes a very iterative nature, building upon the PDSA test cycle methodology. The approach aids in protocol implementation, as well as helping inform and improve upon the protocol. Once guidelines or protocols are developed and all clinicians have been made aware of the new protocol's implementation, a measurement system is put into place to track adherence to key steps in the protocol. These are key _process_ measures that are captured over time to demonstrate the extent to which key pieces of the protocol are followed.

A distinguishing feature of the process management approach is the importance of learning from those cases where protocols or guidelines are not followed. When a protocol is implemented, clinicians are encouraged to use it unless their clinical judgment for a particular case opposes the steps in the protocol. These cases (tracked by the measurement system), provide an opportunity for the organization to understand better why the protocol was not followed for a specific case, and if warranted, the protocol or guideline is then adjusted to account for the specific clinical circumstance. More information on Intermountain's clinical management process can be found at http://intermountainhealthcare.org/qualityandresearch/institute/clinicalmanagement/Pages/home.aspx

10.5.3 Key Measures and Analyzing Data over Time

Tracking data over time is a fundamental principle in QI methodology. Data over time is used to determine if changes have resulted in true and consistent change to the system, and whether the improvement is sustained over time. As discussed in the previous section, when implementing new protocols, _process measures_ are key to demonstrating whether steps in the process are consistently being followed. _Outcome measures_ are also tracked to determine the results of the new protocol, that is, to determine if client outcomes are improving as expected.

Displaying and analyzing data over time (using run charts or statistical process control charts) produces information that traditional before-and-after statistics (e.g., pre- and post-test) do not. The approach to determining if significant change has occurred is to determine if there is uncharacteristic, or "special cause" variation in a stream of data. More information on displaying data over time and the use of Statistical Process Control methods can be found in a report from the BC Patient Safety & Quality Council (BC Patient Safety & Quality Council, 2010) or from other Quality Improvement resources (Carey & Lloyd, 2001, Institute for Healthcare Improvement, n.d., Langley et. al, 2009).

10.5.4 Stakeholder Engagement: Leadership, Providers, Staff, Clients

Central to the success of any Quality Improvement initiative is the underlying notion that all stakeholders are involved in the design, test, and implementation of any changes undertaken. In terms of protocol implementation, this means that clinicians and any other staff that may be impacted by a change to the system should be involved in identifying changes and be given an opportunity to help test the change. People may have a natural resistance to change that impacts their work; it is helpful to consider the work processes from different perspectives to ensure that any affected departments are included in the improvement work (e.g. providers from a variety of units, allied health professionals, support services staff).

Clinicians can be especially resistant to protocols which they perceive as limiting their ability to use their clinical judgment. They may be feel loss of control over their practice, while still feeling responsible for patient outcomes. It is important to try to understand the nature of the resistance and reinforce the role that clinical judgment plays in the development and iteration of guidelines or protocols. (James, 1993). Where variation in practice exists, providing data on adherence to protocols and outcomes of patients can be very effective in helping clinicians understand the quality problems that a protocol is meant to address (James, 1993).

The support of leadership is vital in any change initiative. Leaders should communicate the need and direction for change, be prepared to discuss any resistance, and should visibly show support for the work by recognizing and celebrating improvements. (Langley et al.,2009).

The important role that patients, clients and families can play in Quality Improvement is gaining more understanding. There are a variety of approaches to including a patient perspective in implementation of new processes, all with the aim of understanding how the health system can better meet patient expectations. Some examples of ways to involve clients and families in QI are: patient satisfaction surveys, focus groups on a specific quality issue, inclusion on committees, inclusion on hiring teams, and asking current clients or inpatients to provide real time observations (Frampton et al. 2008). Any method to involve the consumer voice will offer a unique perspective on the quality of care and how to improve the design of protocols or services.

10.6 Evaluation Template

The ROP requirements related to suicide risk management are to assess, treat, and monitor all patients in contact with mental health services, and to document those activities in a designated place in the patient chart. It is expected that some services have many or all of these ROP components in place, and others will need to implement numerous changes to their service. Those changes will be rolled out via an education plan, and the evaluation outcomes should be linked with the goals of that plan.

This evaluation template is comprehensive in scope so that sites and programs can select the components that are targeted for change and disregard the components that are already in place within the service. For example, if a service already has an observation policy related to suicide risk, but no defined clinical pathway for severe depression, the evaluation should only target the implementation and outcomes related to a new clinical pathway.

In summary, the evaluation should:

1. Assess the degree of compliance to the Required Organizational Practices through auditing procedures,

2. Assess the process of the implementation and uptake of any change related to the current initiative, through auditing procedures and staff interviews as needed, and

3. Assess the degree to which initiative achieved its project and education goals, through auditing procedures and monitoring outcome indicators.

10.6.1 Literature Overview

A gray and white literature review was initiated in order to understand how this type of initiative has been evaluated in the past. This review provides the appropriate context for selecting the best indicators and procedures for a suicide risk management initiative.

A literature review was conducted to identify studies which evaluated suicide risk management programs in a health care setting. An electronic search was conducted using PsycInfo and Medline databases with key words including: patient, inpatient, or psychiatric hospital and suicide prevention and evaluation, program evaluation, or evaluation framework. Articles that reported on the outcomes of a suicide risk management program in a health care setting were reviewed. The reference lists of included studies were also reviewed to identify additional relevant studies. Where studies of mental health and addiction populations and settings do not exist, the review includes literature on suicide risk management initiatives in other health care settings.

A multitude of prevention programs have been developed (Rodgers et al., 2007); however, systematic and published evaluation of suicide prevention programs is relatively scarce (Gask et al., 2006). Eleven studies were found that evaluate process or outcome measures of a suicide risk management program implemented in health care settings; a group of three studies evaluated the same program, a pair of two studies evaluated a distinct program, and an additional pair of two papers report on the same study. Health care settings included: primary care, general hospitals, emergency departments, regional health centres, mental health services and trusts, rehabilitation and community care, psychiatric hospitals, and both inpatient and outpatient psychiatric clinics.

The studies are reviewed in greater detail in Appendix G and the common themes are summarized in table 8.

Table 8:
Suicide Risk Management Program Outcomes and Methods

OUTCOMES	METHOD / MEASURE	REFERENCE
Staff Knowledge	Focus groups Self-developed scale	Chan et al., 2008 Chan et al., 2009 Simpson et al., 2003 McAuliffe & Perry, 2007 Shim & Compton, 2009 Chan et al., 2009

Intermittent Observation	Attitudes to Suicide Prevention Scale (ASP)
	
	Focus groups
	
	Self-developed scale
	
	Semi-structured interview
	    – telephone
	    – face-to-face
	
	Suicide Opinion Questionnaire (SOQ)
		Appleby et al., 2000
		Gask et al., 2006
		
		Chan et al., 2008
		Chan et al., 2009
		
		Simpson et al., 2003
		
		Fenwick et al., 2004
		Shim & Compton, 2009
		
		Ramberg & Wasserman,
		  2004b
		Gask et al., 2006
		
		Chan et al., 2009

OUTCOMES	METHOD / MEASURE	REFERENCE
Staff Skills	Face-to-face interviews	Gask et al., 2006
	Focus groups	Chan et al., 2008
		Chan et al., 2009
	Self-developed scale	
		Simpson et al., 2003
	Suicide Intervention Response Inventory Form 2 (SIRI-2)	McAuliffe & Perry, 2007
		Chan et al., 2009
	Videotaped role-played interviews	
		Morriss et al., 1999
		Appleby et al., 2000
		Fenwick et al., 2004
		Gask et al., 2006
		Morriss et al., 1999
		Appleby et al., 2000
		Gask et al., 2006
Staff Confidence and Self-efficacy	Face-to-face interviews	Gask et al., 2006
	Self-developed scale	
		Fenwick et al., 2004
	Visual analogue scale	Ramberg & Wasserman, 2004a
		McAuliffe & Perry, 2007
		Shim & Compton, 2009
		Morriss et al., 1999
		Appleby et al., 2000
		Gask et al., 2006
Impact of Policy/ Protocol on Rates of Suicide and Self-Harm	Quantitative measures	McAuliffe & Perry, 2007
	Semi-structured telephone interviews	Ramberg & Wasserman, 2004b
Staff	Self-developed scale	Appleby et al., 2000
Satisfaction with Training		Gask et al., 2006

10.6.2 Recommendations: Education Plan

Recommendations for suicide risk management programs emerge from the limitations of these evaluation studies. The results from a number of studies indicate that program curricula should place less emphasis on interview skills and addressing hopelessness, and place more emphasis on providing staff with training on emotional support, removal of lethal means, and problem solving (Morriss and colleagues,1999). Similarly, Appleby and colleagues (2000) suggest an increased emphasis on assessment and management skills. Regarding future programs, Simpson and colleagues (2003) stress the importance of highlighting demographic risk factors rather than debunking suicide myths, and suggest that interviewing skills may not be an essential component for experienced professionals who routinely practice those skills.

Secondly, a number of the studies suggest that increased manager or administrator participation and support in the program would be helpful (Gask et al., 2006; Chan et al., 2008). McAuliffe and Perry (2007) identify that having the training program endorsed by all levels of the Health Centre's management team was an important contributor to the success of the project.

Similarly, Gask and colleagues (2006) suggest further research on understanding the processes involved in effecting organizational change, and Ramberg and colleagues (2004b) identify a need for increased understanding of local prerequisites for successful implementation. To address challenges with implementation, continuous evaluation of implementation processes is recommended (Ramberg & Wasserman, 2004b).

To address non-attenders, Appleby and colleagues (2000) suggest several methods including extended training periods, peer dissemination and encouragement of attendance, and online learning. Shim and Compton (2009) also suggest the adaptation of training materials through various curricula formats or focus on specific geographical participants in order to improve dissemination.

Finally, several studies recommend further investigation of the duration of sustained changes, and suggest that the impact of various methods such as booster sessions, ongoing supervision, and relapse prevention plans be explored in order to enhance and maintain the gains from suicide risk management training programs (Morriss et al., 1999; Simpson et al., 2003; Chan et al., 2009)

10.6.3 Recommendations: Evaluation Indicators & Methods

The mixed model should focus on those areas targeted for change within a specific program, and should follow the education plan as laid out by that program (section 10.3). It is recommended that an education plan and evaluation protocol use the following indicators and methods, as suggested by the literature review (Appendix G):

Table 9

Suggest mixed method for evaluating the roll-out and uptake of a suicide risk management protocol

INDICATOR	METHOD
Uptake of clinical protocol	Chart audit
Staff knowledge	Pre-post training
Staff confidence and self-efficacy	Pre-post training

If time and resources allow, evaluation and research should measure the impact of the clinical protocol on rates of suicide and self-harm over time.

Proposed Logic Model:

Evaluation of the education and clinical components of a Suicide Risk Management Initiative

Project Goal	Project Objectives	Inputs (resources/ budget lines)	Activities (activities, tasks, strategies)	Outputs (deliverables)	Short-Term Outcomes	Long-Term Outcomes
Identify safety risks inherent in client population	To assess each client for risk of suicide at regular intervals, or as needs change To identify clients at risk of suicide To address clients' immediate safety needs To identify treatment and monitoring strategies to ensure client safety To document treatment and monitoring strategies in client's health record To increase knowledge related to suicide risk management To increase skills related to suicide risk management To increase confidence related to suicide risk management To demonstrate satisfaction with suicide risk management training	Planning staff resources: executive leadership, project leader, quality analyst, communications, change management & learning and development representatives, sub-committee leads/experts & members, administrative support Implementation staff resources: Planning staff, plus all direct care staff time Material resources: assessment tools Planning: Learning & development staff time Implementation: L&D staff plus all direct care staff time	Development and implementation of a suicide risk management protocol for each site/ population Communication initiative developed and implemented Education initiative developed and implemented	# of sites with developed and implemented protocols % of clients assessed for risk of suicide at intake % of clients assessed for risk at regular intervals, or as needs change % of clients with appropriate documentations of treatment strategies % of clients with appropriate documentations of monitoring strategies # of education sessions % of direct care staff trained	Improved clinical consistency in suicide risk assessment Improved clinical consistency in suicide treatment strategies. Improved consistency of suicide monitoring strategies Improved consistency in documentation practices related to suicide risk management. Increased knowledge related to suicide assessment, treatment and monitoring Increased skills related to suicide assessment, treatment and monitoring Increased confidence to assess, treat & monitor suicide risk Satisfaction with training related to suicide risk management	Reduction of suicide/self-harm-related safety events within the service Reduction of suicide/self-harm-related safety events within the service

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Appendix A: Adolescent Tool Reviews

Beck Hopelessness Scale

Description:
Hopelessness is the experience of despair or extreme pessimism about the future, and as such, is part of the "cognitive triad" (along with a negative view of oneself and one's world) described in Beck's (1979) cognitive model of depression. According to Shneidman (1996), hopelessness-helplessness is the most common emotion experienced among suicidal persons. The Beck Hopelessness Scale (Beck et al., 1974; Beck and Steer, 1988; Steer and Beck, 1988) is a 20-item assessment device designed to measure negative expectations about the future. Individuals completing the BHS are asked to answer the questionnaire based on their attitudes during the preceding week. The self-report instrument may be administered in written or oral form, and each item is scored with a true/false response. Total scores range from 0-20 with higher scores indicating a greater degree of hopelessness. The BHS has been translated into Dutch (DeWilde et al., 1993) and Hebrew (Pershakovsky, 1985).

Potential Use:
Clinical research and assessment.

Populations Studied:
The BHS has been used with high school students and other non-clinically ascertained populations (DeWilde et al., 1993; Osman et al., 1998), adolescent psychiatric outpatients (Brent et al., 1997; 1998) and inpatients (Enns et al., 1997; Goldston et al., 2001; Kashden et al., 1993; Kumar and Steer, 1995; Morano et al., 1993; Rotheram-Borus and Trautman, 1988; Steer et al., 1993a, 1993b; Topol and Reznikoff, 1982), and adolescent suicide attempters on a pediatrics unit (Swedo et al., 1991).

Reliability:
Among adolescents who have been psychiatrically hospitalized, hopelessness as assessed with the BHS seems to be a relatively stable construct (correlation between serial administrations 6 months apart = .63; Goldston, unpublished data, January 2000). These data dovetail with data from adult samples suggesting that hopelessness as assessed with the BHS has some "trait characteristics" (Young et al., 1996).

Internal Consistency:
In adolescent psychiatric inpatients (Steer et al., 1993a), the BHS has been found to be internally consistent (KR-20 coefficient=.86). Both the Dutch translation of the scale (in three samples of adolescents) and the Israeli version of the BHS have been found to be internally consistent (alphas from .68 to .75, and alpha=.89, respectively).

Concurrent Validity:
In a United States adolescent psychiatric inpatient sample, and in Canadian samples of Aboriginal psychiatric inpatient suicide attempters and non-Aboriginal psychiatric inpatient suicide attempters, BHS scores were found to correlate (r=.53, .75, and .82, respectively) with severity of depression as measured with the BDI (Enns et al., 1997). In nonreferred adolescents, BHS scores were negatively related (as predicted) with Reasons for Living – Adolescent Version total scores (r=-.65; Osman et al., 1998). In adolescent psychiatric inpatients, severity of hopelessness was positively related to suicidal ideation (Steer et al., 1993b). Likewise, changes in hopelessness over one year among high school students were related to changes in suicidal ideation over the same period of time, after controlling for changes in depression (Mazza and Reynolds, 1998).

In both Caucasian and Aboriginal adolescent psychiatric inpatient suicide attempters, BHS scores were related to suicide intent; the relationship between BHS scores and suicide intent remained significant for Caucasian but not Aboriginal youths after controlling for concurrent depression (Enns et al., 1997). BHS scores were not found to be related to suicidal intent among primarily Hispanic and African-American adolescent psychiatry inpatient suicide attempters (Rotheram-Borus and Trautman, 1988).

In one study, adolescent suicide attempters reported more hopelessness at psychiatric hospitalization than did adolescents without a history of attempts (Goldston et al., 2000). In another study, suicidal adolescents as well as depressed nonsuicidal adolescents reported more hopelessness than nondepressed, nonsuicidal adolescents (DeWilde et al., 1993). In this study, depressed adolescents also reported more hopelessness than suicidal youths, although it is worth noting that some of the suicide attempters made their suicide attempts as long ago as one year before the study.

Psychiatrically hospitalized adolescent suicide attempters had higher hopelessness scores than nonattempters, both in samples matched for severity of depression (Morano et al., 1993) and in samples not matched for depression scores (Kashden et al., 1993; Topol and Reznikoff, 1982). Hopelessness was one of two variables that were used to discriminate between (or correctly classify) 76% of suicide attempters hospitalized on a pediatrics unit, other at-risk youths, and normal controls (Swedo et al., 1991).

Predictive Validity:
Among adults, hopelessness has repeatedly been found to be associated with eventual suicide (Beck et al., 1985, 1990; Fawcett et al., 1990) and repeat self-harm behaviors (Scott et al., 1997; Brittlebank et al., 1990) in clinically referred samples.

Among adolescent psychiatric inpatients with a history of suicide attempts, BHS scores were predictive of suicide attempts following discharge from the hospital (Goldston et al., 2000). These predictive effects were not apparent among adolescents without a history of attempts, and were no longer statistically significant after controlling for depression (Goldston et al., 2000). In a second study (Hawton et al., 1999), the BHS failed to differentiate between adolescents who made repeat attempts and adolescents who did not make repeat attempts in a 1-year follow-up after hospitalization for self-poisoning. However, this study was limited in power because of the small number of youths attempting suicide in the follow-up. When Hawton et al. (1999) combined for statistical analyses the adolescents who presented at hospitalization with repeat suicide attempts and adolescents who made repeat suicide attempts over the follow-up, the repeaters did on average have higher BHS scores than the youths with single overdoses.

Adults who prematurely discontinue cognitive therapy have higher hopelessness scores than adults who remain in therapy (Dahlsgaard et al., 1998). In a controlled treatment study, Brent et al. (1997) also found that adolescents who dropped out of therapy had higher hopelessness scores than adolescents who remained in therapy. Brent et al. (1998) also found higher BHS scores to be associated with failure to achieve clinical remission of major depression.

Treatment Studies:
A suicide prevention program was found to reduce BHS scores in some but not all schools (Orbach and Bar-Joseph, 1993); however, BHS scores were generally low in this high school population even before the intervention.

The BHS has been used in multiple treatment studies with adults (e.g., Rush et al., 1982), but has not been used as a primary outcomes measure in a controlled treatment trial with youths.

Summary and Evaluation:

The Beck Hopelessness Scale is an excellent scale based on the cognitive theory of depression that has been widely used with adults, but less used in studies with adolescents. Among adults, the BHS repeatedly has been found to be associated with repeat suicide attempts and completed suicide in clinically ascertained samples. Hopelessness also has been found to predict later suicide attempts (over 5 years) among psychiatrically hospitalized adolescents with a history of prior attempts (but not among youths without prior attempts). An important consideration in treatment studies is that BHS scores have been found to be associated with treatment dropout in both samples of adults and adolescents.

Where to Obtain:

The Psychological Corporation, 555 Academic Court, San Antonio, TX 78204

Reproduced from Goldston D. Assessment of suicidal behaviors and risk among children and adolescents. 2000. Technical report submitted to the National Institute of Mental Health under Contract 263-MD-909995. Available at: http://www.nimh.nih.gov/suicideresearch/measures.pdf, p. 122.

Hopelessness Scale for Children

Description:

The Hopelessness Scale for Children (HPLS) is a 17-item modification of the Beck Hopelessness Scale (BHS). Items are rated either true or false, and total scores range from 0-17. As with the BHS, higher scores indicate a greater degree of hopelessness. Readability of the Hopelessness Scale for Children is at first- to second-grade level.

Potential Utility:

Clinical assessment and clinical research

Populations Studied:

The standardization sample for the HPLS was 6- to 13- year-old psychiatric inpatients (Kazdin et al., 1986). The HPLS also has been used with other non-clinically-ascertained samples of high school students (Cole, 1989a; Reifman and Windle, 1995; Spirito et al., 1988), suicide attempters in a pediatric setting (Boergers et al., 1998; Spirito et al., 1987, 1988), child and adolescent psychiatric inpatients (Asarnow et al., 1989; Hewitt et al., 1997; Kashani et al., 1991, 1997; Pinto and Whisman, 1996; Pinto et al., 1998; Whisman and Pinto, 1997), child and adolescent psychiatric outpatients (Spirito et al., 1988), and with incarcerated youths (Cole et al., 1989a).

Reliability:

There was moderate stability in HPLS scores over a 6-week period of time among child psychiatric inpatients (r=.57; Kazdin et al., 1986). Among non-clinically referred young adolescents (9th graders), there again was moderate stability over a 10-week test-retest interval (r=.49; Spirito et al., 1988).

Internal Consistency:

In a sample of 6- to 13-year-old (Kazdin et al., 1986) psychiatric inpatients, the HPLS was internally consistent (a=.97; Spearman-Brown split-half reliability=.96). The HPLS was also internally consistent among adolescent psychiatric inpatients (a=.89; Hewitt et al.,1997; and, a=.84, Spearman-Brown split-half reliability=.91; Spirito et al., 1988). In a large sample of nonclinically referred 9th graders (Spirito et al., 1988), the coefficient a for the HPLS was .69, and Spearman-Brown split-half reliability coefficient was .75.

Concurrent Validity:

Among high school students, HPLS scores were positively correlated with a five-item questionnaire used by Beck et al. (1974) to validate the Beck Hopelessness Scale (r=.71; Cole, 1989a). Adolescent suicide attempters hospitalized on a pediatric unit were found to have higher HPLS scores than adolescents in a non-clinically referred sample; however, the suicide attempters did not have higher HPLS scores than those obtained with an outpatient psychiatric clinical sample (Spirito et al., 1988). In different samples of child and adolescent pediatric and psychiatric inpatients, higher HPLS scores were found to be associated with greater severity of depressive symptoms (Asarnow and Guthrie, 1989; Cole, 1989a; Kazdin et al., 1986; Marciano and Kazdin, 1994; Overholser et al., 1997; Spirito et al., 1988), a higher prevalence of depressive diagnoses (Kashani et al., 1991), a greater number of total diagnoses (Kashani et al., 1991), poorer self-esteem (Kashani et al., 1991; Kazdin et al., 1986, Marciano and Kazdin, 1994; Overholser et al., 1995), poorer self-rated social skills (Kazdin et al., 1986), more anxiety (Kashani et al., 1991), greater perfectionism in girls (Hewitt et al., 1997), more difficult temperament (Kashani et al., 1991), lower estimated intellectual functioning (Kashani et al., 1991), suicidal ideation (Hewitt et al., 1997; Kashani et al., 1991; Whisman and Pinto, 1997), suicidal tendencies (suicidal ideation and attempts rated on a continuous scale; Asarnow and Guthrie, 1989; Cole, 1989a), and suicide attempts (McLaughlin et al., 1996).

There have been mixed results regarding whether HPLS scores are related to suicidality after controlling for depression. In one study, the correlation between hopelessness and suicidal ideation did not remain statistically significant after controlling for severity of depression (Asarnow and Guthrie, 1989). In another study, hopelessness continued to be correlated with an index of suicidal behavior after controlling for depression for high school girls, but not for high school boys (Cole, 1989a). HPLS scores were related to a continuous index of suicidality in a mixed sample of child psychiatric outpatients and inpatients, even after controlling for severity of symptoms of depression (Myers et al., 1991a). However, HLPS scores were not related to the suicidality index among youths with major depression after controlling for severity of depression (Myers et al., 1991a). In a sample of incarcerated adolescents, the relationship between HPLS scores and presence/absence of suicide attempts no longer remained significant (in a model including race because of the lower suicide attempts among African-American youths) after accounting for depression (Kempton and Forehand, 1992).

In two studies of child psychiatric inpatients, HPLS scores have contributed to discriminant function analyses in classifying children with suicidal ideation or attempts and nonsuicidal youths (Asarnow and Guthrie, 1989; Marciano and Kazdin, 1994). In both studies, approximately 40% of cases were incorrectly classified even after consideration of HPLS scores. HPLS scores did not differentiate between adolescents hospitalized on a pediatric unit following overdoses and adolescents on the same unit receiving psychiatric consultations for other reasons (Spirito et al., 1987).

In samples of both adolescents recruited from high schools and incarcerated juvenile delinquents, higher HPLS scores have been found to be associated with fewer or less strong reasons for living, particularly survival and coping beliefs (Cole, 1989b; Pinto et al., 1998). HPLS scores have been found to be associated with a "wish to die" as a primary motivation for adolescent suicide attempts (Boergers et al., 1998). HPLS scores have been found to be related to greater expectations of lethal outcome (Spirito et al., 1996) and less impulsive suicide attempts (Brown et al., 1991; Spirito et al., 1996). In one study, the relationship between HPLS scores and overall suicide intent scores was stronger among female than among male adolescent psychiatric inpatients (Overholser et al., 1997). HPLS scores were not found to be associated with medical lethality of suicide attempts among adolescent psychiatric inpatients (Nasser and Overholser, 1999).tionship between HPLS scores and overall suicide intent scores was stronger among female than among male adolescent psychiatric inpatients (Overholser et al., 1997). HPLS scores were not found to be associated with medical lethality of suicide attempts among adolescent psychiatric inpatients (Nasser and Overholser, 1999).

Dimensionality:

A principal components analysis with data from child psychiatric inpatients yielded one primary and one secondary factor, both assessing negative expectancies for the future, and overlapping in content (Kazdin et al., 1986).

Predictive Validity:

Only one prospective study has examined HPLS as a predictor of later suicidal behavior (Myers et al., 1991b). This study focused on 7- to 17-year-olds recruited from inpatient and outpatient psychiatric settings; 100 of the youths had diagnoses of Major Depression and 38 did not. In this study, HPLS scores were not related to suicidality over a 3-year follow-up.

Treatment Studies:

The HPLS was used as one of the outcome measures in a comparison of two interventions – routine care vs. a combination of routine care, home visits, and family problem-solving sessions – for adolescents who had taken overdoes (Harrington et al., 1998). At 2- and 6-month followups, the two groups did not differ with regard to hopelessness (the intervention did result in a reduction in suicidal ideation, but only for youths with Major Depression).

Summary and Evaluation:

The Hopelessness Scale for Children has been very widely used in research studies of suicidality among youths. The scale may be particularly useful for preadolescents (an age group for whom the Beck Hopelessness Scale is not appropriate). The great majority of studies using the Hopelessness Scale for Children have been cross-sectional in design and have demonstrated the correlation between HPLS scores and other constructs related to depression, distress, or suicidal ideation/behavior. However, among adult populations, the construct of hopelessness is valuable primarily because of its ability to predict future suicidal behavior. In this context, it is notable that the single prospective study conducted failed to demonstrate the predictive utility of HPLS scores.

Where to Obtain:

The items on the HPLS are reproduced in the Kazdin et al. (1986) article, referenced below.

Reproduced from Goldston D. Assessment of suicidal behaviors and risk among children and adolescents. 2000. Technical report submitted to the National Institute of Mental Health under Contract 263–MD–909995. Available at: http://www.nimh.nih.gov/suicideresearch/measures.pdf, p. 133.Reproduced from Goldston D. Assessment of suicidal behaviors and risk among children and adolescents. 2000. Technical report submitted to the National Institute of Mental Health under Contract 263–MD-909995. Available at: http://www.nimh.nih.gov/suicideresearch/measures.pdf, p. 133.

Columbia Teen Screen

Description:

The Columbia Teen Screen was developed as a rapid (11 item) self-report screening questionnaire for assessing risk of suicidal behaviors (Shaffer et al., 1996). This measure includes 4 stem items regarding current and past suicidal ideation and attempts, and stem questions about depression, and alcohol and substance abuse. If the respondent answers positively to the Yes/No stem questions about suicidal behavior, s/he is then directed to a series of Yes/No questions assessing the seriousness of the problem, whether the respondent is receiving help for this problem, and whether the respondent would like to have help with this problem. The stem questions for depression, and about alcohol and drug abuse ask the respondent how much of a problem s/he is having with these areas on a 1 (no problem) to 5 (very bad problem) scale. If the problem is rated as a "bad problem" or a "very bad problem," respondents are then asked Yes/No questions about whether they are concerned about the problem, have seen a mental health professional, or have an appointment to see a mental health professional.

On this measure, adolescents who report one of the following are assumed to be "at-risk" for suicidal behavior: (1) suicidal ideation, (2) past suicide attempts, (3) a "bad" or "very bad" problem with depression, substance, or alcohol use, (4) a need for help with depression, substance, or alcohol use.

Potential Use:

Epidemiologic/screening surveys; Shaffer and Craft (1999) describe the utility of the combined use of the Columbia Teen Screen and the NIMH DISC in a two a two-stage screening procedure for identifying youths at risk for suicidal behaviors

Populations Studied:

In one study (Shaffer et al., personal communication, 10/99), the Columbia Teen Screen was used to screen for "at-risk" youths in eight high schools in the New York City area (one of which withdrew consent in mid-screening and was removed from analyses). These schools initially included two suburban and six urban schools, two single sex schools (one all female and one all male), two parochial schools, one vocational-technical school, and five unspecialized public schools.

Assessment and Detection of Suicidal Behaviors:

The two stem questions on the Columbia Teen Screen regarding suicidal ideation ("During the past 3 months, have you thought about suicide?") and suicide attempts ("Have you ever tried to commit suicide?") implicitly refer to "non-zero intent to die" and are consistent with the operational definitions proposed by O'Carroll et al. (1996).

Reliability:

From a much larger school-based sample (Shaffer et al., personal communication, 10/99), 85 students were readministered the Columbia Teen Screen 14 days after its initial administration. Test-retest reliability was as follows: suicidal ideation in last 3 months (k=.48), frequent suicidal ideation (k=.42), "seriously" thought about killing self (k=.56), suicidal ideation for "a long time" (k=.39), lifetime suicide attempts (k=.58), problems with depression (k=.36), problems with alcohol or drugs (k=.48).

Internal Consistency:

No published data were located.

Concurrent Validity:

From a larger school-based sample, 319 adolescents who screened "positive" on the Columbia Teen Screen, and 322 students who endorsed none of the items associated with risk were interviewed with the DISC-2.3 (Shaffer et al., personal communication, 10/99). Endorsement of the item regarding suicidal ideation was associated with an 11.6-fold increase in the likelihood of a prior attempt (assessed with the DISC), 3.6-fold increase in the likelihood of any DISC diagnosis, and a 4.9-fold in the increase of a DISC mood disorder diagnosis. Endorsing the item regarding "often thought about suicide" was associated with a 16.4-fold increase in the likelihood of past attempt (as assessed with the DISC), a 4.3-fold increase in the rate of any DISC-assessed diagnosis, and a 4.2-fold increase in the likelihood of a current mood disorder. Endorsing the item "Seriously thought about suicide" was associated with a 21.9-fold increase in the rate of prior attempts (assessed with the DISC), a 4.6-fold increase in the rate of any DISC assessed disorder, and a 4.7-fold increase in the odds of having a mood disorder.

In this same sample, the screening item regarding suicidal ideation in the last three months had 61% sensitivity and 88% specificity in "predicting" past suicide attempts as assessed with the DISC.

Dimensionality:

No published data were located.

Predictive Validity:

In the New York metropolitan area, a large number of high school students were screened with instruments including the Columbia Teen Screen (Shaffer et al., personal communication, 10/99). Students were considered to be at risk on the basis of their responses to the Columbia Teen Screen. A large sampling of students, approximately half of whom were thought to be "at risk," were followed up approximately 3 to 4 years later. A classification of "at risk" on the Columbia Teen Screen was found to have 71% sensitivity and 51% specificity in predicting suicidal ideation within the last year according to

the DISC administered at the second assessment. Questions regarding suicidal ideation and attempts on the Columbia Teen Screen generally were much less sensitive, although more specific in their relationship to later suicidal ideation.

In this same study, the Columbia Teen Risk classification of "at risk" yielded 78% sensitivity and 53% specificity in predicting suicide attempts since the initial screen (Shaffer et al., personal communication, 12/99). Again, questions regarding ideation and attempts at the initial screening were generally less sensitive, but more specific in their relationship to later attempts.

Treatment Studies:
The Columbia Teen Screen is primarily a screening instrument, and has not been used in treatment studies.

Summary and Evaluation:
The Columbia Teen Screen is a new brief screening instrument. Preliminary indications are that the instrument has excellent concurrent validity. More importantly, the classification of "at-risk" from the instrument not only has been shown to be predictive of later suicide ideation and attempts, but is considerably more sensitive as a screener than prior history of suicidal ideation/behavior by itself.

Where to Obtain:
Division of Child and Adolescent Psychiatry, New York State Psychiatric Institute, 1051 Riverside Drive, New York, NY 10032

Reproduced from Goldston D. Assessment of suicidal behaviors and risk among children and adolescents. 2000. Technical report submitted to the National Institute of Mental Health under Contract 263–MD–909995. Available at: http://www.nimh.nih.gov/suicideresearch/measures.pdf, p. 107.

The Suicidal Ideation Questionnaire

Description:
The Suicidal Ideation Questionnaire (SIQ) is a screening measure for severity or "seriousness" of suicidal ideation (Reynolds, 1988). There are two self-report forms of the SIQ: a 30-item version originally designed for 10th, 11th, and 12th graders (named simply the SIQ), and the 15-item version originally designed for adolescents in grades 7, 8, and 9 (named the SIQ-JR). Although the SIQ-JR was developed for use with younger adolescents, it also has been used studies with older adolescents (Hovey and King, 1996; King et al., 1993a, 1995b, 1997a; Sieman et al., 1994). According to the publisher, the SIQ and SIQ-JR are not currently available in languages other than English.

Respondents to the SIQ and SIQ-JR rank each of the items on a 7-point scale, ranging from 0 ("I never had this thought") to 6 ("almost every day"). The scores of each item are summed to yield a total score, reflecting severity of suicidal ideation. Normative data (stratified by gender and junior versus high school) are provided for the SIQ and SIQ-JR. Based on data in a non-clinically referred sample, Reynolds (1988) suggested that adolescents who have a raw score of >41 on the SIQ or >31 on the SIQ-JR be evaluated further for "potentially significant psychopathology and suicide risk" (p. 11). In an inpatient psychiatric sample, Pinto et al. (1997) found that a cutoff score of 41 on the SIQ was highly specific but missed a significant number of suicide attempters. Hence, it was argued that a cutoff score of 20 on the SIQ in a clinical setting might prove more useful than the higher cutoff in identifying youths in need of further evaluation for suicide risk.

Potential Use:

Clinical assessment and clinical research, epidemiologic/screening surveys; Reynolds (1991) describes the utility of the combined use of the SIQ and the SBI in a two a two-stage screening procedure for identifying youths at risk for suicidal behaviors.

Populations Studied:

The standardization samples for the SIQ were normal high school populations (Reynolds, 1988). The SIQ also has been used in junior high school samples (Lamb and Pusker, 1991), high school samples (Mazza and Reynolds, 1998), with suicide attempters (Brown et al., 1991; Harrington et al., 1998; Shaunesey et al., 1993; Spirito et al., 1987), adolescents in inpatient psychiatric settings (Hewitt et al., 1997; Pinto and Whisman, 1996; Pinto et al., 1997, 1998; Shaunesey et al., 1993), physically abused adolescents (Shaunesey et al., 1993), and nonsuicidal patients on a pediatric floor (Spirito et al., 1987).

The standardization samples for the SIQ-JR were non-clinically ascertained 7th, 8th, and 9th graders (Reynolds, 1988). The SIQ-JR also has been used with immigrant and second-generation Latino-American adolescents (Hovey and King, 1996), American Indian adolescents (Dick et al., 1994; Keane et al., 1996; Novins et al., 1999), primarily African-American and Hispanic children and adolescents from the inner city (Reynolds and Mazza, 1999) and adolescents in inpatient psychiatric settings (King et al., 1993, 1995a, 1995b, 1997a; Sieman et al., 1994).

Assessment and Detection of Suicidal Behaviors:

The questions in the SIQ and SIQ-JR are based on Reynolds' theoretical notions regarding a hierarchy of seriousness of suicidal cognitions and behavior. In this scheme, suicidal thoughts and behavior form a continuum ranging from thoughts of death, to thoughts of wanting to be dead, to general and then specific thoughts of killing oneself, to making specific preparations for suicidal behavior, to attempting suicide (Reynolds, 1988).

However, similar to Reynolds' Suicide Behavior Interview, the specific items of the SIQ and SIQ-JR can be evaluated with regard to the operational definitions proposed by O'Carroll et al. (1996). On the SIQ and on the SIQ-JR, there are separate items for thoughts of death and dying (items #5 and 6 on both the SIQ and SIQ-JR), thoughts of wishing to be dead (item #12 on the SIQ, item #11 on the SIQ-JR), and thoughts of killing oneself (item #2 on both the SIQ and SIQ-JR). The wording of the suicide ideation question refers implicitly to "non-zero intent to die," consistent with the nomenclature proposed by O'Carroll et al. (1996).

There is no item regarding past or current suicide attempts, so the SIQ and SIQ-JR cannot be used as an instrument to identify attempters.

Reliability:

In a large sample of high school students, the SIQ had a test-retest reliability, over an interval of approximately 4 weeks, of .72 (Reynolds, 1988). In a sample of inner-city children and young adolescents, the SIQ-JR had test-retest reliability of .89 over approximately 3 weeks (Reynolds and Mazza, 1999).

Internal Consistency:

In the standardization samples of 7th, 8th, and 9th graders, the SIQ-JR was found to be internally consistent (alpha=94; Reynolds, 1988). Most of the item-total correlations of the SIQ-JR ranged from .62 to .86 (Reynolds, 1988). The SIQ-JR also was found to be internally consistent (alpha=.96 and .91, respectively) in a sample of American Indian boarding school high school students (Dick et al., 1994), and in a sample of primarily African-American and Hispanic inner city adolescents (Reynolds and Mazza, 1999).

In the standardization samples of 10th, 11th, and 12th graders, the SIQ was found to be internally consistent (alpha=.97; Reynolds, 1988). Most of the item-total correlations for the SIQ range from .70 to .84 (Reynolds, 1988). In addition, the SIQ was found to be internally consistent (alpha=.97 and .98, respectively) among adolescents in two inpatient psychiatry samples (Pinto et al., 1997; Hewitt et al., 1997).

Concurrent Validity:

In various samples of clinically and non-clinically ascertained adolescents, higher SIQ scores have been found to be related to severity of depression (Reynolds, 1988; Pinto et al., 1996), greater likelihood of mood disorder (Pinto et al., 1997), hopelessness (Hewitt et al., 1997; Pinto and Whisman, 1996; Reynolds, 1988), anxiety (Pinto et al., 1996; Reynolds, 1988), low self-esteem (Pinto and Whisman, 1996; Reynolds, 1988), lower Reasons for Living (RFL) total scores (Pinto et al., 1998), suicide attempts (King et al., 1990), nonimpulsive (as opposed to impulsive) suicide attempts (Brown et al., 1991), higher scores on another suicidality measure (Reynolds and Mazza, 1994), greater severity of physical abuse (Shaunesey et al., 1993), socially prescribed perfectionism (Hewitt et al., 1997), and anger (Pinto and Whisman, 1996).

In inpatient psychiatric samples, adolescent suicide attempters and adolescent suicide ideators did not differ with regard to scores on the SIQ; however, both groups had higher scores on the SIQ than nonsuicidal adolescent inpatients (Pinto et al., 1997; Shaunesey et al., 1993). Among adolescent pediatric inpatients, suicide attempters rated as having chronic psychiatric problems had higher scores on the SIQ than did suicide attempters with acute problems (Spirito et al., 1987). In various samples of clinically and non-clinically ascertained adolescents, higher SIQ-JR scores have been found to be associated with increased severity of depression (Dick et al., 1994; Hovey and King, 1996; King et al., 1993; Reynolds, 1988), anxiety (Dick et al., 1994; Reynolds, 1988), decreased self-esteem (Reynolds, 1988), higher scores on other measures of suicidality (Dick et al., 1994; King et al., 1993, 1997b; Reynolds and Mazza, 1999), suicide attempts (Reynolds and Mazza, 1999), greater acculturative stress (Hovey and King, 1996), and alcohol use (King et al., 1993). Findings regarding whether SIQ-JR scores are related to family functioning have been inconsistent (Hovey and King, 1996; King et al., 1993).

When data from the Suicidal Behaviors Interview were used as the criterion for determining "clinical level of suicidal risk," cutoffs of 41 or above on the SIQ and 31 and above on the SIQ-JR were found to have utility as screens for suicidal behavior (sensitivity of 79% and specificity of 69%; and sensitivity of 92% and specificity of 76%, respectively; Reynolds, 1992).

Dimensionality:

A principal components analysis of SIQ from the standardization sample of high school students yielded three factors with eigenvalues greater than 1.0 (Reynolds, 1988). The first factor (on which the majority of items loaded) included items assessing suicidal ideation, thoughts about not wanting to be alive, and thoughts regarding preparations for suicide. The second factor primarily consisted of items assessing the responses of others to suicide. The third factor included items assessing general thoughts of death and an item regarding the writing of a will.

In an inpatient psychiatric sample, a principal components analysis of the SIQ yielded four factors; however, similar to the results in the standardization sample, the first factor accounted for a much greater proportion of variance than the other factors, suggesting the possibility that the SIQ may be assessing one primary dimension of suicidal thoughts (Pinto et al., 1997).

A principal components analysis of the SIQ-JR from the standardization sample of 7th, 8th, and 9th graders also yielded three factors with eigenvalues greater than 1.0 (Reynolds, 1988). The first factor consisted primarily of items assessing thoughts about death or dying. The second factor included items more specifically assessing suicidal thoughts and suicidal plans. Similar to the third factor for the SIQ, the third factor of the SIQ-JR included two items assessing general thoughts of death.

Predictive Validity:

The manual for the SIQ explicitly says that the "SIQ is not an instrument for the prediction of suicide per se" (Reynolds, 1988). Nonetheless, in a sample of American Indian adolescents, the SIQ-JR was found to be more predictive of subsequent suicide attempts in a suicide attempt cluster two months later than anxiety, depression, and alcohol use (Keane et al., 1996). Moreover, among adolescent psychiatric inpatients, SIQ-JR scores have been found to be predictive of later suicide attempts (King et al., 1995b) and SIQ-JR scores one-half year later (King et al., 1997a).

Treatment Studies:

The SIQ was used as an outcome measure in a controlled intervention trial (routine follow-up care vs. routine care in addition to home visits and family problem-solving assistance) with suicide attempters, aged 16 and younger. However, no differences were found between the two interventions (Harrington et al., 1998).

The SIQ was also used as an outcome measure in an open-label trial of fluoxetine for adolescents with major depression (Colle et al., 1994). In that study, 7 of 8 patients who remained on fluoxetine at least 24 weeks had significant (>50%) reductions in suicidal ideation as assessed with the SIQ. The gradual reduction in suicidal ideation was noted throughout the period of active treatment, and the lower levels of suicidal ideation were largely maintained at one-year follow-up.

No published treatment studies using the SIQ-JR were located.

Summary and Evaluation:

The Suicidal Ideation Questionnaire is one of the most widely used screening measures for suicidal ideation in adolescents. Both a shorter junior high and longer high school version of the SIQ are available. The junior high version of the SIQ-JR may be used with older adolescents (as well as younger youths), particularly when the sample includes youths who may have difficulty with reading, or when the study requirements necessitate a brief instrument. The SIQ and SIQ-JR have been used both with clinically ascertained samples and with non-clinically ascertained adolescents including American Indians and immigrant Latino-Americans. Considerable data regarding the concurrent validity of both the SIQ and SIQ-JR have been published

There are no items on the SIQ and SIQ-JR regarding attempted suicide. Nonetheless, recent data indicate that individuals who attempt suicide following screening with the SIQ may have higher SIQ scores than individuals not attempting suicide. In addition, the SIQ is one of the few measures of suicidality in youths that has been used as a primary outcome measure in treatment studies. In one trial, no differences were found between two interventions, but in another open-label study, suicidal ideation decreased during the period of active treatment with pharmacotherapy.

Where to Obtain:

Psychological Assessment Resources, Inc., P.O. Box 998, Odessa, FL 33556

Suicide Probability Scale

Description:

The Suicide Probability Scale (SPS) is a 36-item self-report measure designed as a screening instrument to assess suicide risk in individuals aged 14 and older (Cull and Gill, 1988). The impetus for developing this scale was "the lack of empirically validated and generally available measures for predicting suicidal behaviors" (Cull and Gill, 1988; p. 1). Items of the SPS assess four areas: hopelessness, suicidal ideation, negative self-evaluation, and hostility. Respondents are instructed to circle whether each item on the SPS describes them "None or a little of the time," "Some of the time," "Good part of the time," or "Most or all of the time." Interpretation of the SPS is based on individual item analysis, scores on the four subscales (corresponding to the areas above), and the total weighted score (and T-score). The authors caution that the SPS should not be used as the sole instrument for assessing suicidality when a person is thought to be at risk, and state that the SPS is meant to supplement, rather than supplant, clinical judgment.

Potential Use:

Clinical research, clinical assessment, screening in "high-risk settings in conjunction with other methods of assessing suicide potential" (Cull and Gill, 1988, p.3)

Populations Studied:

The SPS was validated on a primarily adult sample (Cull and Gill, 1988), and the norms on the measure extend to age 14. The SPS also has been used with high school students (D'Attilio et al., 1992; D'Attilio and Campbell, 1990; Osman et al., 1998; Tatman et al., 1993), pediatric health clinic attendees (Cappelli et al., 1995), physically abused youths (Kaplan et al. 1997), adolescents in a group home setting (Larzelere et al., 1996), and adolescent psychiatric inpatients (Osman et al., 1996).

Reliability:

The test-retest reliability of the SPS for two mixed age groups was high (r=.92 and .94), although the SPS had somewhat lower test-retest reliability in certain subgroups (e.g., r=.84 for male Hispanics; Cull and Gill, 1988).

Internal Consistency:

In the validation sample of adolescents and (mostly) adults, internal consistency was determined separately for even and odd items, and for each subscale: Total Scale alpha=.93 and .93; Hopelessness Scale alpha=.85 and .86; Suicidal Ideation Scale alpha=.89 and .89; Negative Self-Evaluation Scale alpha=.68 and .62; Hostility Scale a=.76 and .75 (Cull and Gill, 1988). In a high school sample, internal con sistency- was as follows: Total Scale alpha=.90; Hopelessness Scale alpha=.78; Suicidal Ideation Scale alpha=.86; Negative Self-Evaluation Scale alpha=.59; Hostility Scale alpha=.66 (Tatman et al., 1993). It was noted that the item-total correlations of the SPS among the adolescent students (Tatman et al., 1993) was significantly lower than that reported for Cull and Gill's (1988) validation sample.

Concurrent Validity:

In a sample of adolescent psychiatric inpatients, the total SPS score was negatively correlated with the Survival and Coping Beliefs, Responsibility to Family, and Moral Objections scales and the total score of the Brief Reasons for Living Inventory – Adolescent (BRFL-A; Osman et al., 1996). In a sample of high school students, SPS scores were found to be negatively associated with all of the Reasons for Living – Adolescent (RFL-A) scales, as well as the total score from that measure (Osman et al., 1998). In student samples, SPS scores also have been found to be associated with decreased social support and death anxiety (D'Attilio et al., 1992; D'Attilio and Campbell, 1990).

In physically abused adolescents, suicide attempters were found to differ from nonsuicidal youths on the Hostility Scale of the SPS (Kaplan et al., 1997). However, in this same sample, the suicide attempters and nonsuicidal youths did not differ on the Negative Self-Evaluation, Suicidal Ideation, or Probability of Suicide Scales, nor with regard to SPS total scores (Kaplan et al., 1997).

Dimensionality:

Factor analysis of responses to the SPS revealed six factors with eigenvalues greater than 1.0 (Cull and Gill, 1988). These were interpreted as reflecting Suicidal Ideation, Hopelessness, Positive Outlook, Interpersonal Closeness, Hostility, and Angry Impulsivity. The Positive Outlook factor had only a small cluster of items and was merged with the Interpersonal Closeness factor to form the Negative Self-Evaluation Scale. The Hostility and Angry Impulsivity factors also had a relatively small number of items, and were merged to form the Hostility Scale of the SPS.

Factor analysis in a high school sample yielded a factor solution slightly different from that found in the validation sample (Tatman et al., 1993). Essentially, in this sample, three factors were found which were interpreted as Suicidal Despair (which included modest factor loadings for the hopelessness items), Angry Frustration, and Low Self-Efficacy.

Predictive Validity:

In validating this scale, the authors (Cull and Gill, 1988) provided evidence that the items differentiated (in cross-sectional analyses) between individuals who had attempted suicide and individuals who had not attempted suicide. However, in the manual, no evidence about predictive validity (or the ability of the scale to predict suicidal behavior at a later point in time) was offered.

In a sample of adolescents receiving treatment in a group home, SPS scores were predictive (at conventional levels of statistical significance) of future suicide attempts, suicidal verbalizations, and "minor self-destructive behaviors" (Larzelere et al., 1996). However, use of the cutoff for taking suicide precautions cited in the SPS manual would have yielded only 27.6% sensitivity and 89.7% specificity in predicting suicide attempts. Using an alternative cutoff would have yielded sensitivity of 48.3% and specificity of 80.3%.

Treatment Studies:

No published studies were located.

Summary and Evaluation:

Despite the fact that the SPS was developed in part because of the dearth of available scales predicting suicidal behavior, the manual presents no evidence about the predictive utility of the scale. Evidence is mixed as to the scale's usefulness in an adolescent population. One study found SPS scores to be predictive (at statistically significant levels) of later suicidal behavior in a sample of adolescents in a group home. However, in terms of the clinical or practical significance of the findings, the cutoff score recommended in the SPS manual failed to identify even half of the adolescents who eventually attempted suicide. Additional work assessing the predictive utility of the scale in adolescent populations is recommended.

Where to Obtain:

Western Psychological Services, 12031 Wilshire Blvd, Los Angeles, CA 90025-1251

Reproduced from Goldston D. Assessment of suicidal behaviors and risk among children and adolescents. 2000. Technical report submitted to the National Institute of Mental Health under Contract 263–MD–909995. Available at: http://www.nimh.nih.gov/suicideresearch/measures.pdf, p. 160.

Reasons for Living Inventory for Adolescents and Brief Reasons for Living Inventory for Adolescents

Description:
Two measures, the Reasons for Living Inventory for Adolescents (RFL-A; Osman et al., 1998) and the Brief Reasons for Living Inventory for Adolescents (BRFL-A; Osman et al., 1996), were developed to assess the same adaptive or life-maintaining belief system thought to be measured by the parent version of the RFL. The RFL-A is a 52-item measure, and the BRFL-A is a 14- item measure. The BRFL-A was developed from items on the original RFL; the RFL-A was developed using both existing items and new items.

Potential Use:
Clinical research.

Populations Studied:
Validation samples for the RFL-A and BRFL-A include both samples of non-clinically ascertained high school students, and adolescent psychiatric inpatients (Osman et al., 1996; 1998).

Reliability:
No published data were located.

Internal Consistency:
In an initial mixed sample of high school students, adolescent psychiatric inpatients, and college freshmen, and in a cross-validation sample of adolescent psychiatric inpatients, the BRFL-A scales were found to be internally consistent: Survival and Coping Beliefs alpha=.76 and .74, Responsibility to Family alpha=.74 and .85, Fear of Suicide a=.67 and .70, Fear of Social Disapproval a=.80 and .76, and Moral Objections alpha=.79 and .68 (Osman et al., 1996).

The RFL-A has five factor-analytically derived scales. In two samples of non-clinically referred high school students, and another sample of adolescent psychiatric inpatients, the internal consistency of these factor-derived scales was as follows – Future Optimism: alpha=.91 to .94, Suicide-Related Concerns: alpha=.93 to .95, Family Alliance alpha=.93 to 95, Peer Acceptance and Support: alpha=.89 to .92, and Self-Acceptance : alpha=.93 to .95 (Gutierrez et al., 2000; Osman et al., 1998).

The internal consistency of the entire RFL-A was .96 (Osman et al., 1998) and .97 (Gutierrez et al., 2000), in a sample of non-clinically referred high school students, and adolescent psychiatric inpatients, respectively.

Concurrent Validity:
In a mixed sample of high school students (Osman et al., 1996), adolescent psychiatric inpatients, and college freshmen, the Survival and Coping Beliefs and Responsibility to Family scales of the BRFL-A were found to correlate negatively with estimated suicide probability, self-rated expectation of later suicide attempts, and current suicidal ideation. The Moral Objections scale was found to be negatively correlated with estimated probability of later suicide attempt and self-rated expectations for later suicide attempts.

However, in this same sample (Osman et al., 1996), the BRFL-A Survival and Coping Beliefs scale was also found to be positively correlated with the Lie and the Defensiveness validity scales of the MMPI-A. The Fear of Social Disapproval Scale was paradoxically negatively related to the Lie Scale of the MMPI-A. The Survival and Coping Beliefs Scale was negatively related to the Depression, Low Self-Esteem, Family Problems, and Negative Treatment Indicators Content Scales of the MMPI-A (following Bonferonni corrections). The Responsibility to Family scale was negatively related to alienation, family problems, and negative treatment indicators. Last, the Moral Objections scale was negatively correlated with the MMPI-A Depression and Negative Treatment Indicators content scales.

In a sample of high school students, the RFL-A total score and scale scores had moderate negative (but statistically significant) correlations with suicidal ideation, suicide threats, and estimated likelihood of future attempts as assessed with the Suicide Behavior Questionnaire, Suicide Probability Scale scores, Beck Hopelessness Scale scores, and the depression section of the Brief Symptom Inventory (Osman et al., 1998). All of the correlations (with measures except the BSI) remained statistically significant after controlling for general psychopathology as assessed with the BSI. In psychiatric inpatients, the RFL-A scales again were negatively correlated with SBQ-assessed suicidal ideation, threats, and estimated likelihood of future attempts (Gutierrez et al., 2000; Osman et al., 1998), SPS total scores (Gutierrez et al., 2000; Osman et al., 1998), hopelessness (Gutierrez et al., 2000), and low self-esteem (Gutierrez et al., 2000).

In one sample, recently suicidal adolescent psychiatric inpatients had lower scores on each of the RFL-A scales and for the entire RFL-A than psychiatric inpatients without recent suicide attempts, and a non-clinically ascertained sample of high school students (Osman et al., 1998). In a second sample of adolescent psychiatric inpatients, both first-time or repeat suicide attempters had lower RFL-A scores than nonsuicidal adolescents (Gutierrez et al., 2000).

Dimensionality:
In a mixed sample of clinically referred adolescents and normal high school students, exploratory and confirmatory factor analyses of the BRFL-A yielded five factors, consistent with the factor structure of the original RFL (Osman et al., 1996).

In a sample of high school students, exploratory factor analysis of RFL-A data yielded five factors which were interpreted as Future Optimism (by far the largest factor), Suicide-Related Concerns, Family Alliance, Peer Acceptance and Support, and Self-Acceptance (Osman et al., 1998). Confirmatory factor analysis with three additional sets of youths indicated that this factor solution provided an adequate fit for the data (Osman et al., 1998; Gutierrez et al., 2000).

Predictive Validity:
No published data were located.

Treatment Studies:
No published data were located.

Summary and Evaluation:
The RFL-A and the BRFL-A eventually may have greater utility with adolescents than the original RFL. However, relatively little research has been conducted with the scales beyond the validation and cross-validation studies, and the predictive validity of both scales has yet to be documented.

Where to Obtain:
Items on the RFL-A are in the Osman et al. (1998) article, referenced below. Items on the BRFL-A are in the Osman et al. (1996) article, referenced below.

Reproduced from Goldston D. Assessment of suicidal behaviors and risk among children and adolescents. 2000. Technical report submitted to the National Institute of Mental Health under Contract 263–MD–909995. Available at: http://www.nimh.nih.gov/suicideresearch/measures.pdf, p. 157.

Child Suicide Potential Scales (CSPS)

Description:

The Child Suicide Potential Scales (CSPS) is one of the first comprehensive semi-structured interviews developed for assessing suicidal behaviors in youths (Pfeffer et al., 1979). Some of CSPS scales, e.g., the scales assessing ego functioning and ego defense mechanisms, are grounded in developmental and psychodynamic theory. The CSPS was developed as a tool that could be administered by clinicians or researchers. The interview consists of assessments for demographic and background information, assaultive behavior, suicidal behavior (the "Spectrum of Suicidal Behavior Scale"), life events prior to the evaluation, recent affects and behavior, past affects and behavior, family background, concept of death, current ego functions, ego defenses, and a section for recording diagnostic impressions.

The Spectrum of Suicidal Behavior Scale (SSB) has been used and interpreted in various ways – as an instrument for assessing presence of suicidal behavior, as an instrument assessing "dangerousness" of suicidal behaviors, and as an instrument theoretically linked to suicide potential. The other clinical scales on the CSPS are included in the instrument because of their presumed or purported linkages with suicidal behaviors.

The CSPS has been translated into Hebrew. A self-report version of the CSPS is planned (Pfeffer, personal communication, 11/99).

Potential Use:

Clinical assessment or clinical research.

Populations Studied:

The CSPS has been used in studies of child and adolescent psychiatric inpatients (King et al., 1993a, 1993b, 1995; Miller et al., 1992; Milling et al., 1992; Pfeffer et al., 1979, 1982, 1991, 1993), in non-clinically-referred children (Pfeffer et al., 1984), and in child psychiatric outpatients (Pfeffer et al., 1980). The Hebrew version of the CSPS has been used in studies of Israeli adolescent psychiatric inpatients, adolescent suicide attempters presenting in an emergency room setting, and adolescent non-patients (Apter et al., 1997; Gothelf et al., 1998; Ofek et al., 1998; Stein et al., 1998).

Assessment and Detection of Suicidal Behaviors:

The presence of suicidal behaviors is rated on a 1 to 5 continuum ("the spectrum of suicidal behavior") from nonsuicidal to serious attempt. In this rating system, "suicidal ideation" (a rating of 2) is defined as "thoughts or verbalization of suicidal intention." Suicidal threat (a rating of 3) is defined as "verbalization of impending suicidal action and/or a precursor action which, if fully carried out, could have led to harm." A mild attempt (a rating of 4) is defined as "actual self destructive action which realistically would not have endangered life and did not necessitate intensive medical attention." A serious attempt (a rating of 5) is defined as "actual self destructive action which realistically could have led to the child's death and may have necessitated intensive medical care."

Cut-offs on the 1 to 5 rating scale have been used to define suicidal and nonsuicidal groups in research studies, and can be evaluated with regard to the recommended nomenclature for suicidal behaviors (O'Carroll et al., 1996). In this context, the SSB queries regarding suicidal ideation (a minimum rating of 2) are not so broad as to include thoughts of death or thoughts of wanting to die (without suicidal ideation). The queries regarding suicidal thoughts are distinguished from less specific thoughts of death.

The queries for suicide attempts (a rating of 4 or 5) do not necessarily imply "non-zero" intent to die as suggested in the O'Carroll et al. (1996) nomenclature. Rather, the suicide attempt items refer to "self-destructive action," a term that if taken literally, could refer not only to suicidal behavior but additionally to a variety of other life- or health-endangering or risk-taking behaviors.

The SSB ratings for suicide attempts confound issues regarding the presence/absence of suicidal behavior with the clinical characteristics of suicidal behavior. For example, suicidal behavior that "does not necessitate intensive medical attention" is rated as less severe than suicidal behavior that "may have necessitated intensive medical care." However, in at least one study (King et al., 1997, p. 1437), the two ratings designating suicide attempts have been combined, avoiding the confounding of clinical characteristics with definitions of suicidal behavior.

Reliability:
In two samples of 6- to 12-year-old psychiatric inpatients (Pfeffer et al., 1979, 1989), a sample of non-clinically ascertained school children (Pfeffer et al., 1984), and a sample of adolescent psychiatric inpatients (Miller et al., 1992), high levels of interrater agreement have been found for Spectrum of Suicidal Behavior Scale ratings (94%, 100%, and 100% agreement, and r=.96, respectively).

In a sample of non-clinically-referred preadolescents, the interrater reliability of the Concept of Death scale was found to be high (r=.92; Pfeffer et al., 1984). In this same sample, the interrater reliabilities of the CSPS scales other than the Concept of Death and Spectrum of Suicidal Behavior Scales range from moderate to high (r=.54 to r=.97; Pfeffer et al., 1984). Interrater reliabilities for the Spectrum of Assaultive Behavior and the Spectrum of Suicidal Behavior scales of the Hebrew version of the CSPS ranged from r=.77 to r=.93. Interrater reliabilities ranged from .89 to .90 for the Concept of Death scales, from r=.65 to r=1.0 for the Ego Mechanism Scales, and r=.83 to r=1.0 for the Ego Defense Scales.

In assessing suicidal behavior over a 6- to 8-year follow-up of a mixed sample of prepubescent children who were psychiatric inpatients or normal controls, the interrater reliability of the Spectrum of Suicidal Behavior Scale was found to be moderate (k=.55; Pfeffer et al., 1993).

Internal Consistency:
The Spectrum of Suicidal Behavior Scale from the CSPS yields a single rating and is therefore not amenable to tests of internal consistency.

With a sample of 6- to 12-year-old inpatients, internal consistency of the Concept of Death Scale was found to be high (a=.86). In this same sample, the internal consistency of the other CSPS Scales in this sample was found to range from moderate to high (a=.54 to .97).

In a sample of adolescent inpatients, the internal consistency of selected sections of the CSPS was generally in the moderate range (a=.39 to .79; Ofek et al., 1998).

Concurrent Validity:
CSPS-assessed depression, hopelessness, worthlessness, thoughts of wishing to die, being preoccupied with death, and having mothers who were depressed were more common among suicidal than nonsuicidal inpatient children (Pfeffer et al., 1979). Maternal depression, and believing that death is a pleasant state were related to suicidal behavior, whereas anxiety and aggressive behaviors were not (Pfeffer et al., 1979).

Suicidal and nonsuicidal inpatient and outpatient children did not differ with regard to CSPS-assessed life stresses, ego functioning, and family problems other than parental suicidal ideation (Pfeffer et al., 1979, 1980).

CSPS-assessed perception of death as temporary and the use of introjection as a defense were inconsistently associated with suicidality among child psychiatric inpatients (Pfeffer et al., 1979, 1982).

In a sample of non-clinically-ascertained school children, suicidal 6- to 12-year-olds were found to have more CSPS-assessed current and past depression, to be more preoccupied, and to use more introjection as a defense) than nonsuicidal school children (Pfeffer et al., 1984).

Suicidal and nonsuicidal psychiatric inpatients (as assessed with the CSPS) were also found to differ with regard to family variables (Miller et al., 1992, King et al., 1993b). Specifically, suicidal adolescent inpatients described their families as less cohesive and less adaptable (Miller et al., 1992), as having poorer overall family functioning and more paternal depression than nonsuicidal inpatients with mood disorders (King et al., 1993b). Suicidal adolescent inpatients with mood disorders were also found to have "more distant, unaffectionate, and uncommunicative relationships with their fathers" than nonsuicidal inpatients with mood disorders (King et al., 1993b).

Using the Hebrew version of the CSPS, repeat adolescent psychiatric inpatient suicide attempters, but not first-time attempters, were found to have more aggressive tendencies and more "antisocial tendencies" than nonsuicidal adolescents (Stein et al., 1998). Suicidal adolescent inpatients were also more preoccupied with death and more likely to view death as pleasant (according to CSPS ratings) than other adolescents (Gothelf et al., 1998).

Most of the scales on the Hebrew version of the CSPS were only modestly to moderately (but statistically significantly) related with measures assessing similar constructs (Ofek et al., 1998). For example, ratings on the Spectrum of Suicidal Behavior were correlated .37 with the Self- Aggression Scale of the Overt Aggression Scale and .45 with the Suicide Risk Scale, and CSPSrated depression correlated .21 with Beck Depression Inventory scores (Ofek et al., 1998).

Dimensionality:
No published data were located.

Predictive Validity:
CSPS ratings of suicidal behavior among adolescent psychiatric inpatients have been found to predict CSPS of ratings of suicidal behavior one year later (Ofek et al., 1998), and SIQ-Jr ratings of suicidality 6 to 8 months later (King et al., 1997). Child psychiatric inpatients and non-clinically-ascertained controls rated as having suicidal ideation and suicide attempts on the Spectrum of Suicidal Behavior were three times and six times, respectively, more likely to make suicide attempts over the 6- to 8-year follow-up (Pfeffer et al., 1993).

Treatment Studies:
The scales of the CSPS have not been used in treatment studies.

Where to Obtain:
Cynthia R. Pfeffer, M.D., Professor of Psychiatry, New York Hospital – Westchester Division, 21 Bloomingdale Road, White Plains, NY 10605

Summary and Evaluation:
The CSPS has been used extensively in studies of child suicidal behaviors. The detection items do not strictly conform to the recommendations regarding definitions of suicidal behaviors by O'Carroll et al. (1996), but can be grouped to more closely approximate this classification scheme (King et al., 1997). The utility of the CSPS is evidenced by the number of scientific publications using this scale, and the predictive validity of the Spectrum of Suicidal Behavior items in two samples.

Where to Obtain:
Cynthia R. Pfeffer, M.D., Professor of Psychiatry, Cornell University Medical College, New York Hospital – Westchester Division, 21 Bloomingdale Road, White Plains, NY 10605

Reproduced from Goldston D. Assessment of suicidal behaviors and risk among children and adolescents. 2000. Technical report submitted to the National Institute of Mental Health under Contract 263–MD– 909995. Available at: http://www.nimh.nih.gov/suicideresearch/measures.pdf, p. 54.

Description :
The Risk of Suicide Questionnaire (RSQ) was originally designed as a 14-item self-report screening tool for detecting suicide risk in child and adolescent patients, intended for use by nonmental health clinicians in an emergency department (ED). The Suicidal Ideation Questionnaire (SIQ) was used as the criterion standard to validate the RSQ, and has demonstrated a high reliability and evidence of validity. 4 RSQ items were selected for inclusion on the questionnaire because little additional predictive value was gained with inclusion of more items. The administration time for the RSQ is very short (< 2 minutes). All items on the RSQ are phrased in the form of a question with possible responses of "yes," "no," or "no response" (Horowitz et al, 2001). The RSQ has been translated into Spanish, showing adequate validity and reliability in Mexican students (Robles-Garcia et al, 2005)

Risk of Suicide Questionnaire (RSQ)

Potential Use:
Screening for suicide risk among children and adolescents in an emergency department setting. Results from Robles-Garcia's (2005) study suggest the RSQ may also be used in educational settings and all the health care levels.

Populations Studied:
Children and adolescents in a pediatric ED for primarily psychiatric reasons (Horowitz et al, 2001); adolescents and adults in an Level I trauma centre for primarily nonpsychiatric reasons (Folse et al, 2006); fifth and sixth grade elementary school students of both genders from a private educational institution in Mexico (Robles-Garcia et al, 2005).

Assessment and Detection of Suicidal Behaviors:
The 4 items on the questionnaire assess major facets of suicide risk: present and past thoughts on suicide, prior self-destructive behavior, and current stressors. Each has been identified by other studies to be an important risk factor for suicidal behaviour (Reynolds, 1990; Rotherham-Borus, 1989, in Horowitz et al, 2001).

Reliability:
The RSQ was found to have adequate internal consistency; In the 4-item RSQ, questions 3 and 4 were found to add little to the reliability of the instrument in an adolescent population.

Internal Consistency:
Adequate internal consistency was determined for both the 4-item and a 2-item (Q1 and Q2) RSQ in adolescents (= 0.63). Strong inter-item correlations were established between Question 1 and Question 2, however, inter-item correlations involving Question 3 and Question 4 suggested these questions added little to the reliability of the instrument. Cronbach's alpha coefficients were recalculated using only the first two items of the RSQ. Little change was noted for adolescents (= 0.65) (Folse et al, 2006). The RSQ Spanish version (4-item) showed a similarly adequate level of internal consistency for children (=0.68) (Robles-Garcia et al, 2005).

Concurrent Validity:
Analysis of the 4-item RSQ demonstrated that it is able to identify 98% of the adolescents determined by the SIQ to be at risk for suicide (Horowitz et al, 2001). For adolescents, strong correlations (p < 0.01) were noted between Question 1 and suicide diagnosis (r = 0.75) and Question 2 and suicide diagnosis (r = 0.72), however, Question 3 and Question 4 contributed little to the establishment of concurrent validity. A positive screen was correlated with suicide diagnosis (r = 0.57) (Folse et al, 2006). The Spanish version of the RSQ showed moderate-high correlation with scales that evaluate constructs that are hypothesized to be closely linked to suicide risk: the Beck Depression Inventory (r= 0.74) and the Beck Hopelessness Scale (r=0.52) (p=0.001) (Robles-Garcia et al, 2005).

Dimensionality:
No published data were located.

Predictive Validity:
The overall prediction of suicidality was assessed by the criterion standard SIQ for the most predictive 4-item model (c statistic = 0.87); the model was also found to have high sensitivity (0.98), positive predictive value (0.87) and negative predictive value (0.97) (Horowitz et al, 2001).

The author notes that given its intended use in the ED setting as a screening tool, questionnaire items are meant to identify children who are imminently at risk for self-destructive behaviour, rather than items that would predict future behaviour (Horowitz et al, 2001).

Treatment Studies:
The RSQ is primarily a screening instrument, and has not been used in treatment studies.

Summary and Evaluation:
The Risk of Suicide Questionnaire (RSQ) is a new brief screening instrument. Preliminary indications are that the 4-item model has adequate internal consistency and concurrent validity. Importantly, given the relative importance of detecting children and adolescents at high risk and the potentially devastating consequences of not doing so, the sensitivity of the 4-item model is very high.

Appendix B: Adult Tool Reviews

Scale for Suicide Ideation

APA notes that this is one of the only scales that demonstrates predictive validity; however that value is 3%, and false positives are high.

Description.
The Scale for Suicide Ideation (SSI; Beck et al., 1979) is a 21-item, interviewer-administered rating scale that measures the current intensity of patients' specific attitudes, behaviors, and plans to commit suicide on the day of the interview. Each item consists of three options graded according to suicidal intensity on a 3-point scale ranging from 0 to 2. The ratings for the first 19 items are summed to yield a total score, ranging from 0 to 38. The SSI consists of five screening items. Three items assess the wish to live or the wish to die, and two items assess the desire to attempt suicide. If the respondent reports any active or passive desire to commit suicide, then 14 additional items are administered. Individual items assess suicidal risk factors such as the duration and frequency of ideation, sense of control over making an attempt, number of deterrents, and amount of actual preparation for a contemplated attempt. Two additional items record incidence and frequency of previous suicide attempts. The SSI takes approximately 10 minutes to administer.

Samples studied.
The SSI has been standardized with adult psychiatric patients in psychiatric inpatient (Beck et al., 1985) and outpatient settings (Beck, Brown, & Steer, 1997). For the inpatient sample, 54% were female, 60% were White, 34% were African-American; and the mean age was approximately 34 years (Beck et al., 1979). For the outpatient sample, 56% were female, 91% were White, 6% were African American, and the mean age was 36 years, ranging from 13 to 79 years. The SSI has been utilized in a wide variety of settings such as primary care practices, emergency rooms, rehabilitation programs, private practice, etc. The SSI also has been administered to college students (Clum & Curtin, 1993; Clum & Yang, 1995; Dixon, Heppner & Anderson, 1991), including African American college students (Blanton- Lacy, 1997; Molock, Kimbrough, Lacy, McClure & Williams, 1994). This measure has been administered with elderly clinical populations as well (Mireault & de Man, 1996; Rifai, George, Stack, Mann et al., 1994; Szanto, Reynolds, Frank, Stack, Fasiczka, Miller, Mulsant, Mazumdar, & Kupfer, 1996).

Reliability.
The SSI has been found to have moderately high internal consistency with Cronbach coefficient alphas ranging from .84 (Beck et al., 1997) to .89 (Beck et al, 1979). The SSI also has high interrater reliability with correlations ranging from .83 (Beck et al., 1979) to .98 (Beck et al., 1997).

Dimensionality.
Beck and colleagues (1997) reported that the SSI represents two positively related underlying dimensions of Preparation (9 items) and Motivation (8 items) in psychiatric outpatients. The overall compositions of these two dimensions correspond to the Active Suicidal Desire and Preparation dimensions that Beck et al. (1979) had been previously found with patients hospitalized for suicide ideation.

Concurrent validity.
The SSI has been found to be significantly associated with the suicide items from the Beck Depression Inventory and the Hamilton Rating Scale for Depression (Beck et al., 1979; Beck et al., 1985; Beck et al., 1997; Hawton, 1987). The SSI has also been associated with previous suicide attempts and severity of depression (Beck et al., 1997; Molock et al., 1994). The SSI discriminated suicidal inpatients from depressed outpatients (Beck et al., 1979) as well as suicide attempters from nonattempters (Mann, Waternaux, Haas, & Malone, 1999). In addition, the SSI has significant, positive correlations with daily self-monitoring of suicidal ideation (Clum & Curtin, 1993). Prigerson and Slimack (1999) reported that the SSI was more highly correlated with aggression in young adult males whereas the SSI was correlated with depression and posttraumatic stress disorder in young adult females.

Predictive validity.

The predictive validity of the SSI for completed suicide has been established for patients seeking outpatient psychiatric treatment (Beck et al., 1999; Brown et al., 2000). Specifically, patients who scored in the higher risk category (i.e., SSI total score greater than 2) were approximately seven times more likely to commit suicide than those who scored in the lower risk category (Brown et al., 2000). Although suicide ideation is a criterion for a major depressive episode in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV; American Psychiatric Association, 1994), the Brown et al. (2000) study found that the presence of suicidal ideation provides an independent estimate of the risk for suicide for psychiatric patients.

Sensitivity to change.

In a sample of psychiatric outpatients who sought treatment for depression, the SSI one week prior to treatment was moderately correlated (.51) with scores at the end of treatment (Beck et al., 1979). Changes in the SSI were moderately correlated with changes in levels of depression (r = .65) and hopelessness (r = .57) from pretreatment to posttreatment. The SSI has also been found to be sensitive to change in randomized clinical trials for patients at high risk for suicide (Linehan, Armstrong, Suarez, Allman & Heard, 1991; Patsiokas & Clum, 1985; Salkovskis, Atha, & Storer, 1990). In addition, the SSI has been found to be sensitive to change in suicide ideation over a 24 hour period for psychiatric patients who were hospitalized because of suicidal risk (Russ, Kashdan, Pollack, & Bajmakovic-Kacila, 1999).

Summary and evaluation.

The SSI is one of the most widely-used measures of suicide ideation. The SSI includes items that measure suicide ideation (thoughts of wanting to kill oneself) as defined by the O'Carroll et al. (1996) nomenclature. The SSI includes an item that assesses the frequency of previous suicide attempts. The degree of intent to kill oneself during the last suicide attempt is also assessed. The internal consistency, interrater reliability, test-retest reliability and concurrent validity of the SSI has been established. Moreover, the SSI is one of the few suicide assessment instruments to have documented the predictive validity for completed suicide.

Reproduced from Brown GK. A review of suicide assessment measures for intervention research with adults and older adults. National Institute of Mental Health. Available at: http://www.nimh.nih.gov/suicideresearch/adultsuicide.pdf, p. 6.

Beck Scale for Suicidal Ideation

Description:

The Beck Scale for Suicidal Ideation (BSI; Beck and Steer, 1991) is a self-report measure based on the semi-structured interview, the Scale for Suicidal Ideation or SSI (Beck et al., 1979). The SSI was developed for use with adult psychiatric patients. Steer and Beck (1988) suggest that the SSI is appropriate for research with adolescents as well, although very few studies of adolescents have used the SSI (e.g., Kashani et. al., 1991). A French self-report adaptation of the SSI was developed (De Man et al., 1987), examined in French-speaking adolescents (De Man et al., 1993), and then translated back into English and used with English-speaking adolescents (De Man and Leduc, 1994). A Modified (self-report) version of the Scale for Suicidal Ideation (the MSSI) has also been developed (Miller et al., 1986), but has rarely been used with adolescents (Esposito and Clum, 1999).

The BSI is an easy-to-administer 21-item self-report questionnaire (only 19 of the items are scored) that has promise for greater use with adolescents than the SSI (Beck and Steer, 1991). The authors of the BSI suggest that the instrument is best used to detect and measure severity of suicidal ideation, which is considered to be an indication for suicide risk (Beck and Steer, 1991). However, the authors caution that the BSI should not be the only instrument used for assessing suicidality, and suggest that "endorsement of any BSI item may reflect the presence of suicide intention and should be investigated by the clinician" (Beck and Steer, 1991).

Potential Use:
Clinical assessment and clinical research.

Populations Studied:
The BSI has been used with adolescent psychiatric inpatients (Kumar and Steer, 1995; Steer et al., 1993) and outpatients (Rathus and Miller, under editorial review), but apparently has not yet been used in published studies of non-clinically ascertained subjects.

Assessment and Detection of Suicidal Behavior:
The BSI begins with 5 items assessing wish to live, wish to die, reasons to live versus reasons to die, active suicidal ideation (e.g., "I have a moderate to strong desire to kill myself"), and passive suicidal ideation (e.g., "I would not take the steps necessary to avoid death if I found myself in a life-threatening situation"). If the respondent totally denies active or passive suicidal ideation, s/he is directed to the last two items (#20 and #21) of the questionnaire assessing past suicide attempts and wish to die during the last attempt. If respondents do admit to at least some active or passive suicidal ideation, they complete Items #6 through #19, assessing duration and frequency of suicidal ideation, ambivalence regarding the suicidal ideation, specific deterrents to suicide and reasons for living, suicide plan and opportunity, expectations about following through with an attempt, and preparations in anticipation of suicide.

The BSI is one of the more thorough instruments for assessing severity of suicidal ideation, and one of the only assessment devices for assessing passive suicidal ideation. The total score yields a severity score, but individual items can be used as screens for active suicidal ideation, passive ideation, and past attempts. The items assessing thoughts of death are separate from items assessing suicidal ideation per se. The active suicide ideation screening item (#4) refers to "desire to kill myself," which implicitly assumes some ruminations associated with "non-zero intent to kill oneself." The follow-up Item #15 even more clearly addresses issues of intent (e.g., "I am sure I shall make a suicide attempt").

Reliability:
No published data were located.

Internal Consistency:
In two samples of adolescent psychiatric inpatients, the BSI was found to be internally consistent as indicated by an alpha of .95 and .96 (Steer et al., 1993; Kumar and Steer, 1995).

Concurrent Validity:
In a sample of adolescent psychiatric inpatients, BSI scores were correlated with the total number of presenting problems (Kumar and Steer, 1995), severity of depression (Kumar and Steer, 1995; Steer et al., 1993), severity of anxiety (Kumar and Steer, 1995; Steer et al., 1993), the diagnosis of mood disorder (Steer et al., 1993), and the BDI suicide ideation item (Steer et al., 1993). Findings regarding the relationship between BSI scores and past suicidal behavior were inconsistent (Kumar and Steer, 1995; Steer et al., 1993).

Dimensionality:
In data from adult inpatients, five factors were extracted from the BSI. These were interpreted as reflecting intensity of suicidal ideation, active suicidal desire, suicide planning, passive suicide desire, and concealment (Beck and Steer, 1991). No factor analytic studies have been conducted with adolescents.

Predictive Validity:

In recent studies with adult psychiatric outpatients, suicidal ideation "at its worst point" and current suicidal ideation assessed with the SSI were found to predict later suicide (Beck et al., 1999; Brown et al., 2000). However, no studies have examined the predictive utility of the BSI with adolescent populations.

Treatment Studies:

In a pilot study of dialectical behavior therapy (biweekly individual and family sessions) with 10 suicidal adolescents who exhibited symptoms of borderline personality disorder, suicidal ideation as assessed with the self-report version of the Scale for Suicidal Ideation decreased from mean scores of 9.8 (SD=5.3) at pretreatment to 3.8 (SD=4.6) at posttreatment 12 weeks later (Rathus and Miller, under editorial review).

Summary and Evaluation:

The BSI is one of the more thorough instruments for assessing suicidal ideation, and one of the only scales to assess passive suicidal ideation in addition to active suicidal ideation. The BSI is appropriate for use with adolescents, but not younger children. The BSI also has been used in a small pilot study of dialectical behavioral therapy with suicidal adolescents who exhibited symptoms of borderline personality disorder. Nonetheless, test-retest reliability data are not available for the BSI with adolescents, nor has the BSI been used in non-clinically ascertained samples. In adult samples, current suicidal ideation and suicidal ideation at its worst point has been found to be predictive of later suicide; however, the predictive validity of the BSI (and the interview form, the SSI) has not been demonstrated with adolescents.

Where to Obtain:

The Psychological Corporation, 555 Academic Court, San Antonio, TX 78204

Reproduced from Goldston D. Assessment of suicidal behaviors and risk among children and adolescents. 2000. Technical report submitted to the National Institute of Mental Health under Contract 263–MD–909995. Available at: http://www.nimh.nih.gov/suicideresearch/measures.pdf, p. 83.

Suicidal Behaviors Questionnaire (Revised)

Description.

The Suicidal Behavior Questionnaire was recently revised to assess 14 suicidal behaviors (SBQ-14; Linehan, 1996). Respondents complete up to 34 items depending upon the presence or absence of current, past or expected suicidal behaviors. The SBQ-14 items measure the following five behavioral domains: Past suicidal ideation, future suicidal ideation, past suicide threats, future suicide attempts and the likelihood of dying in a future suicide attempt. Each of these items is rated according to the past several days including today, the last month, the last 4 months, the last year and over a lifetime. The five behaviors are scored using a weighted summary score across each time interval. Nine additional items assess the severity of lifetime suicidal behavior, current suicide plan, availability of a method, social deterrents, attitudes towards suicide behavior and distress tolerance. A total SBQ-14 score is also calculated using 10 of the 14 items.

Samples studied.

The SBQ-14 was standardized using men (42%) and women (58%) who attended a street fair (Addis & Linehan, 1989). The mean age in this sample was 32 years. The SBQ-14 also has been administered to a clinical sample of female psychiatric outpatients who were diagnosed with borderline personality disorder and who had a history of parasuicidal behavior (Addis & Linehan, 1989). The mean age in this sample was 27 years and ranged from 18 to 45 years.

Dimensionality.

A principal components factor analysis of clinical and nonclinical samples indicated that the SBQ-14 was unidimensional (Addis & Linehan, 1990).

Reliability.

The five SBQ-14 behaviors have high internal reliability with coefficients ranging from .73 to .92 (Addis & Linehan, 1989).

Concurrent validity.

Four of the five SBQ-14 behaviors were positively correlated (rs = .36 to .51) with items from the Scale for Suicide Ideation and the Suicide Coping Interview. The SBQ-14 total score was positively correlated (rs = .55 to .62) with the Scale for Suicide Ideation, the Beck Depression Inventory and the Beck Hopelessness Scale, and negatively correlated (r = − .46) with the Linehan Reasons for Living Inventory. Differences in the SBQ-14 total scores between clinical and nonclinical samples have been reported after controlling for depression, hopelessness and reasons for living (Linehan & Addis, 1990).

Summary and evaluation.

The revised SBQ-14 is a comprehensive assessment of suicide ideation, suicide attempts and suicidal acts (without intent to commit suicide) using a self-report format. The SBQ assesses suicide ideation and related suicide behaviors as defined by the O'Carroll et al. (1996) nomenclature. The intent to die is specifically assessed for each suicide attempt or self-injury behavior. The internal consistency and concurrent validity has been established. Researchers are encouraged to use the 34-item SBQ-14 rather than the abbreviated 4-item SBQ.

Reproduced from Brown GK. A review of suicide assessment measures for intervention research with adults and older adults. National Institute of Mental Health. Available at: http://www.nimh.nih.gov/ suicideresearch/adultsuicide.pdf, p. 19.

Beck Suicide Intent Scale

Description:

The Suicide Intent Scale (SIS) is a semi-structured, 15-item interviewer rating scale which is used to evaluate the severity of suicidal intent for a previous suicide attempt, usually an attempt immediately preceding the interview (Beck et al., 1974). There are two sections in the SIS: one assesses "objective" characteristics of the suicide attempt (such as precautions taken against discovery, degree of planning, taking precautions against discovery), and the other assesses "subjective" characteristics (such as expectation of fatality, perceived seriousness of the attempt, etc.). Although developed for use with adults, the SIS has been recommended as appropriate for research with adolescents (Steer and Beck, 1988).

The Beck Suicide Intent Scale was included in the Suicide Circumstances Schedule, a compilation of instruments assessing suicidal behaviors (Brent et al., 1988). A Physician ED (Emergency Department) measure for evaluating suicidal behavior, based largely on the SIS, has been developed (Spirito et al., 1994).

Potential Use:

Clinical research

Populations Studied:

The SIS has been used with medically hospitalized suicide attempters (Brown et al., 1991; Hawton et al., 1999; Spirito et al., 1996), psychiatrically hospitalized suicide attempters (Enns et al., 1997; Nasser and Overholser, 1999; Overholser et al., 1997; Spirito et al., 1996), youths presenting in an Emergency Department (Kingsbury, 1993; Spirito et al., 1994), Aboriginal youths (Enns et al., 1997), and sexually and other physically abused adolescents (Shaunesey et al., 1993).

Reliability:

There was substantial interrater agreement on the SIS in a small sample of adolescent psychiatric inpatients and their parents, and parents of suicide completers (intraclass correlation coefficients ranging from .83 to 1.00; Brent et al., 1988).

Internal Consistency:

In a sample of adolescent suicide attempters, the total SIS was found to be internally consistent (alpha=.85; Spirito et al., 1996). The subjective portion of the scale was found to have higher internal consistency than the objective portion of the scale (alpha= .85 and .60, respectively). The item-total correlations for items in the objective portion of the scale ranged from .12 (n.s.) to .56; Item 8 on the SIS regarding Prior Communication was the only item without a statistically significant item-total correlation. Item-total correlations for the subjective portion of the scale ranged from .57 to .81.

The internal consistency of the entire SIS was replicated in two samples of adolescents with recent attempts (alpha=.74 and .79, respectively; Nassar et al., 1999; Kingsbury, 1993). However, Kingsbury (1993) noted the two sections of the SIS were not highly correlated (r=.24).

Concurrent Validity:

In various clinically referred samples, SIS total scores have been found to be related to severity of depression (DeMaso et al., 1994; Enns et al., 1997; Overholser et al., 1997; Spirito et al., 1996), hopelessness (Enns et al., 1997; Spirito et al., 1996), anxiety (Enns et al., 1997), and suicidal ideation as assessed with the SIQ (Spirito et al., 1996). Longer premeditation before suicidal attempts (assessed with two items on the SIS) was related to greater depression and hopelessness (Brown et al., 1991).

Mixed results have been reported regarding the relationship between suicide intent scores and medical lethality (DeMaso et al., 1994; Nasser and Overholser, 1999).

Dimensionality:

From data collected from adolescents who had taken intentional overdoses, Kingsbury (1993) extracted four factors from the SIS; these factors were variously interpreted as (1) Belief about Intent, (2) Preparation before Overdose, (3) Prevention of Discovery, and (4) Communication. The last factor included only two SIS items.

In a sample of medically and psychiatrically hospitalized adolescent suicide attempts, Spirito et al. (1996) extracted a three-factor solution, interpreted as Expected Outcome, Isolation Beliefs, and Planning Activities. Items 7 (regarding the presence of a suicide note) and 8 (regarding prior communication) did not load on any of the factors.

Predictive Validity:

Hawton et al. (1999) did not find that suicide intent as assessed with the SIS differentiated adolescent repeat suicide attempters from one-time only attempters in a one-year follow-up study. Similarly, using the Physician ED Measure (based largely on the SIS), Spirito et al. (1994) did not find that suicide intent was related to repeat suicidal behavior among adolescents in a 3 month follow-up (although length of planning the attempt was positively related to compliance with outpatient psychiatric treatment).

Treatment Studies:

No treatment studies using the SIS with adolescents were located.

Summary and Evaluation:

The Suicide Intent Scale was initially developed for adult populations, and its utility with adolescents is still being evaluated. The scale correlates as expected with constructs such as depression and hopelessness, but data regarding the relationship between intent and medical lethality of attempts are mixed. Although the SIS appears to be useful as a research instrument, and aspects of suicide intent (e.g., precautions against discovery) have been shown to have predictive value in adults, it is not clear whether the SIS conveys any unique information about prognosis or treatment considerations in adolescents.

IWhere to Obtain:

The SIS is in the Beck et al. (1974) reference below. The Physician ED measure based on the SIS can be obtained from: Anthony Spirito, PhD, Child and Family Psychiatry, Rhode Island Hospital, 593 Eddy Street, Providence, RI 02903.

Reproduced from Goldston D. Assessment of suicidal behaviors and risk among children and adolescents. 2000. Technical report submitted to the National Institute of Mental Health under Contract 263–MD–909995. Available at: http://www.nimh.nih.gov/suicideresearch/measures.pdf, p. 167.

Linehan Reasons for Living Inventory

Description.

The Reasons for Living Inventory (LRFL; Linehan, Goodstein, Nielsen, & Chiles, 1983) is a 48-item self-report measure that assesses the beliefs and expectations for not committing suicide. The instrument may be used to explore differences in the reasons for living for individuals who engage in suicidal behavior and those who do not. Each item is rated on a six point Likert scale ranging from 1 (not at all important) to 6 (extremely important). The LRFL consists of six subscales and a total scale. The subscales include: Survival and Coping Beliefs (24 items), Responsibility to Family (7 items), Child-Related Concerns (3 items), Fear of Suicide (7 items), Fear of Social Disapproval (3 items), and Moral Objections (4 items). The subscales and total scale are scored by summing the items and dividing by the number of items. A 72-item LRFL version is also available. The LRFL assumes that adaptive beliefs and expectations can serve as buffers for adult suicide behavior. The 48-item LRFL takes approximately 10 minutes to administer.

Samples studied.

The LRFL has been standardized using volunteers from a shopping mall and psychiatric patients in hospital settings (Linehan et al., 1983). For the nonclinical sample, 52% were female and the mean age was 36 years. For the clinical sample, 64% were female and the mean age was 34 years. Malone and colleagues (Malone et al., 2000) examined the LRFL among 84 depressed inpatients, half of whom had attempted suicide. The patients ages ranged from 18 to 80, 55% were female, 25% were non-Caucasion. The LRFL has also been used in college student samples (Osman, Gifford, Jones, Lickiss, Osman & Wenzel, 1993). In the college student sample, 68% were female and the mean age was 20 years.

Dimensionality.

The selection of the six subscales was based on four separate factor analysis performed on two samples of normal adult volunteers (Linehan et al., 1983). The LRFL factors have been replicated in college student samples (Osman, Gregg, Osman & Jones, 1992; Osman, Gifford, Jones, Lickiss, Osman & Wenzel, 1993). Confirmatory factor analyses found only moderate support for the six-factor solution in psychiatric patients, however (Osman, Kopper, Linehan, Barrios, Gutierrez, & Bagge, 1999).

Reliability.

The LRFL has high internal reliability with Cronbach alpha coefficients ranging from .72 to .92 for each subscale and .89 for the LRFL total scale (Linehan et al., 1983; Osman, Gifford, et al., 1993). The test-retest reliability over a three week period is moderately high with reliability coefficients ranging from .75 to .85 for the six subscales (Osman, Jones & Osman, 1991).

Concurrent validity.

Linehan and her associates (1983) found that four of the subscales – Survival and Coping, Responsibility to Family, Child-Related Concerns and Moral Objections – were negatively related to measures of suicide ideation (rs = -.13 to -.53) and suicide probability (rs = -.28 to -.67). Similar findings were reported in other studies (Bonner & Rich, 1991; Cole, 1989; Osman et al., 1993; Range & Antonelli, 1990). The Survival and Coping subscale was found to be negatively correlated with the Beck Depression Inventory (r = -.68), the Beck Hopelessness Scale (r = − .71) and the Suicide Intent Scale (r = -.42) in a sample of hospitalized parasuicidal patients (Strosahl, Chiles, & Linehan, 1992). In this study, Survival and Coping was the single most important predictor of suicide intent. The LRFL was also moderately and negatively correlated with the Scale for Suicide Ideation (-.64) and the Beck Hopelessness Scale (-.63) in a sample of college students (Dean, Range, & Goggin, 1996). In samples of acute and long-term psychiatric inpatients, however, the LRFL has almost negligible (r = -.19) to low (r = − .41) correlations with the Content scales of the Minnesota Multiphasic Personality Inventory – 2 (Linehan et al., 1983; Osman et al., 1999) as well as negligible to low correlations with social desirability (Linehan et al., 1983). The LRFL has distinguished psychiatric inpatients from controls (Strosahl, Chiles, & Linehan, 1992), suicide attempters from psychiatric controls (Mann et al., 1999; Osman et al., 1999; Malone et al., 2000) and suicide attempters from suicide ideators (Linehan et al., 1983). In college students, some of the LRFL subscales differentiated suicidal from nonsuicidal individuals (Connell and Meyer, 1991; Osman et al., 1993).

Sensitivity to change.

The LRFL was associated with decreases in depression, hopelessness and suicide ideation for female patients treated for borderline personality disorder (Linehan, Armstrong, Suarez, Allman & Heard, 1991).

Summary and evaluation.

The LRFL has high internal reliability and good test-retest reliability. There concurrent validity of this measure has also been established. This measure may be a useful tool for the measurement of changes in beliefs about the reasons for living for interventions that focus on reducing suicide behaviors.

Reproduced from Brown GK. A review of suicide assessment measures for intervention research with adults and older adults. National Institute of Mental Health. Available at: http://www.nimh.nih.gov/ suicideresearch/adultsuicide.pdf, p. 27.

Risk-Rescue Rating

Description.
The Risk-Rescue Rating (Weisman & Worden, 1972, 1974) is a 10-item interviewer-administered measure that is designed to assess the lethality and intent of a suicide attempt. Five of the items measure the risk of suicide and include the type of method of self-injury, the level of consciousness, the extent of lesions or toxicity, the expected degree of recovery from the attempt and the degree of required medical treatment. The other five items indicate the likelihood of intervention as defined by observable circumstances and available resources present at the time of the attempt. Each of the items has specific values, ranging from 0 to 3. The items are summed to yield a Risk Rating and a Rescue Rating. The Risk Rating ranges from 5 ("low risk") to 15 ("high risk") and the Rescue Rating ranges from 5 ("least rescuable") to 15 ("most rescuable"). Finally, a Risk-Rescue Rating is calculated [(Risk Rating/(Risk Rating + Rescue Rating)) x 100] to measure the overall seriousness of the attempt. The measure takes approximately 5 minutes to complete.

Samples studied.
The Risk Rescue Rating has been administered to suicide attempters in hospital settings (Potter, Kresnow, Powell, O'Carroll, Lee, Frankowski, Swann, Bayer, Bautista & Briscoe, 1998; Weisman & Worden, 1972. In the initial sample, 66% were female, 100% were White, 8% were 10 to 19 years old, 53% were 20 to 39 years old, 30% were 40 to 59 years old and 9% were 60 years or older (Weisman & Worden, 1972).

Reliability.
An adequate interrater reliability, or physician agreement, has been reported for the Risk Rating (kappa = .67) and 12.9% of the physicians disagreed on the risk categories (Potter et al., 1998). The interrater reliability of the Rescue Rating was somewhat lower (kappa = .59) and 22% of the physicians disagreed on the Rescue Rating (Potter et al., 1998).

Concurrent validity.
The Risk-Rescue Rating was moderately correlated (r = .60) with the BeckÃƒÂÂ¿Â½s Lethality Scale. Although a moderate degree of association (r = .56) was found between the Risk Rating and the level of medical treatment, a weak association (r = .07) was reported between the Rescue Rating and level of medical treatment (Weisman & Worden, 1972). A high degree of intrarater reliability on the method of injury was found between the Risk Rescue Rating and the Self-Inflicted Injury Severity Form (kappa = .88; Potter et al., 1998). Based on a review of medical records, the Risk-Rescue Rating discriminated between those who survived and did not survive a suicide attempt. This measure, however, failed to distinguish between multiple and nonmultiple suicide attempters (Weisman & Worden, 1972). In another study, high scores on the Risk-Rescue rating were positively associated with high scores on the Suicide Intent Scale (r = .38; Goldney, 1981).

Predictive validity.
The Risk Rescue Rating was administered to a sample of patients who were hospitalized following a suicide attempt (Tejedor, Diaz, Castillon, Pericay, 1999). This study failed to differentiate among patients who reattempted suicide, completed suicide or did not reattempt suicide.

Summary and evaluation.
The interrater reliability of the Risk Rescue Rating has been established and there is good concurrent validity of the measure with other ratings of self-injury.

Beck Hopelessness Scale

APA notes that this is one of the only scales that demonstrates predictive validity...however that value is 1%, and false positives are high.

Description.
The Beck Hopelessness Scale (BHS; Beck & Steer, 1988) is a self-report instrument that consists of 20 true-false statements designed to assess the extent of positive and negative beliefs about the future during the past week. Each of the 20 statements is scored 0 or 1. A total score is calculated by summing the pessimistic responses for each of the 20 items. The total BHS score ranges from 0 to 20. The BHS takes less than 5 minutes to complete.

Samples studied.
The BHS has been standardized using psychiatric inpatients and outpatients (Beck et al., 1974; Beck & Steer, 1988). The primary sample included patients who reported suicide ideation or who had attempted suicide. For the suicide ideators, 54% were female; 62% were White, and 38% were African-American; the mean age was 34 years (SD = 2.5). For the suicide attempters, 58% were female; 51% were White and 48% were African- American; the mean age was 30 years (SD = 10.7). Other samples included patients with alcohol dependence, heroin addiction, single-episode major depression, recurrent major depression, and dysthymic disorder (Beck & Steer, 1988). The BHS has been used in numerous studies involving suicide ideation or behavior.

Summary and evaluation.
The interrater reliability of the Risk Rescue Rating has been established and there is good concurrent validity of the measure with other ratings of self-injury.

Dimensionality.
A principal components analysis of the BHS for suicide attempters revealed three components: (1) feelings about the future, (2) loss of motivation, and (3) future expectations (Beck et al., 1974). In a s ubsequent study, Steer, Beck, & Brown (1997) found that the BHS was composed of two factors: Pessimism About the Future (4 items) and Resignation (3 items). This factor structure was maintained for outpatients diagnosed with either primary mood or primary anxiety disorders.

Reliability.
Beck and Steer (1988) reported high internal reliability across diverse clinical and nonclinical populations with Kuder-Richardson reliabilities ranging from .87 to .93. The BHS has adequate one-week test-retest reliability in a psychiatric outpatient sample (r = .69; Beck & Steer, 1988) and high three-week test-retest reliability in a college student sample (r = .85; Holden & Fekken, 1988).

Concurrent validity.
The BHS has moderate to high correlations (rs = .62 to .74) with clinical ratings of hopelessness for patients in primary care practices and for patients who attempted suicide in hospital settings (Beck et al., 1974). Although the BHS was significantly higher in suicide attempters than nonattempters in several studies (Mann, Waternaux, Haas, & Malone, 1999; Rifai, George, Stack, Mann, & Reynolds, 1994), other research has indicated that only multiple attempters had higher scores on the BHS than single attempters or suicide ideators (Rudd, Joiner, & Rajab, 1996). Kaslow et al. (2000) reported that female, African-American suicide attempters scored higher on the BHS than general medical care patients in an emergency room setting. Correlation coefficients between the BHS and the Beck Depression Inventory Pessimism item range from .42 to .64 in clinical samples (Beck & Steer, 1988). Other studies have found significant associations between the BHS and suicide intent as measured by the Suicide Intent Scale (Beck, Steer, & McElroy, 1982; Dyer & Kreitman, 1984; Kovacs, Beck, & Weissman, 1975; Weissman, Beck, & Kovacs, 1979). The BHS has been found to be moderately correlated (r = .46) with suicide ideation (SSI) in a sample of psychiatric outpatients (Beck, Steer, Beck, & Newman, 1993).

Predictive validity.

The BHS has been established as an important risk factor for suicide in prospective studies for psychiatric patients in hospital and outpatient settings (Beck et al., 1990; Beck et al., 1989; Beck et al., 1985; Brown, Beck, Steer & Grisham, 2000; Drake & Cotton, 1986; Fawcett et al., 1987; Fawcett et al., 1990; Nordstrom et al., 1995). For example, patients who scored a 9 or above on the BHS were approximately 11 times more likely than patients who scored 8 or below to commit suicide (Beck et al., 1989). In fact, recent research has indicated that patients whose hopelessness does not significantly change with psychiatric treatment may be more likely to commit suicide (Dahlsgaard, Beck, & Brown, 1998). Previous research has also indicated that stable levels of hopelessness in those patients with remitted depression was more predictive of suicide attempts than high levels of hopelessness at any one point (Young, Fogg, Scheftner, Fawcett, Akiskal, & Maser, 1996). In a study of hospitalized suicide attempters, Petrie, Chamberlain, and Clarke (1988) found that the BHS provided a unique estimate of subsequent suicide attempts.

Sensitivity to change.

Reductions in BHS scores attributable to psychiatric interventions have been reported. For example, Rush, Beck, Kovacs, Weissenberger, and Hollon (1982) found that depressed patients who received cognitive therapy aimed at reducing hopelessness yielded greater decreases in BHS scores than patients who received imipraimine and not cognitive therapy. Changes in BHS scores were also associated with changes in depressive symptomatology. The BHS has been associated with clinical symptom change in many randomized controlled trials for high risk or suicidal patients (e.g., Linehan, Armstrong, Suarez, Allman & Heard, 1991; McLeavey, Daly, Ludgate, & Murray, 1994; Patsiokas & Clum, 1985; Rudd, Rajab, Orman, Stulman, Joiner, & Dixon, 1996; Salkovskis, Atha, & Storer, 1990; Szanto, Reynolds, Conwell, Begley, & Houck, 1998; Van der Sande, Van Rooifen, Buskens, Allart, Hawton, Van der Graff & Van Engeland, 1997; Verkes, Van der Mast, Hengeveld, Tuyl, Zwinderman,, & Van Kempen, 1998).

Summary and evaluation.

The BHS is one of the most widely used measures of hopelessness. The scale has excellent internal consistency and test-retest reliability. The concurrent validity is well established across a wide variety of samples and frequently has been used in treatment outcome studies. There have been several studies that have supported the predictive validity of the BHS for suicide attempts and completed suicide.

Reproduced from Brown GK. A review of suicide assessment measures for intervention research with adults and older adults. National Institute of Mental Health. Available at: http://www.nimh.nih.gov/ suicideresearch/adultsuicide.pdf, p. 25.

Beck Depression Inventory (Suicide Item)

Suicide is related to the overall Beck depression score, as well as the specific inventory item, reviewed here.

Description
Both the Beck Depression Inventory (BDI; Beck & Steer, 1988) and the Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996) are 21-item self-report scales of depressive symptoms. Both scales contain an identical suicide item that consists of 4 ratings: 1 ("I don't have any thoughts of killing myself"), 2 ("I have thoughts of killing myself, but I would not carry them out"), 3 ("I would like to kill myself") and 4 ("I would kill myself if I had the chance").

Concurrent validity.
The BDI suicide item has been found to be moderately correlated (rs = .56 to .58) with the Beck Scale for Suicide Ideation for both inpatient and outpatient psychiatric samples (Beck & Steer, 1991).

Predictive validity.
The predictive validity of this item was investigated using data from a prospective study of risk factors for suicide in psychiatric outpatients (Brown et al., 2000). These (unpublished) results indicated that patients who scored a 2 or higher on the BDI suicide item were 6.9 times (95% CI: 3.7-12.6) more likely to commit suicide than patients who scored less than 2.

Summary and evaluation.
The BDI suicide item has good concurrent and predictive validity in some studies. The item measures suicide ideation that is consistent with the O'Carroll et al. (1996) nomenclature. The item may be beneficial for measuring fluctuations in suicide ideation throughout the course of treatment. This item also may be a useful screening tool indicating the need for a more thorough assessment of suicide ideation throughout the course of treatment.

Reproduced from Brown GK. A review of suicide assessment measures for intervention research with adults and older adults. National Institute of Mental Health. Available at: http://www.nimh.nih.gov/suicideresearch/adultsuicide.pdf, p. 25.

Hamilton Rating Scale for Depression (Suicide Item)

Similar to the suicide item on the Beck depression scale, this one item on the HAM-D is associated with increased suicide risk.

Description.
The Hamilton Rating Scale for Depression (HRSD; Hamilton, 1960) is a widely used interviewer-administered measure of the depressive symptom severity. The HRSD suicide item consists of 4 ratings of suicidal behavior: 0 ("absent"), 1 ("feels life is not worth living or any thoughts of possible death to self"), 2 ("wishes he were dead"), 3 ("suicidal ideas or gestures"), or 4 ("attempts at suicide").

Reliability.
Reynolds (1991b) reported a high level of interrater reliability (r = .92) for the HRSD suicide item. The test-retest reliability for this item over a 3-day period is adequate (r = .64; Williams, 1988).

Concurrent validity.
The HRSD suicide item was found to be highly correlated with the Adult Suicide Ideation Questionnaire (Reynolds, 1991b), the Scale for Suicide Ideation (Beck et al., 1997) and the suicide item of the Beck Depression Inventory (Beck & Steer, 1988). In a sample of elderly psychiatric patients (60 years or older), the seriousness of intent of previous attempts, poor social support and the severity of depression (total HRSD score minus the suicide item) were significant predictors of suicide ideation (HRSD suicide item >0; Alexopolous, Bruce, Hull, Sirey, & Kakuma, 1999).

Predictive validity.
The predictive validity of this item was investigated in a prospective study of risk factors for suicide in psychiatric outpatients (Brown et al., 2000). These (unpublished) results indicated that patients who scored a 2 or higher on the HRSD suicide item were 4.9 times (95% CI: 2.7 – 9.0) more likely to commit suicide than patients who scored less than 2.

Summary and evaluation.
Although there is some evidence that the HRSD suicide item is associated with other measures of suicide ideation and completed suicide, this item does not measure suicide ideation or suicide attempts as proposed by O'Carroll et al. (1996).

Reproduced from Brown GK. A review of suicide assessment measures for intervention research with adults and older adults. National Institute of Mental Health. Available at: http://www.nimh.nih.gov/suicideresearch/ adultsuicide.pdf, p. 24.

The SAD PERSONAS Scale

APA (2003) does not review or endorse the SAD PERSONAS Scale; however it is suggested in the Ministry of Health "Working with a Client who is Suicidal," and is an easily-learned and commonly-used risk assessment tool. Direct care staff may find this scale a useful tool to flag clients for a more in-depth psychiatric consultation or assessment.

A number of factors that have predictive value in terms of suicide intent have been identified (Hockberger & Rothstein, 1988; Patterson, Dohn, Bird & Patterson, 1983). These factors are incorporated in to the SAD PERSONAS scale, which is essentially a semi structured interview for detecting risk of suicidal intent. Many of the clinical scales available for assessing the suicide potential of patients are too complex or cumbersome for practical use. However, the SAD PERSONAS Scale provides a simple and practical guide to suicidal assessment. Using the acronym as a device to assist memory ensures that during the semi structured interview each risk factor is considered and helps identify specific intervention strategies. The scale can be easily implemented during a crisis situation or a client intake process. The device is readily accepted in a teaching context and is easy to learn, which can be taught to medical students in one lecture. The assessment typically takes from 20 to 25 minutes to complete depending on the client's clinical presentation.

The scale is intended to be scored with one point for each factor deemed present, with a range from 0 (very little risk) to 11(very high risk). However, extreme caution must be used with this scoring method as factors may pair up in a critical fashion that leads to a low score. For example, a 15 year old girl who has attempted to hang herself because internal stimuli told her to would only score 3 points on the scale, yet due to the aggregation of critical factors additional clinical judgment is needed and would override the scoring.

The SAD PERSONAS Scale for Assessing the Risk of Suicide

Sex
Age
Depression

Previous attempt
Ethanol abuse
Rational thinking loss
Social supports lacking
Organized plan
No spouse
Access to means
Sickness

The reliability and validity evaluation of suicide assessment scales using traditional methods is extremely difficult. To establish predictive validity for such scales, persons assessed at high risk would need to be released, and only after their deaths could the validity of the scale be determined. This validation is obviously not acceptable for moral and ethical reasons.

A validation study using one high risk client and one low risk client was conducted to lend support to this instrument. In this study 3 psychiatrists individually viewed two video-taped assessments interviews and rated each client's immediate suicide risk. These videotaped interviews were then were observed by a group of third year medical students who had learned the SAD PERSONS Scale [17] (n=36) and third year medical students who didn't receive training. Those who had received training demonstrated significantly greater ability to accurately evaluate suicide risk (using the psychiatrists ratings as the "gold standard") than those with no training.

A major weakness of the SAD PERSONS scale is its lack of supporting reliability and validity measures. As Juhnke (1994) notes, little research has been done to determine concurrent validity with instruments such as the Adult Suicidal Ideation Questionnaire (ASIQ) (Reynolds, 1991), or Koss-Butcher Critical Items for Depressed Suicidal Ideation on the Minnesota Multiphasic Personality Inventory (MMPI) or MMPII (Hathaway & McKinley, 1998). It is recommended that users of the SAD PERSONAS scale should also administer a specialty instrument (such as those previously mentioned) in combination with this scale to acquire the most accurate risk assessment (Juhnke, 1994).

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17   "A" access to means was not included in all studies as it was added as a risk factor at a later date.

.Hockberger and Rothstein (1988) adapted the SAD PERSONS Scale to include risk factors missing from the original assessment tool. The new criteria included: feelings of hopelessness, a history of psychiatric care, drug addiction, a "serious" attempt, and affirmative or ambivalent answers when asked about future intent. Through a comprehensive review of literature that identified the characteristics of patients at risk for suicide, there was no validation that chronic illness was a significant risk factor and was deleted from the original mnemonic.

The MSPS for Assessing the Risk of Suicide

Sex
Age
Depression or hopelessness

Previous attempt or psychiatric care
Excessive alcohol or drug use Rational thinking loss
Separated, divorced, or widowed
Organized or serious attempt
No social supports
Stated future intent

This modified SAD PERSONS Scale (MSPS) was tested in an emergency department to determine whether non-psychiatrists could accurately assess the risk of suicide.

To remedy the potential misinterpretation of a low score (i.e. low score may not mean low risk depending on clinical factors), Hockberger & Rothstein (1988) determined if any individual parameters were statistically correlated with admission to hospital and then weighted these scores. Depression or hopelessness, rational thinking loss, organized or serious attempt, and stated future intent were all given a score of 2 if present. The authors found that a total score ≥ 6 when using the weighted scores, would have identified all patients identified by the Psychiatrists to be true suicide risks.

Hockberger & Rothstein's (1988) study showed that non-psychiatrist can be quite accurate with two recommendations explaining discrepancies found. First, suicide assessments should be done on patients that are uninfluenced by drugs or alcohol as patients tend to exhibit greater evidence of depression and ambivalence regarding future intent if intoxicated. Secondly, information given by a patient should be verified by a social support before a final disposition is rendered; "this should be possible in all instances where discharge and referral is being considered, since no patient should ever be released unattended following a suicide attempt" (Hockberger & Rothstein, 1988 pg. 105).

Appendix C: Risk & Protective Factors

Risk Factors for Suicide[18]

Demographic or Social Factors:

- Older adult
- Male gender
- Poverty
- Aboriginal, especially youth aged 12-24
- *White race* (APA, 2003)
- *Gay, lesbian or bisexual orientation* (APA, 2003)
- Single status (widow, divorced, separated, single)
- Social isolation, including new or worsening estrangement, and rural location
- Economic or occupational stress, loss, or humiliation
- New incarceration
- History of gambling
- Easy access to firearms

Clinical Factors:

- Past and current major psychiatric illness, including bipolar, schizophrenia and major depressive disorder (especially depression)
- Personality disorder (borderline, narcissistic, antisocial)
- Impulsive or violent traits by history
- Current medical illness
- Family history of suicide
- Previous suicide attempts or other self-injurious or impulsive acts
- Current anger, agitation, or constricted preoccupation
- Current abuse of alcohol or drugs (including solvents)
- Easy access to lethal toxins (including prescribed medication)
- Formulated plan, preparations for death or suicide note
- Low ambivalence about dying versus living
- *Childhood trauma (sexual abuse, physical abuse)* (APA, 2003)
- *Suicidal Ideas (current or previous)*
- *Suicidal intent* (APA, 2003)
- *Hopelessness* (APA, 2003)
- *Severe or unremitting anxiety* (APA, 2003)
- *Panic Attacks* (APA, 2003)
- *Impulsiveness* (APA, 2003)
- *Aggression* (APA, 2003)

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18   Source: Murray & Hauenstein (2008), in RNAO, 2008 *Adaptations by RNAO in italics

Precipitants:

- Recent stressors (especially losses of emotional, social, physical, or financial security)

Protective Factors:

- Intact social supports
- Active religious affiliation or faith (may be a risk factor if shame/guilt about behaviour is involved)
- Marriage and presence of dependent children
- Ongoing supportive relationship with a caregiver
- *Positive therapeutic relationship* (APA, 2003)
- Absence of depression or substance abuse
- Access to medical and mental health resources
- Impulse control
- Proven problem-solving and coping skills
- *Pregnancy* (APA, 2003)
- *Life satisfaction* (APA, 2003)
- *Relief about not completing suicide* (NZGG, 2003)
- *Sense of 'unfinished business'* (NZGG, 2003)
- *Good self-esteem, self-confidence* (NZGG, 2003)
- *Awareness of significant others about their suicidal thoughts* (NZGG, 2003)
- *Sense of belonging* (Sargent, Williams, Hagerty, Lynch-Sauer & Hoyle., 2002)

Presence of risk and protective factors should be noted in the patient's chart as part of the risk assessment.
Note: The assessment of risk should always take place within the context of a comprehensive exam.

Appendix D: Interview Questions for the Assessment of Suicidal Ideation and Plan (Adults)

Here are some suggested questions (APA, 2003, NZGG, 2003, in RNAO, 2008) that a mental health clinician might use to ask about a person's suicidal thoughts, plans and behaviours. Always be attentive to and assess both verbal and non-verbal communication, and 'cues' from the person. Not all questions may need to be asked. Although this list of questions is presented in a linear fashion, they are intended to be utilized within an assessment, as a process within a conversation or discussion that flows in the context of the nurse-patient relationship.

A general question about a person's thoughts and feelings about living is frequently a recommended start to this discussion:

- *Sometimes people feel that life is not worth living. Can you tell me how you feel about your own life?*
- *What are some of the aspects of your life that make it worth living?*
- *What are some of the aspects of your life that may make you feel or think that your life is not worth living?*
- *Do you find yourself wishing for a permanent escape from life?*
- *How would that happen for you? What might you do to achieve that?*

It is important to continue with additional questions that are actually about self-harm, suicide and death. Even if the response to the previous questions tend to affirm the person's value for his/her own life, those responses may not be consistent or congruent with other assessment information you have for this person, so assess for suicidal ideation and behaviour more specifically:

- *Do you think about your own death or about dying?*
- *Have you ever thought of harming yourself or trying to take your own life?*
- *Do you think or feel this way presently?*

If the person expresses thoughts of self-harm, and/or suicide, or even if he/she seems ambivalent (e.g. says "I don't know," or "I don't remember" or "maybe, I'm not sure"), continue with these questions as ambivalence between wanting to live and die is very common in suicidal ideation and behaviour and does not necessarily equate to no thoughts or behaviours. Be attentive to the person's cues, as not all questions may need to be asked.

- *When did you begin to experience these thoughts and feelings?*
- *What happened before you had them?*
- *Were there events in your life that preceded this such as a sudden loss or feelings of depression?*
- *How frequently have you had these thoughts and feelings?*
- *Do these thoughts intrude into your thinking and activities?*
- *How strong are they?*
- *Can you describe them?*
- *Can you stop yourself from having them by distracting yourself with an activity or other more positive thoughts?*
- *Have you ever acted upon these thoughts?*
- *If not, what stopped you from acting on them?*

- *Do you think you might act on these thoughts of self-harm or suicide in the future?*

- *What might help you from acting on them?*

- *If you did take your own life, what do you imagine would happen after you die to those people who are important to you?*

- *Do you have a plan to harm yourself or take your own life? If so – describe your plan*

- *Do you have those methods available to you to take your life, such as over the counter pills, prescription pills, knives or proximity to a balcony, bridge or subway?*

- *Have you prepared for your death by writing a note, making a will, practicing the plan, putting your affairs such as your finances in order, or ensuring privacy such that you would unlikely be discovered?*

- *Have you told anyone that you are thinking about taking your own life or are planning to do this?*

If a person has attempted suicide or engaged in self-harm behaviour(s), ask additional questions to assess circumstances surrounding the event(s):

- *What happened in your previous attempts to self-harm or take your life? What led up to it? Were you using alcohol or other substances? What method did you use? Sometimes people have many reasons for harming themselves in addition to wanting to die. What might have been some of your reasons for self-harm or suicide? How severe were your injuries?*

- *What were your thoughts just before you harmed yourself?*

- *What did you anticipate would be the outcome of your self-harm or suicide attempt? Did you think you would die?*

- *Were other people present when you did this?*

- *How did you get help afterward? Did you look for it by yourself or did someone else help you?*

- *Did you anticipate that you might be discovered? If not, were you found accidentally?*

- *How did you feel after your attempt? Did you feel relief or regret at being alive?*

- *Did you receive treatment after your attempt? Did you get medical and/or psychiatric, emergency help?*

- *Were you assessed in an emergency department? Were you cared for in an inpatient/outpatient department?*

- *How do you think and feel about your life now? Have things changed for you? Do you see your life in the same way or differently?*

- *Are there other times in the past when you've tried to harm (or kill) yourself?*

For individuals with repeated suicidal thoughts or attempts:

- *How many times have you tried to harm yourself, or tried to take your own life?*

- *When was the most recent time?*

- *What were your thoughts and feelings at the time that you were most serious about suicide?*

Assess reasons for living or protective factors for this person:

- *How do you feel about your own future?*

- *What would help you to feel or think more positively, optimistically or hopefully about your future?*

- *What would make it more (or less) likely that you would try to take your own life?*

- *What happens in your life to make you wish to die or escape from life?*

- *What happens in your life to help you to want to live?*

- *If you began to have thoughts of harming or killing yourself again, what would you do to prevent them?*

For individuals with psychosis, ask specifically about hallucinations and delusions:

- *Can you describe the voices you hear?*

- *Can you tell if they are male or female?*

- *Can you stop the voices?*

- *What do the voices say to you? Do they say anything positive, or do they say negative or hurtful things to you? Do they threaten you or anyone else?*

- *How do you cope with the voices? Do you do anything about them?*

- *Have there been times when the voices told you to hurt or kill yourself? How frequently has this happened? What happened?*

Key Questions for the Assessment of Suicidal Ideation and Plan (Children and Youth)

The AACAP give a list of key questions to ask children and adolescents who may be considering suicide. Questions include:

- Did you ever feel so upset that you wished you were not alive or wanted to die?

- Did you ever do something that you knew was so dangerous that you could get hurt or killed doing it?

- Did you ever hurt yourself or try to hurt yourself?

- Did you ever try to kill yourself?

- Did you ever think about or try to commit suicide?

Appendix E:

Mental Status Assessment

APPEARANCE	
Age, Sex, Race	Grooming
Body Build	Manner
Position	Attentiveness to examiner
Posture	Distinguishing features
Eye contact	Prominent physical irregularity
Dress	Emotional facial expression
Alertness	

MOTOR BEHAVIOUR	
Retardation	Gait
Agitation	Catatonia
Unusual Movements	

SPEECH	
Rate	Amount
Rhythm	Articulation
Volume	Spontaneity

MOOD/AFFECT	
Stability	Intensity
Range	Affect
Appropriateness	Mood

THOUGHT CONTENT	
Suicidal or homicidal ideations	Paranoid ideation
Depressive cognition	Magical ideation
Obsessions	Delusions
Ruminations	Overvalued ideas
Phobias	Thought broadcasting, insertion or withdrawal
Ideas of reference	Other major themes discussed by patient/client

THOUGHT PROCESS	
Perseveration	Neologism
Logic	Blocking
Stream	Attention
Coherence	

PERCEPTION	
Hallucinations	Depersonalization
Illusions	Déjà vu, Jamais Vu

COGNITION	
Orientation	Abstract Thought
Memory	Capacity to read and write
Intellect	Level of consciousness

INSIGHT/JUDGEMENT	
Ability to make a decision wisely considering the pros and cons for a course of action	Awareness of illness

Appendix F:

Risk Factors & Checklist: Adolescents

HIGH-RISK FACTORS FOR SUICIDE IN ADOLESCENTS			
Immediate risk predicted by agitation and major depressive disorder			
Males HIgher Risk	Overall	Previous suicide attempts Age 16 or older Associated mood disorder Associated substance abuse	Females — Mood disorders Previous suicide attempts

CHECKLIST FOR ASSESSING CHILD OR ADOLESCENT SUICIDE ATTEMPTERS IN AN EMERGENCY ROOM OR CRISIS CENTER	
Suicidal history	Still thinking about suicide
	Made a prior suicide attempt
Demographics	Male
	Lives alone
Mental state	Depressed, manic, hypomanic, severely anxious, or mixture of these states
	Substance abuse alone or in association with a mood disorder
	Irritable, agitated, threatening violence to others, delusional, or hallucinating

Do not discharge such patients without psychiatric evaluation.

Look for:

SIGNS OF CLINICAL DEPRESSION	SIGNS OF MANIA OR HYPOMANIA
Depressed mood most of the time	Depressed mood most of the time
Loss of interest or pleasure in usual activities	Elated, expansive, or irritable mood
Weight loss or gain	Inflated self-esteem, grandiosity
Can't sleep or sleeps too much	Decreased need for sleep
Restless or slowed-down	More talkative than usual, pressured speech
Fatigue, loss of energy	Racing thoughts
Feels worthless or guilty	Abrupt topic changes when talking
Low self-esteem, disappointed with self	Distractible
Feels hopeless about future	Excessive participation in multiple activities
Can't concentrate, indecisive	Agitated or restless
Recurring thoughts of death	Hypersexual, spends foolishly, uninhibited remarks
Irritable, upset by little things	

Appendix G

Evaluation Literature Review

All of the studies identified were educational programs, or included an educational component, that aimed to educate health care staff on the assessment, management, and treatment of suicide risk.

The suicide risk management programs identified have for the most part, employed outcome measures focused on knowledge, attitudes, and skills of health care staff in the area of suicide risk. Evaluation of changes in organizational practice or impact on service users is less prevalent. The primary objective of suicide risk management programs is to prevent suicide, yet using suicide deaths as an outcome measure has been identified as nearly impossible due to the relative infrequency of the event (Rodger et al., 2007). Additionally, the lack of research in the area speaks to the difficulty in defining indicators to accurately evaluate suicide risk management program outcomes.

Perhaps most relevant to the BCMHAS initiative is the study by McAuliffe and Perry (2007) which implemented a best practice initiative to improve patient safety in the area of suicide prevention. The initiative included the development of a suicide risk assessment tool, staff training, and the development of clinical protocols.

To our knowledge, McAuliffe and Perry (2007) are the only researchers to have evaluated quantitative indicators outside the realm of impact on health professionals.

These included:

- % of emergency room visits and hospital admissions
- Average length of stay for patients admitted to hospital due to suicide or self-harm
- % patients assessed for suicide risk
- % patients with appropriate documentation of assessment and safety plan

Literature Review: Potential Outcome Indicators

From the overview of the literature, a number of outcome indicators were selected for more detailed review: Staff knowledge, attitudes, skills, confidence/self-efficacy regarding suicide risk management, and the impact of the initiative on clinical care.

Knowledge

Five of the eleven studies identified above assessed the impact of the education or training program on changes in knowledge. These programs aimed to manage suicide risk by improving suicide-related knowledge in staff who care for patients at increased risk for suicide, and their families.

Chan, Chien, and Tso (2008, 2009) reported on a study which aimed to evaluate a suicide prevention and management education program delivered to general nurses in two general hospitals in Hong Kong. The program consisted of 18 hours of education and used reflective learning principles and learning methods including lectures, role-play, reflective discussions, cases studies, and self-directed study. Chan et al. (2008) reported on the qualitative data in which purposive samples were selected to participate in focus groups to evaluate outcome measures.

In focus groups conducted immediately following the training program, participants reported that the program increased their knowledge on suicidal risk factors, nurses' responsibilities in suicide prevention, and awareness of patients with suicidal intent. Additionally, nurses reported increased understanding

about the psychological needs of depressed patients and their families, and families' needs for psychological support, practical help, information and communication. Focus groups were also conducted 6 months following the program to determine the program's effect on nurses' knowledge in caring for suicidal patients and their families. Participants felt the program increased their knowledge about caring for suicidal patients which led to an increase in confidence. Additionally, Chan et al. (2009) reported on a self-developed scale – the test on knowledge of management of suicide, to ascertain changes in knowledge. For this indicator, participants randomly assigned to study and control groups were assessed four times: i) before training (pretest), ii) immediately after training (posttest 1), iii) 3 months post-training (posttest 2), and iv) 6 months post-training (posttest 3). Both study and control groups demonstrated improved knowledge scores immediately following training compared to pre-test, but these scores decreased at later assessments. Thus, there was no treatment effect for this measure over the full follow-up period.

Another study included an examination of the effectiveness of training for enhancing practitioners' knowledge of suicide risks and prevention. Simpson and colleagues (2003) evaluated an education workshop that aimed to address the assessment and management of suicidality among individuals with traumatic brain injury (TBI) in Australia. The one day workshop consisted of 5.25 hours of training for professional and paraprofessional staff from a range of organizations including acute and postacute rehabilitation and long-term community care. Participants who completed the training were assessed on an objective knowledge test at three points in time: i) before training, ii) immediately following training, and iii) 6 months post-training, while a control group who did not participate in training was assessed at two points in time: i) prior to the workshop, and ii) 6 months follow up. The knowledge scale consisted of 21 dichotomous (true/false) questions addressing TBI, demographics, and clinical areas, and included a global score.

For the intervention group, there were significant increases on TBI, demographic, and global knowledge scores from pre-workshop to post-workshop, but no differences on the clinical subscale. In comparing the intervention group with the control group, there were no significant differences at pre-test but significant differences were observed for TBI, demographic, and global knowledge scores between post-workshop scores and control group scores at pre-test. At 6 months follow-up, there were significant decreases in knowledge for the workshop group on all three subscales (TBI, demographic, and clinical scales) but not on the global score. However, the workshop group scores were still significantly better than control group scores at follow-up.

In addition, a self-assessment knowledge and skills inventory was used. The scale was scored on a five-point scale and was comprised of nine items assessing knowledge. Participants demonstrated increased average self-rating scores from pre-workshop to post-workshop in general knowledge of suicide and TBI, and also increased on the global score. No significant decreases in self-rated knowledge scores from post-workshop to follow-up were reported, nor was there significant improvement of the control group from pre-test to follow-up.

Shim and Compton (2009) completed an evaluation of a training program for emergency department personnel aimed at evaluating and treating potentially suicidal patients (including those at increased risk thereof), in the United States. The program consisted of 2 hours of didactic lectures and 1 hour of participant discussion including a description of the National Patient Safety Goals guidelines (The Basic Five-Step Evaluation – B-SAFE). To assess knowledge of the curriculum, participants completed a 16-item multiple choice scale before and immediately following the training session. A significant increase in knowledge scores was observed from pre-test to post-test.

McAuliffe and Perry (2007) report on a Best Practice Initiative in a two-site health centre to improve patient care in the area of suicide risk. The initiative included the development of strategies to implement into clinical practice in the areas of: involving patients and families in the project; comprehensive suicide risk assessment and rating scale; cost-effective staff training; and suicide assessment and risk management protocols (McAuliffe & Perry, 2007). The Best Practice Committee selected Applied

Suicide Intervention Skills Training (ASIST) as the program to deliver to staff. The program's impact on staff knowledge was assessed by a self-developed scale. The results demonstrated that the percentage of staff who report that they "know what steps to take after assessing for suicide risk" increased from 87% to 97%. However, only 48% report that they "strongly agree" that they know what to do following an assessment.

A small number of studies have utilized self-assessment and objective knowledge instruments as well as qualitative methods to ascertain professionals' knowledge of suicide risk. A review of the extant literature suggests that suicide prevention programs have been successful in increasing professionals' knowledge about caring for individuals at increased risk for suicide and in enhancing their knowledge about the needs of family members of suicidal individuals. However, the few studies that have included post-training follow-up evaluations suggest that there is considerable drift over time and that improvements in knowledge can be lost in the months following training, reflecting the importance of booster sessions and refresher training.

Attitudes

Attitudes, both toward suicidal patients and toward suicide risk management training programs, were assessed in 8 of the 11 reviewed studies. Four studies assessed participants' attitudes towards caring for suicidal patients and their families, three studies assessed attitudes towards training, and one study assessed both types of attitudes.

The National Centre for Suicide Research and Prevention of Mental-Ill Health (NASP) introduced an educational program designed to increase suicide preventive activities among psychiatric staff. The initiative consisted of a 200-hour post-graduate educational program, delivered over 2 years in 11 psychiatric clinics in Stockholm County, Sweden (Ramberg & Wasserman, 2004b). The NASP program, based on a "training-of-trainers" model, evaluated outcomes at 5 years following the end of the program. In the evaluation, 16 participants representing 10 of the 11 clinics completed semi-structured telephone interviews in order to determine attitudes towards the course. All of the participants interviewed had positive views of the course, with the exception of one participant who expressed a wholly negative view. Participants described the course as extensive and comprehensive and reported that the program helped increase their understanding of suicidal patients and suicide prevention and helped them implement suicide preventive programs in their clinics and in their individual work with suicidal patients.

Chan et al. (2008, 2009) used focus groups to ascertain changes in attitudes towards suicide and suicidal patients among participants. The assessment conducted immediately following training revealed that case sharing was viewed as helpful in shifting nurses' attitudes towards suicidal patients. The evaluation conducted at 6 months follow-up demonstrated that participants felt the program helped to disprove several myths about suicide which led to changes in attitudes related to suicidal patients. Additionally, Chan et al. (2009) used the Suicide Opinion Questionnaire (SOQ) for both the intervention and control groups to assess attitudes towards suicidal patients. Again, both study and control groups demonstrated improved scores on the SOQ immediately following training, or at posttest 1 for the control group, compared to pretest, but these scores decreased at later assessments. Thus, there was no treatment effect for this measure.

Three studies evaluated the Skills Training On Risk Management (STORM) program in the UK. Gask and colleagues (2006) aimed to evaluate the STORM training program in three mental health trusts in North-West England. The STORM training program was delivered by mental health nurses to front-line mental health staff in three clinical services over 6 months. A pretest-posttest design was used with participants acting as their own controls. Participants were assessed at three points in time: i) before training, ii) after training, and iii) 4 to 6 months following training. To assess attitudes towards suicide prevention, the Attitudes to Suicide Prevention Scale (ASP) was used. Changes in

attitudes were entirely positive, with 10 out of 14 items on the ASP improving significantly from before training to immediately after training and seven items maintaining significant improvement at 4 months following training.

Semi-structured face-to-face interviews were also employed by Gask and colleagues (2006) to collect qualitative data on participant attitudes towards training in mental health trusts. The STORM training program was well received by participants, particularly the structured nature of the training and role-play and videotaped feedback. Nursing assistants had positive views about the training and reported increased confidence in talking with patients. Participants expressed disappointment in the lack of senior staff willingness to participate in skill demonstrations and senior staff attitudes were reported to be counterproductive.

The STORM training program was also delivered to program staff in one of three health care settings: primary care, accident and emergency departments, and mental health services in South Lancashire, UK (Appleby et al., 2000). This evaluation also employed the Attitudes to Suicide Prevention Scale, described above. The 14-item scale was used to assess participant attitudes towards suicide prevention both before and after completion of the training program. Overall, attitudes became less negative from pre-test to posttest; however, significant changes were only observed among accident and emergency staff who had the most negative attitudes at pretest.

Simpson and colleagues (2003) assessed participant attitudes towards suicide using a 12-item self-developed instrument scored on a four-point scale. The scale assessed three attitudinal areas: i) working with suicidal clients, ii) moral attitudes towards suicide, and iii) normality of suicide. However, the factor loadings were below the recommended minimum, so it was not feasible to use the attitude instrument as an indicator. Thus, no further analysis was completed.

Attitudes towards training were assessed within a training program in Birmingham, UK (Fenwick et al., 2004). The training program was designed to educate healthcare staff within a psychiatric teaching hospital on the assessment and detection of suicide risk. Participants attended either a full day workshop or half-day lecture and were assessed at three points in time: i) before training, ii) immediately following training, and iii) 2 months post-training. Attitudes towards training were assessed using a self-developed scale in which participants were provided the statement, "Attending a training course can improve my ability to deal with suicidal clients" (Fenwick et al., 2004, p. 118). Participants were then asked to rate their degree of agreement with the statement on a scale of one to ten, with one representing the lowest agreement and ten representing the highest agreement: No significant difference was observed over time or between groups, indicating a lack of change on attitudes towards training.

Lastly, Shim and Compton (2009) assessed attitudes towards suicide assessment and management training for emergency department personnel using four Likert-scaled items at posttest only. Over 84% of participants who responded to the attitudinal scale rated the training as: i) very or extremely helpful, and ii) very or extremely relevant; and over 86% of respondents reported being: i) very or extremely likely to use the information in their work, and ii) very or extremely likely to recommend the training to others.

Our review of the literature demonstrates that only a handful of published studies have reported on the extent to which suicide risk management training programs are successful in modifying healthcare provider's attitudes, both toward suicidal patients and toward suicide risk management training programs. These studies have generally used self-developed measures; a small number of studies have also employed standardized assessment instruments and qualitative methods including focus groups and semi-structured interviews to assess attitudes towards suicide prevention. The extent to which trainees view educational programs as useful is quite mixed. Similarly, results with respect to the extent to which training is effective in improving healthcare professionals' attitudes about individuals who are suicidal is equivocal at present.

Skills

Skills in caring for suicidal patients are also commonly evaluated by suicide risk management programs. Whereas "knowledge" is related to understanding and comprehension of curriculum, "skills" are conceptualized as the application of that knowledge. Eight studies evaluated participants' skills in suicide risk management.

Focus groups were used to assess participant outcomes in competence in caring for suicidal patients by Chan and colleagues (2008, 2009) following the suicide prevention and management education program for nurses in general hospitals. Participants reported that following a suicide education program they viewed themselves as more competent in assessing, communicating and helping people with suicidal intent and that the program changed their clinical practice. Chan and colleagues (2009) also reported on the assessment of participant skills using the nursing competency in suicidal prevention and management instrument at four points in time: i) before training (pretest), ii) immediately following training (posttest 1), iii) 3 months after training (posttest 2), and iv) 6 months after training (posttest 3). The study group demonstrated increased scores on the competency instrument from before training to immediately after training. Similarly, there were observed competency increases in the control group from pretest to posttest at time 1. For both groups, the increases observed from pretest to posttest at time 1 declined upon later assessments; thus, there was no treatment effect for this measure.

As discussed above, Simpson and colleagues (2003) developed a scale to assess skills in the management and assessment of suicidality among individuals with traumatic brain injury (TBI). The self-assessment inventory consisted of 14 knowledge and skill items scored on a five-point scale, of which five items assessed skills. Participants demonstrated increased average self-rating scores from pre-workshop to post-workshop in skills for assessment/management of suicide, both generally and specific to TBI. No significant decrease in self-rated skills from post-workshop to 6 months follow-up were reported, nor was there significant improvement of the control group from pre-test to 6 months follow-up. The results suggest that participants felt that the training increased their suicide assessment/management skills; however, the study is limited due to the fact that the participants' skills were not objectively evaluated and the ratings simply reflected self-evaluations.

McAuliffe and Perry (2007) used a self-developed scale to assess the impact of the Best Practice initiative on staff's skills. Results demonstrated a 13% increase in the number of clinicians who report assessing almost all of their clients for suicide risk.

The Suicide Intervention Response Inventory Form 2 (SIRI-2) was employed in four studies to assess an individual's ability to effectively intervene with suicidal patients. Fenwick and colleagues (2004) used a pretest-posttest design, assessing participants at three points in time: i) before training, ii) immediately following training, and iii) 2 months post-training. Following training, SIRI-2 scores improved significantly, an effect that was maintained at 2 months follow-up and which was greater for participants attending the half-day lecture compared with the full-day workshop.

Morriss and colleagues (1999), Appleby and colleagues (2000), and Gask and colleagues (2006) evaluated the STORM training program discussed above and employed the SIRI-2 to assess skills in assessment and management of suicidal patients. Morriss and colleagues (1999) delivered STORM to front-line workers in four 2 hour weekly sessions, including staff from: primary care, emergency rooms in general hospitals, social services, voluntary mental health or substance abuse agencies, and those who do not have mental health training or qualifications. Participants demonstrated significant post-training improvements, as indicated by the SIRI-2. Appleby and colleagues (2000) also assessed participants' skills both before and after the STORM training program. Forty-four percent of participants completed the SIRI-2 both before and after training; however no differences were observed between pre- and post-training scores in this study. Gask and colleagues (2006) assessed participants at three points in time: i) before training, ii) immediately after training, and iii) 4 months following training. No differences were observed on pre-training and post-training SIRI-2 scores, however, upon separate

analyses, non-qualified staff and staff with no previous suicide training were found to reflect the results of the entire sample of participants including qualified health care professionals.

Gask and colleagues (2006) also conducted semi-structured face-to-face interviews with a purposive sample in order to ascertain the impact of the training program on participants' clinical practice. Emergent themes from these qualitative interviews suggested that the training program increased participants' confidence and as a result, changed their clinical practice. On the other hand, some respondents reported that the training program bolstered their reassurance that their current practice was satisfactory.

Lastly, to assess participant acquisition and retention of skills, videotaped role-played interviews were used by the three STORM program evaluations (Morriss et al., 1999; Appleby et al., 2000; Gask et al., 2006). Volunteer samples of participants completed ten to fifteen minute role-played interviews in which an actor played a specific patient role. Morriss and colleagues (1999) conducted the videotaped assessments both before and 1-2 months following the training program. There were no changes observed on general interview skills, however there were significant improvements in risk assessment and management of suicidal patients at 1 month following training. Significant improvements in microskills from before training to after training were also demonstrated, including improvements in: eliciting suicidal ideas and places, adequate problem solving, and coping if the patient felt suicidal. Appleby and colleagues (2000) observed significant improvement in total scores from pretest to posttest. Mental health professionals did not improve in assessment skills, but improved in clinical management skills and total scores, albeit non-significantly. Lack of significance may be attributed to higher baseline scores of mental health professionals. On the other hand, non-mental health professionals had lower baseline scores and improved significantly in the assessment of suicidal intent and overall skills. Gask and colleagues (2006) reported non-significant increases in skills from before training to immediately after training and data were insufficient to assess whether acquired skills were maintained at 4 months following training.

Skills in caring for suicidal patients, most often the assessment and management of suicidal patients, were assessed using several methodologies. Self-assessment instruments, standardized objective instruments, video-taped role play and qualitative focus group and interview data were all used to assess changes in participants' suicide risk management skills. Overall, it appears that skills related to suicide risk management may improve in the short term, but the evidence regarding long-term retention is lacking.

Confidence and Self-efficacy

Confidence and self-efficacy of health professionals in caring for suicidal patients and their families was another assessment outcome. Six studies assessed confidence or self-efficacy in caring for suicidal patients and their families.

Fenwick and colleagues (2004) assessed participants on two confidence items at three points in time: i) before training, ii) immediately following training, and iii) 2 months post-training. Participants had to rank their confidence out of ten for the following statements: "I can recognize a potential suicide risk"; "I can deal with the needs of a suicidal client" (p. 118). After training there were significant improvements on both confidence questions. This effect was significantly greater for the workshop group compared with the lecture group for the second confidence question "I can deal with the needs of a suicidal client."

McAuliffe and Perry (2007) assessed staff comfort and competence in assessing and managing suicidal patients through the use of a self-developed survey. Staff had to rank the degree to which they agree with the statement "I am provided with adequate, ongoing training in how to assess and respond to patients with suicide risk."

The percentage of staff who report agreeing with the statement "I am provided with adequate, ongoing training in how to assess and respond to patients with suicide risk" increased from 30% to 80% with 24% of staff reporting that they "strongly agree" with the statement. Additionally, anecdotal comments indicated that suicide assessment and intervention is an area in which staff want substantial ongoing educational support.

Morriss and colleagues (1999) used a visual analogue scale to assess confidence in assessing and managing suicidal patients. The instrument is comprised of five 10-cm visual analogue scales. The five scales explore front-line workers' confidence in:

1. "Having the interview skills to use my time well with suicidal clients"

2. "Recognising a potential suicide risk"

3. "Differentiating a mild depression from a suicide risk"

4. "Dealing with the needs of suicidal clients"

5. "Dealing with suicidal clients can be improved by attending a training course"

(Morriss et al., 1999. p. 80)

Morriss and colleagues (1999) assessed participants before and after training, and reported significant improvements post-training on four out of five confidence scales.

Appleby and colleagues (2000) and Gask and colleagues (2006) used the same visual analogue scale to assess confidence, however item number five "Dealing with suicidal clients can be improved by attending a training course" was excluded. Appleby et al. (2000) found significant improvements on all confidence items from before training to after training. Similarly, Gask and colleagues (2006) observed that confidence improved significantly from before training to immediately after training, and improvements were maintained at four months post-training. Additionally, Gask and colleagues (2006) conducted semi-structured face-to-face interviews with a purposive sample of participants. Emergent themes suggested that training increased the confidence of participants, particularly among nursing assistants.

To assess self-efficacy, Shim and Compton (2009) used a 12-item, Likert-scaled instrument administered before training and immediately after training and found that participants had significantly increased self-efficacy scores from pre-test to post-test.

A second study by Ramberg and Wasserman (2004a) evaluated the same suicide prevention educational program in Stockholm County, Sweden. In this study, key individuals from 12 of the County's 23 psychiatric clinics were sent to participate in the program while the other 11 clinics served as the control group. The course consisted of a 2 hour lecture and 2 hour small group discussion, every second week for 2 years. Trainees were expected to implement suicide-preventive activities in their clinics during the second year. Self-efficacy of clinic staff (excluding individuals who participated in the program) was assessed through a questionnaire that asked whether respondents had enough training to work with suicidal patients. Staff were assessed at two points in time: i) 6 months after the start of the course but prior to implementation of suicide-preventive activities, and ii) 1.5 years after the course ended. Among the intervention group, the proportion of participants who reported that they considered themselves sufficiently trained for work with suicidal patients increased significantly from 43% at baseline to 58% at follow-up. There were no increases in self-efficacy for staff in the control group from pretest to posttest where forty-six percent considered themselves sufficiently trained at baseline, a percentage that dropped to 42% at follow-up.

These studies suggest that the effect of suicide risk management training programs on confidence and self-efficacy have been successfully measured through the use of self-developed scales and interviews.

Impact

The impact of suicide risk management programs on clinical or organizational practice is a less prevalent but important area of assessment. Two studies assessed the impact of training programs on organizational practices or client outcomes.

Ramberg and Wasserman (2004b) assessed the impact of the NASP course on organizational practice by assessing the implementation of suicide-preventive activities in the psychiatric clinics. Through semi-structured telephone interviews conducted five years following the end of the training program, it was determined that of the 11 clinics that received the course, suicide-preventive activities were implemented in all but one. Suicide-preventive activities implemented included: training and implementation of routines such as guidelines, retrospective autopsies, suicide-risk assessment, collaboration with other clinics, and special treatment programs. Of these activities, there was variation in the components, quantity, frequency, and duration.

McAuliffe and Perry (2007) tracked quantitative measures over 4 years to assess the impact of the best practice initiative on client outcomes and organizational practices. Indicators employed by McAuliffe and Perry (2007) included: number of emergency room visits and hospital admissions with the diagnosis of suicide or self-harm; average length of stay for patients admitted due to suicide or self-harm; percentage of patients assessed for suicide risk; percentage of patients with appropriate documentation of assessment and safety plan; staff attendance at educational events related to suicide prevention (McAuliffe & Perry, 2007).

The ratio of admissions of suicidal patients presenting in the Emergency Department decreased each year from 56% prior to the project to the 2007 rate of 42%. In the first year that the initiative was implemented, there was a 14.5% reduction on average length of stay for patients admitted for suicide ideation or suicide attempt. This reduced length of stay was not maintained the following year; however a decreased utilization rate of 300 bed days per year had been maintained for 2 years due to decreased admission rates of clients presenting with suicidal ideation.

Process outcomes assessed included appropriate documentation of client assessment and safety plans, accessible suicide risk management resources, and staff training. Charts were audited for safety plans, and 90% of charts contained a plan, as required. Additionally, a number of resources related to suicide risk assessment and treatment were made available including: a "cheat sheet" to remind staff of risk assessment format and to serve as a template for risk assessment format, binder and online folder containing new protocols, and other resources for suicide risk assessment. Lastly, in the first 6 months of the best practice initiative, 98% of mental health clinical and administrative staff, psychiatrists and a volunteer were trained in ASIST. ASIST training workshops continue to be offered monthly and are attended by new mental health staff and other hospital and community members. Over the past 3 years, 90% of new staff participated in ASIST training within the first 3 months of being hired. Additionally, most staff also attended a professional development day on suicide intervention.

The suicide risk management programs evaluated by Ramberg and Wasserman (2004b) and McAuliffe and Perry (2007) suggest that suicide risk management programs can effect change in client outcomes and organizational practices.

Satisfaction

Two studies assessed participant satisfaction with training, both of which employed a self-developed scale.

Appleby and colleagues (2000) employed a series of three-point scales to determine participant perceptions of usefulness of the training program with respect to specific instructional methods. Sixty-three percent of respondents reported that the skills taught were "definitely" useful and 35% of respondents reported that the skills taught were "somewhat" useful. Additionally, use of role play, group feedback, and video were viewed as very positive training methods.

Similarly, Gask and colleagues (2006) used a questionnaire to determine participant satisfaction with the training program, which focused on satisfaction with particular components of the program.

Respondents reported that they enjoyed the course "definitely" (76%) or "somewhat" (23%). Participants also reported that the skills and techniques taught were useful "definitely" (79%) and "somewhat" (20%), and that group feedback sessions were useful "definitely" (76%) and "somewhat" (23%). Feedback was very positive on specific components of the training including role-play, use of video, and content.

General satisfaction with suicide prevention training programs was successfully measured by Appleby and colleagues (2000) and Gask and colleagues (2006) using self-developed scales.

Limitations of the Extant Literature

These studies highlight a number of limitations involved with evaluation research of suicide risk management programs. Limitations include: Study design, volunteer bias, use of indicators, program limitations such as duration and content, and period of follow-up.

Lack of randomized controlled trials or lack of randomization was cited as a limitation for a number of studies (Appleby et al., 2000; Fenwick et al., 2004; Gask et al., 2006; Morriss et al., 1999; Ramberg et al., 2004a). Thus, changes from pretest to posttest should be interpreted as preliminary evidence (Appleby et al., 2000). In the Chan and colleagues (2008, 2009) studies, both study and control groups worked in the same area, thus there may have been diffusion between the groups. Control group participants were motivated and interested in suicide risk management, thus assessments may have stimulated thinking about the subject. Lastly, the study only assessed those who were willing to participate; therefore, it is unclear whether the results will generalize to individuals who were not willing to participate in the education program.

Program duration is another common limitation in the studies published to date. Morriss and colleagues (1999) stated that their 8 hour program was likely too short to create improvements in general interview skills and the cognitive skills required to address hopelessness and self-esteem enhancement. Chan and colleagues (2009) also stated that their 8.5 hour program was likely too short to produce significant differences between the study and control groups. Additionally, participants in the Chan and colleagues (2008, 2009) studies suggested that the duration of the program could be increased.

The generalizability, validity and reliability of the various indicators were the most common limitations cited by the suicide risk management program evaluations. Simpson and colleagues (2003) suggest that the complexity of attitudinal responses creates a challenge in assessing attitudes. Morriss and colleagues (1999) state that the use of self-assessment measures may lead to an overestimation of training effects while assessments which occurred in a role-play setting may not necessarily translate to performance in a clinical setting. Similarly, Chan and colleagues (2009) suggest that assessment of only subjective attitudes and competency rather than actual performance is a limitation of their study. Conversely, Simpson and colleagues (2003) suggest that there is a considerable role for subjective assessments of knowledge and skills in suicide risk management training programs because "in vivo" assessments, including assessment of skills through role play, although often regarded as the most valid and objective assessments of skill development, may not be representative of skills that would be used in real situations and may not be used regularly given the associated resource intensiveness. In addition, both Appleby and colleagues (2000) and Gask and colleagues (2006) state that a limitation in their assessment of program effects was that evaluation did not extend to changes in clinical or organizational practice nor impact on service users. Gask and colleagues (2006) alert organizations that confidence may increase in short-term skills training, but confidence does not always positively correlate with skills. Lastly, many studies do not use standardized measures, which disallow definitive conclusions about training effects (Appleby et al., 2000).

A final common limitation with suicide risk management training programs addresses periods of follow-up and maintenance of gains. Studies suggest that longer periods of follow-up are needed to determine the impact of the training program on clinical practice (Appleby et al., 2000; Shim & Compton, 2009). The small number of studies that did have follow-up periods longer than 4 months demonstrated significant declines in training effects (Chan et al., 2009; Simpson et al., 2003).