

Examining the applicability of the screening, brief intervention, and referral to treatment (SBIRT) model to mental health services delivery

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U.S. Public Health Challenge

- The integration of behavioral health and primary care services for patients with mental health problems is a pressing challenge for modern health care systems
- This presentation will explore the
 - Evidence base for the potential application of SBIRT-based principles to the delivery of mental health services in primary care settings
 - Integration into primary care
 - Implementation considerations and implications for mental health treatment

Prevalence of Mental Health Problems in U.S.

- Lifetime prevalence of major depressive disorder --16.6%
- Lifetime prevalence of panic disorder, generalized anxiety disorder, post-traumatic stress disorder (PTSD), and social phobia ranges from 4.7 to 12.1%⁶
- In 2010, 45.9 million U.S. adults had a diagnosable condition
 - 39.2% received treatment
 - 19% reported unmet treatment needs ^{10, 11}
- U.S. adults with mental health conditions exhibit poorer physical health and require greater healthcare utilization compared with the general population²⁻⁵

Opportunities in Primary Care Settings

Patients often present their symptoms to their primary care providers rather than to mental health specialists ^{12, 13}.

Provider barriers ¹⁴⁻¹⁷:

- Lack of time
- Cost/inadequate insurance coverage
- Lack of access to specialist providers/lack of coordination between primary and specialty care
- Lack of knowledge about where to go for services
- Patient resistance/perceived stigma
- Failure to schedule or show up for appointments

Patient barriers ^{12,20}

- Do not perceive a need for treatment
- Resistance
- Failure to schedule or show up for appointments
- Cost, Lack of time
- Perceived stigma
- Lack of knowledge about where to go for services

Could SBIRT be extended to encompass mental health services delivery?

- SBIRT model used successfully for treating alcohol and other substance use disorders ²¹⁻²⁷
 - **Screening**
 - **Brief Intervention**
 - Brief Treatment
 - Referral to Treatment
- To date, current research has not directly investigated the applicability of a comprehensive SBIRT model for the treatment of mental health disorders
- However, there is evidence to suggest that some components of SBIRT could be successfully applied/adapted to improve diagnosis and treatment delivery for mental health problems



What is the evidence for SBIRT for mental health problems?

Methods: Search Criteria

- Articles published in English between January 2000 and December 2011
- Database: PubMed/MEDLINE
- Combinations of the following search terms were used:

- PTSD
- Depression
- Anxiety
- Mental health disorder

and

- Brief screening
- Brief intervention
- Brief treatment
- Treatment referral

and/or

- Primary care
- Collaborative care
- Integrative care

Methods: Article Selection Criteria

Abstracts were collected and catalogued by topic area, and the full-text articles of relevant abstracts were reviewed

Articles **included** in this review relate to the effectiveness of the following for mental health screening/treatment in primary care settings:

- Brief screening instruments
- Brief interventions
- Brief treatments
- Referral to specialty care
- Treatment models

Articles **excluded** from this review include:

- Drug studies
- Case studies
- Studies involving animal models
- Studies examining neurobiological function
- Studies examining the prevalence or symptoms of PTSD, depression, or anxiety

Screening

- Screening allows providers to identify symptoms and initiate dialogue
- The United States Preventive Services Task Force currently recommends:
 - Routine depression screening for adults in healthcare settings that can support effective diagnosis, treatment, and followup³⁰
 - Has not issued any recommendations for screening of anxiety or other mental health disorders
- Numerous instruments developed for mental health in primary care settings
- Many have good reliability, sensitivity, and utility

Brief, Self-Administered Screening Assessments: Depression

(10 min or less, not audience specific)

Name of instrument	Number of items	Administration time (min.)	Timeframe
Beck Depression Inventory®-II (BDI-II)	21	5 to 10	Past 2 weeks
BDI-Primary Care (BDI-PC)	7	Under 5	Past 2 weeks
Center for Epidemiologic Studies Depression Scale (CES-D)	20	5 to 10	Past week
Major Depression Inventory (MDI)	10	5 to 10	Past 2 weeks
Patient Health Questionnaire, 2, 4, and 9-item versions (PHQ-2, 4, 9)	2, 4, or 9	Under 5	Past 2 weeks
Quick Inventory of Depressive Symptomatology (QIDS)	16	5 to 10	Past week
World Health Organization-5 Well-being Index (WHO-5)	5	Under 5	Past 2 weeks
Zung Self-Rating Depression Scale	20	5 to 10	Past several days

Brief, Self-Administered Screening Assessments: Anxiety, including PTSD

Name of instrument	Number of items	Administration time (min.)	Timeframe
Anxiety and Depression Detector	5	Under 5	Past 3 months
Beck Anxiety Inventory (BAI)	21	5 to 10	Past week
Breslau's 7-item screen (PTSD)	7	5	Past month
Generalized Anxiety Disorder 2- and 7-item scales (GAD-2, 7)	2 or 7	Under 5	Past 2 weeks
Hospital Anxiety and Depression Scale (HADS)	14	5 to 10	Past week
My Mood Monitor-3 (M-3) Checklist	27	5 to 10	Past 2 weeks
Primary Care PTSD Screen (PC-PTSD)	4	Under 5	Lifetime

Brief Intervention (BI)

Substance Abuse and Mental Health

Substance Abuse

- Delivered by behavioral health professional
- Delivered to individuals with mild/moderate symptoms
- Include a few short sessions (1–5), each <1 hour in length
- Frequently apply:
 - Motivational interviewing (MI) techniques
 - Stages of change theory

Mental Health

- Delivered by licensed professionals
- Individuals with mild/moderate symptoms less likely to seek intensive treatment
- Often involve longer/more intensive sessions than BI for substance abuse
- Applying MI and CBT approach is common

Brief Intervention (BI)

Mental Health Summary

- Precise definition of a BI and empirical evidence supporting the application of BI to mental health treatment is limited and largely inconclusive
- BI for mental health may be effective for:
 - Psychoeducation³⁸
 - Addressing basic symptoms of depression and anxiety^{34,35}
 - Improving patient adherence to/engagement in specialty care³⁶
- BI may be ineffective/harmful if used for PTSD, or when broadly used to treat all victims of traumatic events³⁹⁻⁴⁶, but may be an effective preventive intervention for secondary trauma victims (e.g., emergency services personnel)
- Additional research is needed

Brief Treatment

Substance Abuse and Mental Health

Substance Abuse

- Intended for patients who exhibit some symptoms of substance abuse but do not have symptoms severe enough to qualify for specialized treatment
- Typically involve a series of 5–12 structured, focused sessions, each lasting up to 1 hour

Mental Health

- May be effective for treating patients with mild/moderate depression and anxiety disorders^{48, 49}.
- Sessions longer and more rigorous than BI but less intensive than treatment in specialty care
 - Treatment effects may be smaller than lengthier treatments⁴⁸
 - CBT for anxiety comparable effects for both brief and longer treatments

Brief Treatment

Evidence Base for Mental Health

- CBT, bibliotherapy, counseling, and problem-solving therapy are all may be effective in primary care settings for treating depression and anxiety disorders^{48, 49}.
 - 6-session CBT intervention for panic disorder⁵⁰
 - Coordinated Anxiety Learning and Management (CALM) model⁵¹
- Computer/Web-based therapies can effectively deliver or facilitate delivery of mental health treatment for patients outside of specialty care, especially for patients with mild/moderate symptoms^{49, 52, 53}
 - Randomized controlled trial of 8-session computerized CBT program administered in general practice⁵⁴
 - Therapist-guided Web-based CBT program designed to treat multiple mental health problems led to significant improvements in both 8- and 5-session formats

Brief Treatment

Mental Health Summary

- Stronger empirical support for effectiveness of primary care-based brief treatments for mental health problems than for BI
- However, research surrounding brief treatments for PTSD and acute traumatic stress is mixed
- A brief treatment approach may not be effective for all patients or for all disorders
- Additional research is needed

Referral to Treatment

Substance Abuse and Mental Health

Identifying and assisting patients who require referral to specialty care is integral to the SBIRT process

Substance Abuse

- Treatment referrals are made for patients with moderate/severe symptoms who require more extensive treatment than can be offered through BI or brief treatments

Mental Health

- Individuals with more severe symptoms may also be those most reluctant to seek mental health treatment^{66, 67}
- Physician referral can facilitate mental health services utilization⁶²
- Patient engagement in mental health referrals is generally low

Referral to Treatment

Mental Health Summary

- BI incorporating motivational interviewing techniques may improve patient follow up and engagement in mental health treatment referrals³⁶
- Many factors influence whether a physician makes a referral to specialty treatment^{14, 63}, including:
 - Physician confidence
 - Physician familiarity with/access to mental health specialists
 - Physicians' attitudes
 - Patients' perceived treatment preferences
- Additional work is needed to identify the factors that facilitate or inhibit patient participation in mental health care

Integration of primary and behavioral health care services

- Coordination between primary and mental health care services is needed
- May require the establishment of new linkages between healthcare systems.
- Several collaborative care models have been developed that incorporate components of SBIRT
- Trials of these models show^{50, 51, 68-70}
 - reduced symptom severity
 - improved remission rates
 - improved case management
 - Increased patient satisfaction
 - Improved communication between primary and mental health care providers

Implementation Considerations

- Optimal methods for service delivery
- Amount of training and support required for service providers
- Patient and provider acceptance
- Quality and type of screening instruments, interventions, and treatment protocols
- Degree of mental health specialist involvement or oversight
- Target patient populations
- Integration into existing health care systems
- Treatment cost
- Sustainability

Implications for behavioral health

- Many important questions remain and future research is needed
 - Assess whether and how best to use an SBIRT approach to identify and manage patients with sub threshold symptoms of MH problems
 - Asses how to manage patients with co-morbidity
- Research suggests SBIRT MH differs from SBIRT SA but may be successfully adapted
- Many effective, existing collaborative care models already incorporate SBIRT-like features
- Additional evaluation of these existing models and the components that have the greatest impact on patient outcomes may provide insight into how SBIRT-based approaches could be adapted successfully to mental health services delivery



Thank you!