Utilizing the Refugee Health Screener 15 in Refugee Resettlement Agencies: An Implementation Guide for Greater Philadelphia

Nationalities Service Center

With Thanks to Pathways to Wellness

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Background

The Refugee Health Screener 15 (RHS-15) was designed by Pathways to Wellness to address a deficit in efficient screening tools to assess for emotional distress across refugee populations. Existing refugee-specific tools screened for specific mental health conditions (posttraumatic stress disorder with the Harvard Trauma Questionnaire and depression with the Vietnamese Depression Scale), or include a comprehensive assessment of traumatic events and assess a broad range of distressing physical and emotional symptoms (New Mexico Refugee Symptoms Checklist-121) rendering them impractical for screening purposes. Other tools (including the Hopkins Symptom Checklist-25 and the Posttraumatic Symptom Scale- Self Report) had been adapted for refugee populations, but served as diagnostic tools rather than predictive screening measures.

Mental health screening instruments are designed to be highly sensitive in order to identify all cases where individuals being screened might be experiencing higher levels of distress than normal. Pathways to Wellness and other supporters of the refugee screening tools believe that integrating early detection and support for mental health problems into the refugee resettlement, paired with culturally appropriate and effective treatment, reduces resettlement stress and accelerates healing. In order to ensure that this measure was able to successfully assess for emotional distress across a range of refugee populations, a unique translation process was utilized which shaped the way certain questions were asked. The development of the tool included the utilization of community focus groups to discuss meanings of words and appropriate translation for each question. As a result of this process, some questions may seem different than the typical Western approach to soliciting the same information (for example, a question assessing for depression or sadness asks how often the respondent has felt "blue").

The RHS-15 was designed to be implemented in health care settings, but is being successfully implemented in refugee resettlement settings, including implementation at Nationalities Service Center (NSC).

Components of RHS-15

The RHS-15 utilizes three different methods of rating responses to ensure understanding of the rating scale. Each of the first 13 questions can be responded to numerically (a scale of 0-4), descriptively (not at all, a little bit, moderately, quite a bit, or extremely), or with the use of graphics (pictures of a jar ranging from empty to full with various levels of fullness in between). These questions assess for a variety of symptoms that potentially correlate to emotional distress. Question 14 utilizes a numerical ranking system to rank the respondent's perception of his or her ability to cope with stressors.

The Distress Thermometer asks respondents to rate his or her distress level over the past week, with a range of no distress ("things are good") to extreme distress ("I feel as bad as I ever have"). This measure quickly assesses the respondent's self-perception of his or her current emotional functioning.



Scoring the RHS-15 was developed to be simple, allowing scores to be quickly tallied immediately after completion. The numerical responses for questions 1-14 are added together. If the total score for questions 1-14 is 12 or higher, there is an indication that the respondent is experiencing an elevated level of emotional distress and should be referred for additional supportive services. If the respondent indicates that their distress is a 5 or higher on the distress thermometer, he or she should be referred for additional supportive services.

Logistics of Implementation

User Agreement: Pathways to Wellness, the developer of the RHS-15 tool, requests that all users of the RHS-15 complete a utilization agreement. The purpose of the agreement is to improve the use and dissemination of the RHS-15. Additionally, organizations can volunteer to submit the number of screenings, time frame utilization and age, gender and language group of those screened. All information can be utilized in a de-identified manner. The agreement can be found on the Refugee Health Technical Assistance Center RHTAC website at (http://www.refugeehealthta.org/files/2012/09/RHS15 Packet PathwaysToWellness.pdf). All individual agencies, clinical settings, and other users should complete user agreements independently.

Feasibility Pilot Project: In early 2014, Nationalities Service Center undertook a small pilot project specifically focused on internal feasibility to utilize the RHS-15. As the tool has already been clinically validated and is being utilized nationwide, our focus was exclusively on feasibility of use within our current program models.

The pilot study included two of NSC's post-resettlement case management programs - the Medical Support Services program (funded through USCRI Preferred Communities) and the Philadelphia Partnership for Resilience program serving immigrant survivors of torture (funded through the Office of Refugee Resettlement and the United Nations Voluntary Fund for Victims of Torture). These two programs see a high prevalence of clients with mental health needs and program coordinators believed that additional tools to assess need and facilitate discussion about available services with clients would be helpful. The pilot was initiated to look at two main feasibility concerns: ease of access and availability of referrals.

The pilot project began on March 15, 2014 and continued for three months to June 15, 2014. Only new clients undergoing an initial intake with Medical Support Services (MSS) or the Philadelphia Partnership for Resilience (PPR) were included. In the MSS program, only those enrolling in intensive services (Tier 1) were included. In total 12 individuals who met the criteria were included in the feasibility pilot. The average age was 38.8 years old and the sample consisted of 6 males and 6 females (50%) each.

The screener was implemented by four case managers working with the Medical Support Services and Philadelphia Partnership for Resilience programs during in-office visits, as part of the initial intake meeting at the time of program enrollment. Involved case managers had between one and three years of case management experience, and all held bachelor's degrees. None of the staff had previous experience with the implementation of standardized mental health screening tools. Staff received a one hour training regarding the utilization of the tools, and



attended a check-in meeting half-way through the pilot project to assess comfort with the tool and to provide additional support in the implementation of the pilot.

In terms of ease of access, the pilot demonstrated that the RHS-15 is feasible to access in the case management setting in terms of staff time spent and administration process including staff training. On average the screening took 11.75 minutes with a range of 5 minutes to 20 minutes. For 83% of the sample (10 clients), the RHS-15 was self-administered or self-administered with an interpreter's explanation provided either in person or over the phone. For two of the clients, an interpreter dictated questions over the phone and the case manager supported the process of recording the results. Overall, this data supports inclusion of the RHS-15 as part of a routine intake process.

It is important to note that during debrief meetings with staff involved in the pilot study, most felt that the administration of the RHS-15 during the initial intake did not represent the most opportune time to administer the tool. Case managers felt that answers may have been skewed due to lack of established relationship and that the tool was "one document too many" during an intensive intake process. Participating staff suggested that implementing the tool during a second meeting, preferably in conjunction with service planning, would increase validity of results.

The majority of clients involved in this pilot screened positive (10/83%). As the programs involved in the sample see clients with complex medical needs and/or extensive trauma histories, this is likely skewed higher than the average population to be screened. Nevertheless, it is important to have strong referral procedures in place prior to initiating the inclusion of the RHS-15 as a tool. Of the ten clients who screened positive, five were referred to mental health treatment with two already enrolled in mental health services. An additional five clients declined a referral to formal mental health treatment. Data was not collected to determine the reason for declined referrals. However, clients from both groups engaged in supportive social activities through the Philadelphia Partnership for Resilience and/or other types of community based activities. Therefore it is our belief that a continuum of available referrals is an essential component of follow up to administration of the tool.

Implementation of the RHS-15 during intake through NSC's Medical Support Services (MSS) and Philadelphia Partnership for Resilience (PPR) programs provided important information that can be used to guide implementation across resettlement and other social service agencies. While the sample size of our pilot project was small (12), distinct trends were found which suggest possible outcome patterns in resettlement and social service environments.

Pilot Project Recommendations:

• The majority of participants (83%) self-administered the tool. We recommend that agencies, clinics and others develop their implementation process around self-administration.



- The majority of participants (83%) screened positive on the RHS-15. We recommend that agencies, clinics and others ensure a strong process for offering clients a referral to a variety of supportive services in the case of positive screening.
- Case mangers involved in the pilot felt that the tool should not be administered during the
 initial intake meeting. We recommend that the tool be incorporated into subsequent
 meetings, such as a service planning meeting or another later case management
 interaction.
- We recommend that symptoms identified through the RHS-15 be addressed within the case management service plan process, and that services identified be linked to symptom reduction.

Review of Key Points Prior to Administering Your First RHS-15

- 1. Sign the utilization agreement with Pathways to Wellness.
- 2. Receive translated tools and coordinate with Pathways to Wellness on use.
- 3. Train staff that will be administering the RHS-15 and offering referrals.
- 4. Develop a comprehensive referral guide including not only clinical referrals, but also supportive services and community based resources.

Suggested Script for Administering the RHS-15 in a Non-Clinical Setting (For clinically-focused settings, please reference the original scripts created by Pathways to Wellness, available in the appendix)

1. Introduce the RHS-15 at the Start of the Meeting:

"Part of what we'll talk about today is how you are feeling in your body and mind. We'll use something called the Refugee Health Screener 15 to talk about different symptoms and feelings."

2. Reintroduce RHS-15:

Before handing out the RHS-15, state that each person (14 years old and over) will be asked the questions about sadness, worries, body aches and pain, and other symptoms that may be bothersome to them.

"Some refugees have mind and body symptoms because of the difficult things they have been through, and because it is very stressful to move to a new country. The questions we are asking help us find people who are having a hard time and who might need extra support. The answers are not shared with employers, USCIS, teachers, or anyone else without your permission."

3. Normalize:

Tell clients that many refugees and asylees have a hard time because of the difficult things they have been through, and because it is very stressful to move to a new country.

"Many of the people we work with have different feelings or symptoms because of the difficult things they have been through, or because of the stress that comes with moving to a new country. We see people every day that have trouble sleeping, or think too much,



or have aches that won't go away. We talk to all of our clients about how they feel to see if we can help them with services to feel better."

4. Explain the Instructions:

"Using the scale beside each symptom (show the scale), please place a mark in/circle the degree to which the symptom has been bothersome to you over the past month/30 days including today. For example, in the past 30 days, you may have been crying every day, a few times, or not at all. We are asking you to place a mark, or circle, in the column that shows how much you have been having that experience in the last month or 30 days."

If someone prefers to have the tool read to them or if the client is pre-literate, read aloud the instructions with appropriate interpretation:

"How often in the last month have you felt down, sad, or blue most of the time? Not at all, a little bit, moderately, quite a bit, or extremely?" (Point to the numbers / images on the scale while reading.)

"How often in the last month have you felt restless, can't sit still? Not at all, a little bit, moderately, quite a bit, or extremely?" (Point to the numbers / images on the scale while reading.)

Remember to:

- Repeat the symptom items, read out loud, and speak slowly
- Check for understanding by asking if anyone has any questions
- If the tool is administered in a group setting (i.e. all family members at one time), remind each person to answer their own questions individually

Script for Offering a Referral if the RHS-15 Screens Positive

1. Review the screener with the client

"From your answers to the questions, it seems like you are having a difficult time. You are not alone. I work with many people who experience [list the specific symptoms being experienced - crying easily, fast heartbeat, too much thinking, etc.] that may be causing some problems for you."

2. Offer support by referring back to the symptom items on the RHS-15

"Lots of people experience sadness, too many worries, bad memories, or too much stress because of everything they have gone through and because it is so difficult to adjust to a new country. There is support in our community for these symptoms you are having."

3. Normalize their experience

"Lots of people who have been through what you went through have these symptoms. Sometimes people need extra support to help them through a difficult time."

4. Educate and re-emphasis



"In the United States, people who experience these symptoms sometimes find it helpful to get extra support. This does not mean that something is wrong with them...(add language about specific service being offered: A counselor in the United States is a type of healthcare worker who will listen to you and provide help and support; Therapeutic arts groups are meetings where people come together to sing, dance, or make art together while sharing their struggles and accomplishments with each other; ESL classes would give you a chance to increase your language skills which will help your adjustment to the United States, while meeting new people)."

5. Give control and power for individual to make an informed choice

"Are you interested in being connected to these services? I recommend that you see what they are all about. If you would like to seek services, I can help you schedule the first appointment."

6. Ask if client will fill out referral form

"I would like to refer you to (name specific service and again describe the tangible benefit of the service – i.e. a counselor, someone who you can talk to and find ways to start feeling better). Is this OK with you? Someone will call you in your language and describe the type of support they can offer you."

7. If yes, proceed to referral form

• Following your agency's protocol for mental health needs including making a referral and responding to possibly triggered clients

Other Considerations and Recommendations

Re-Administration of the RHS-15: Multiple agencies and clinics are in the process of setting up a procedure to implement the tool. With that in mind, the RHS-15 is not designed to be administered to the same individual repeatedly. Current recommendations are that valid results can be obtained with a three to six month gap between administration times. Therefore, it is important that your procedure incorporates a mechanism to determine if the client has already completed an RHS-15. This could include showing them the tool and asking if they have already completed it or coordinating with the referring agency to determine if the tool has already been administered. In either case, if the client has completed the tool, results can be obtained through appropriate release of information mechanisms.

Normalizing: Transition to life in the United States is difficult for most refugees. The addition of the RHS-15 as a tool to better identify individuals who may be facing significant challenges within this process does not change this fact, nor does a negative RHS-15 score indicate a seamless adjustment. It is important to emphasize to all parties involved in administration of the tool, including clients, that this is not a diagnostic tool, but a predictive one. The results, as well as process of administrating the tool and discussing the results, are intended to support clients in accessing needed services.



Data Collection and Data Sharing: At present, no active research projects are evaluating implementation of the RHS-15 in the Greater Philadelphia area. However, it would be prudent for agencies utilizing the RHS-15 in Philadelphia to collect a basic data set in order to collaborate on research in the future. This may also be necessary for reporting back to Pathways to Wellness per the Utilization Agreement.



Pathways to Wellness

Integrating Refugee Health and Well-Being

Creating pathways for refugee survivors to heal



REFUGEE HEALTH SCREENER - 15 (RHS-15)

Pathways to Wellness is a project of Lutheran Community Services Northwest, Asian Counseling and Referral Services, Public Health Seattle & King County, and Michael Hollifield, M.D. Generously funded by the Robert Wood Johnson Foundation, The Bill and Melinda Gates Foundation, United Way of King County, The Medina Foundation, Seattle Foundation, and the Boeing Employees Community Fund

Date of Request:	Name:						
Institution:							
Department (if applicable):							
Your Position:	Your Position:						
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City:	State:	Zip:	Zip:				
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INSTRUCTIONS Please complete the fields below							
Where did you hear about the RHS-15?	In a journal publication List:	From a colleague	Other (please specify):				
What is your intended use of the RHS-15?	Clinical assessment	Research	Other (please specify):				
If you plan to use the RHS-15 for research, please briefly describe your research or use:	Ethnic and/or language group(s): Arabic Russian Nepali Spanish Karen Somali Burmese	Age range 14-21 21-64 65-older	Context: (check all that apply) Refugees Asylum seekers Validity for Screening Comparison to another instrument				
How many refugees do you screen a year?	<u> 25-50</u> <u> 50-100</u>	100-200	200 or more				
What is the setting for administering the RHS-15?	Health setting Rese Primary care agen Public health	ttlement CBC	Other (please specify)				
Funding source?	Federal grant Foun	dation	mural grant None				
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Is there other pertinent information about organization will utilize the RHS-15?	it now your						

Statement of Agreement

I understand that the purpose of this agreement is to improve the use and dissemination of the Refugee Health Screener – 15 (RHS-15). Any and all shared information and data between myself, or my institution, and *Pathways to Wellness* partners is to be utilized to improve the RHS-15. I also understand that I, and/or my institution, may negotiate with *Pathways to Wellness* partners how shared information and data will be used for institutional and/or scientific reports. I agree to utilize the Refugee Health Screener – 15 (RHS-15) in its current form and for its intended use unless otherwise specified in subsequent agreements.

(Please check the box that reflects your desired use of the RHS-15) ☐ I and/or my institution will use the RHS-15 for clinical purposes only. We do not have the capacity to engage in research, but agree to a qualitative interview to discuss challenges and successes with the RHS-15 so the tool can be further developed. ☐ I and/or my institution will use the RHS-15 for clinical purposes only. I/we agree to share with Pathways to Wellness partners the following information within a reasonable amount of time of a written request: 1. The number of screenings conducted. 2. Time of screening administration during resettlement (i.e., six weeks after date of arrival in the U.S., one year after date of arrival in the U.S., etc.) 3. Age, gender, and ethnic/language group, and screening score of participants screened. ☐ I and/or my institution are interested in partnering with *Pathways to Wellness* partners on further evaluative projects about the RHS-15 and/or subsequent versions of the RHS-15. I/we understand that I/we will negotiate with *Pathways* how to proceed in such projects regarding lead, institutional review board approvals, data collection and management, and authoring of scientific reports. I/we agree to share with *Pathways to Wellness* partners the following information within a reasonable amount of time of a written request:

- 1. The number of screenings conducted.
- 2. Time of screening administration during resettlement (i.e., six weeks after date of arrival in the U.S., one year after date of arrival in the U.S., etc.)
- 3. Age, gender, and ethnic/language group, and screening score of participants screened.
- 4. Clinical information regarding 1) the number of those screened referred to care, 2) the number of positive screened persons that went to care, and 3) treatment outcomes.
- 5. A summary of any other qualitative or quantitative evaluations about the utility of the RHS-15 (negotiable on execution of the agreement).

Requestors' signature:	Date:
Requestor's printed name:	
	n utilizing the Refugee Health Screener-15 (RHS-15). We are ecommendations for further use and development, and collaboration t.
Please return the form to:	Pathways to Wellness Beth Farmer, MSW International Counseling & Community Services 4040 S 188th St., #200 Seattle, WA 98188 206-816-3252
You may fax to:	206-838-2680

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REFUGEE HEALTH SCREENER - 15

Development and Use of the RHS-15



Early screening and intervention for emotional distress among newly arrived refugees is rarely conducted. Existing instruments are not designed for refugees or may be cumbersome to administer in health care settings. The RHS-15 was developed in a community public health setting to be an efficient and effective way to sensitively detect the range of emotional distress common across refugee groups.

Background

The United Nations High Commissioner for Refugees lists 16 million refugees and asylum seekers and 26 million internally displaced persons in the world as of mid-2009.¹ Over 1.8 million reside in the United States.² All refugees have experienced extremely stressful events related to war, oppression, migration, and resettlement. The best evidence shows that a large minority of refugees experience multiple, distressing somatic and psychological symptoms and poor mental health³⁻¹¹ that are associated with stressful events in a dose-dependent manner.^{8,12-14}

Because this high burden of combined emotional and physical distress is often symptomatic of preexisting or developing mental disorders, screening upon arrival in the host country is important. However,
screening for mental disorders is not currently a standard practice in the majority of refugee resettlement
programs in the U.S. Barriers to screening include time, cost, follow-up, refugees' health seeking behaviors,
accessibility and availability of services, language, and cultural or conceptual differences in perceptions of
health. Another challenge to screening is that symptoms in refugees are most often not characteristic of
single, western-defined psychiatric disorders. Hence, instruments that effectively screen for distress in
general, i.e., predictive of prevalent common mental disorders, have not been developed and tested in refugee
populations. The value of such screening has also not been definitively established. Ovitt and colleagues
examined refugee perceptions of a culturally-sensitive mental health screening in eight Bosnian refugees in the
United States and suggested that screening is a necessary component of refugee resettlement. Savin and
colleagues (2005) analyzed data from the Colorado Refugee Services Program in Denver, and found that
nearly 14% of the 1,058 refugees over the age of 18 screened positive for a psychiatric disorder using an
instrument developed by an expert consensus process. Of those offered mental health services, 37% received
such services and the remaining 63% declined.²⁶

Developing an efficient and effective screening instrument

A screening instrument for refugees needs to be efficient and sensitive to a range of common psychiatric diagnoses. The two instruments that have been developed in refugee populations and could be considered screening instruments, the Harvard Trauma Questionnaire (HTQ) and the Vietnamese Depression Scale (VDS), are specific to posttraumatic stress disorder (PTSD) and depression, respectively.^{27,28} The New Mexico Refugee Symptom Checklist-121 (NMRSCL-121), which was developed to assess the broad range of distressing physical and emotional symptoms in refugees,⁵ is a reliable and a valid predictor of traumatic

events and mental health symptoms. However, it is long and comprehensive and was not intended to be a screening instrument.

Other scales developed for specific illness states in western populations have been adapted for use with refugees. For example, the Hopkins Symptom Checklist-25 (HSCL-25) has been adapted for several populations including Indochinese and Bosnian. However, the HSCL-25 assesses clinically significant anxiety and depression, not PTSD, and was not intended for screening. A standard instrument that is effective and efficient in screening for emotional distress that is a common marker across psychiatric diagnoses in many ethnic groups would be helpful for resettled refugees.

Items used as a basis for developing an efficient screening instrument for emotional distress

PTSD, anxiety, and depression symptoms are the most common mental symptoms in refugees. Psychotic illnesses are relatively easy to detect by non-psychiatric providers. Thus, initial screening programs in two locales in the U.S. utilized instruments that have the best empirical support for assessing relevant symptoms. These included:

- The New Mexico Refugee Symptoms Checklist-121 (NMRSCL-121) assesses the broad range of persistently distressing somatic and psychological symptoms in refugees, and is reliable and a valid predictor of traumatic experiences, PTSD, anxiety and depression in both Kurdish and Vietnamese refugees.⁵ The NMRSCL-121 is formatted for possible responses from 0 (not at all) to 4 (extremely), and may be scored as a sum or an item average.
- The Hopkins Symptom Checklist-25 (HSCL-25) assesses anxiety and depression symptoms, is valid for the general U.S. population and for Indochinese refugees,^{30,31} and has transcultural validity.^{32,33} The HSCL-25 is formatted for possible responses from 0 (not at all) to 4 (extremely), and is scored as an item average. Item-average cutoff scores of ≥1.75 for each scale predict "clinically significant" anxiety and depression in general U.S. and refugee samples and are valid as diagnostic proxies.^{30,31}
- The Posttraumatic Symptom Scale-Self Report (PSS-SR) is a reliable predictor of the PTSD diagnosis in U.S. populations.³⁴ The 17 items on the scale, each scored from 0 to 3 for symptom frequency, are essentially DSM-IV PTSD diagnostic items. PSS-SR continuous scores and the diagnostic proxy were highly correlated with war-related trauma and anxiety and

depression in Kurdish and Vietnamese refugees,¹³ and Cronbach's alpha in these samples was 0.95. The dichotomous proxy and the cutoff score were used for the current analyses.

The process of screening and assessing diagnostic proxies

For development of the Refugee Health Screener 15 (RHS-15), twenty-seven NMRSCL-121 items (each scored on a 0 to 4 severity scale) that were found to be most predictive of anxiety, depression, and PTSD in a refugee cohort were collectively utilized as the primary screening instrument. Six items were added to this screening based on clinical experience and empirical data about assessing emotional distress, including questions about family psychiatric history, personal psychiatric history, stress reactivity, coping capacity, and a distress thermometer. The HSCL-25 and the PSS-SR were used as diagnostic proxies to evaluate items that would comprise the RHS-15.

All instruments were translated into four languages using a rigorous, iterative back-and-forth participatory consensus process with refugees from each language group. This process ensured relevant language-specific semantics yielding accuracy and clarity of meaning. This phase of development is critical to obtain culturally-responsive items in each language. The four language groups were chosen because they are spoken by the highest number of refugees currently being resettled in King County, as well as in the United States.

Two-hundred fifty-one refugees 14 years or older in these four groups (93 Iraqi, 75 Nepali Bhutanese, 36 Karen, and 45 Burmese Speaking (including Karenni and Chin ethnic groups) coming for health screening at Public Health Seattle and King County (Public Health SKC) between April 2010 and November 2010 were screened by the *Pathways to Wellness* evaluation coordinator. Those screened were administered the diagnostic proxies usually within 2 weeks of screening. One hundred and ninety persons were administered the proxies. Those missed were due to shortage in available interpreters, out-migration, and other reasons (i.e. during time of diagnostic assessment, some participants had other medical concerns that warranted immediate attention). It is important to note that the development of the RHS-15 was an integral part of the overall *Pathways* mission, which included the integration of health services, outreach and education about refugee health, and an evaluation component. Stand-alone screening for emotional distress may not be useful if treatment services are not available or accessible.

Methods for evaluating the most valid set of items for screening

To establish the RHS-15, all items from the screening instrument and diagnostic proxy instruments (N=75 items) were analyzed together to improve on validity and efficiency of the initial screening instrument. Multiple exploratory methods were used, including initial correlations and general linear models using t-tests and analysis of variance. Three methods were then used and compared to establish the most useful and efficient set of items that would classify persons as most likely to have diagnostic proxy level anxiety, depression, or PTSD: discriminant analysis (DA), naïve Bayesian classification (BAY), and chi-square (CHI) for each item by diagnostic proxy. Diagnostic proxies used were (1) clinically significant anxiety, (2) clinically significant depression, (3) PSS-SR diagnostic PTSD, (4) moderate-severe PTSD or greater, and (5) any of the four previous diagnostic entities on Bayesian analysis.

Results of analyses

Most of the 75 items were significantly correlated with diagnostic proxies, reflecting their usefulness in the extant instruments. Some of the same and some different items were found to classify by diagnostic proxy when using each of the three classification methods. To establish the items that had the highest chance of correctly classifying a refugee with a likely diagnostic proxy, a grid of strength of association of item by classification method was constructed. Items that were high for classifying persons by at least 2 of the 3 methods were then subjected to BAY to maximize for classification sensitivity. Fourteen items were important for classifying by at least one of the 5 diagnostic proxies with sensitivity of at least .89 and specificity of at least .83. The table shows items included by BAY for each diagnostic proxy and the sensitivity and specificity of each item-group by proxy diagnosis. One item, HSCL 9 was not significant in other linear analyses, so was dropped from the final screening instrument. One item, HSCL 4 was significant in other BAY and CHI analyses so was added to the final instrument. Another item, HSCL 13, was significant in all 3 prior methods so was added to the final instrument. The distress thermometer was a significant predictor of each diagnostic proxy.

Table. Items selected for the RHS-15 by final Bayesian analysis

Items selected	PSS-SR <u>></u> 16	PTSD diagnosis	HSCL-25	HSCL-25	Any Proxy
by BAY			Anxiety	Depression	
NM 5_1	X		X	X	
NM 5_12				X	
NM 5_19				X	
NM 5_22					X
"Coping"			X		
PSS 3	X				
PSS 5				X	
PSS 11	X	X	X		X
PSS 17				X	
HSCL 1		X	Χ	X	X
HSCL 3			X		
HSCL 9	X				
HSCL 10	X				
HSCL 11				Х	
Sensitivity	1.00	0.89	1.00	1.00	0.96
Specificity	0.94	0.83	0.91	0.93	0.86

[&]quot;NM" is an item from the New Mexico Refugee Symptom Checklist

Current Recommendations for Scoring and Using the RHS-15

Past analyses of the initial screening instrument consisting mostly of NMRSCL-121 items determined that an item-average of 0.88 or greater was optimally associated with significant emotional distress (i.e., diagnostic level distress on proxy instruments). However, the RHS-15 now includes items from 3 different instruments, which had different instructions, response scales, and scoring. In particular, the PSS-SR items are rated more by frequency than severity on a scale from 0 to 3. The NMRSCL-121 and the HSCL-25 both have items rated from 0 to 4, but the instructions specify a different time frame of the symptoms. We have constructed the RHS-15 so that each item has the same response possibilities from 0 (not at all) to 4 (extremely).

Post-hoc analyses of the RHS-15 with items standardized to the current scoring scale were conducted to determine the optimal cut-off score to predict a positive case. One assumption of such analysis is that future

[&]quot;PSS" is an item from the Posttraumatic Stress Symptoms-Self-Report

[&]quot;HSCL" is an item from the Hopkins Symptom Checklist

The sensitivity and specificity values assume optimal scores to proxy diagnoses in BAY analyses

samples will score similar to our initial sample on the RHS-15 items and the diagnostic proxies. These analyses showed that an item-average of 1.18 may result in the most optimal sensitivity and specificity. However, a screening instrument is generally utilized to be highly sensitive, in order to identify all cases, particularly when missing any case would result in a significantly adverse outcome. An item-average of 0.88 and 1.18 on the 14 RHS-15 items translates to a total score of 12.32 and 16.52, respectively. Our data suggest that using the former cut score will result in identifying approximately 38% of refugees as positive for emotional distress. The latter cut score has not been tested in a separate or split sample, but we estimate it will result in identifying between 25% and 33% of refugees as positive for emotional distress. For now, we recommend that the item average of 0.88 (total ≥12) or higher be used to identify a positive case. Further evaluation is necessary to determine the sensitivity and specificity of the RHS-15 at various cut-off scores to find significant emotional distress, as well as other outcome measures that have yet to be investigated.

In the current analyses, a distress thermometer score of 5 or greater was 85% specific for being positive on any of the diagnostic proxies. The sensitivity of this cut score was .87, .85, and .66 for PTSD, depression, and anxiety, respectively. If a cut score of 6 or greater was used, then specificity increased to .93, but the sensitivity was below .50 for the three diagnostic proxies. Thus, to optimize for sensitivity and include cases that may be missed by the 13 symptom items plus the coping item, we recommend that a distress thermometer score of 5 or greater be considered a positive screen. Thus, our current recommendation is that a score of \geq 12 OR a distress thermometer score of \geq 5 is considered a positive case. We believe that the best process will eventually be to utilize the RHS-15 as a highly sensitive first screen, with intermediate scores (e.g., 12 to 16) warranting a second level, more specific screen. Early results from our second phase where the RHS-15 is integrated into routine health screening at Public Health SKC indicates that the administration time is approximately 5 minutes for those who are literate and self-administer the RHS-15, and up to 15 minutes for those who are administered the instrument regardless of literacy level. Public Health SKC has been forward-looking and innovative as a *Pathways* partner and by advocating for a pay-line for the time to administer the RHS-15.

We highly recommend the use of the RHS-15 in settings where there are adequate resources to conduct and score the screening, and to develop a source and method of referral for further diagnosis and treatment. Another decision point is about when in the course of resettlement is the best time to administer the RHS-15. While our premise is that it should be administered early in the course of resettlement, it is also clear in our work and from other studies that a significant proportion of newly arrived refugees will have a delayed onset of emotional distress. We are currently working on better understanding the proportion of refugees with distress on arrival, delayed distress, and factors that predict each.

Finally, the *Pathways* project invites collaborative work with other groups who wish to use and/or evaluate the effectiveness of the RHS-15. It is expected that the form and method of screening may vary from locale to locale, dependent on the health care setting, the population served, and the resources available. As of September 2011, the RHS-15 is available in English, Arabic, Burmese, Karen, Russian and Nepali (Bhutanese), with a Somali version soon available. We are beginning the process to have the RHS-15 also available in Spanish. Current development and evaluation of the RHS-15 has had institutional review board (IRB) approval and oversight at The Pacific Institute for Research and Evaluation. Any further collaborative evaluation and/or research will necessarily involve a discussion about how and where to obtain IRB approval to proceed with the work.

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REFUGEE HEALTH SCREENER-15 (RHS-15)

Pathways to Wellness

Integrating Refugee Health and Well-being

Creating pathways for refugee survivors to heal



DEMOGRAPHIC INFORMATION						
NAME:	DATE OF BIRTH:					
ADMINSTERED BY:	DATE OF SCREEN:					
DATE OF ARRIVAL: GENDER:	HEALTH ID #:					

Developed by the *Pathways to Wellness* project and generously supported by the Robert Wood Johnson Foundation, The Bill and Melinda Gates Foundation, United Way of King County, The Medina Foundation, Seattle Foundation, and the Boeing Employees Community Fund.

Pathways to Wellness: Integrating Community Health and Well-being is a project of Lutheran Community Services Northwest, Asian Counseling and Referral Services, Public Health Seattle & King County, and Dr. Michael Hollifield. For more information, please contact Beth Farmer at 206-816-3252 or bfarmer@lcsnw.org.

REFUGEE HEALTH SCREENER (RHS-15)

Instructions: Using the scale beside each symptom, please indicate the degree to which the symptom has been bothersome to you <u>over the past month</u>. Place a mark in the appropriate column. If the symptom has not been bothersome to you during the past month, circle "NOT AT ALL."

		Y.4	思想	1944 1945	
SYMPTOMS	NOT AT ALL	A LITILE BIT	MODER- ATELY	QUITE A BIT	EXTREMELY
1. Muscle, bone, joint pains	0	1	2	3	4
2. Feeling down, sad, or blue most of the time	0	1	2	3	4
3. Too much thinking or too many thoughts	0	1	2	3	4
4. Feeling helpless	0	1	2	3	4
5. Suddenly scared for no reason	0	1	2	3	4
6. Faintness, dizziness, or weakness	0	1	2	3	4
7. Nervousness or shakiness inside	0	1	2	3	4
8. Feeling restless, can't sit still	0	1	2	3	4
9. Crying easily	0	1	2	3	4

The following symptoms may be related to traumatic experiences during war and migration. How much in the past month have you:

10.	Had the experience of reliving the trauma; acting or feeling as if it were happening again?	0	1	2	3	4
11.	Been having PHYSICAL reactions (for example, break out in a sweat, heart beats fast) when reminded of the trauma?	0	1	2	3	4
12.	Felt emotionally numb (for example, feel sad but can't cry, unable to have loving feelings)?	0	1	2	3	4
13.	Been jumpier, more easily startled (for example, when someone walks up behind you)?	0	1	2	3	4

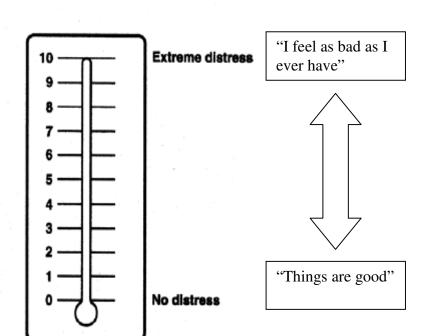
REFUGEE HEALTH SCREENER (RHS-15)

14. Generally over your life, do you feel that you are:

Able to handle (cope with) anything that comes your way	(
Able to handle (cope with) most things that come your way	1
Able to handle (cope with) some things, but not able to cope with other things	
Unable to cope with most things	
Unable to cope with anything	
Charle to cope with anything	••

Distress Thermometer

FIRST: Please circle the number (0-10) that best describes how much distress you have been experiencing in the past week including today.



ADD TOTAL SCORE OF ITEMS 1-14: ___

SCORING

Screening is POSITIVE

1. If Items 1-14 is \geq 12 OR

2. Distress Thermometer is ≥ 5

CIRCLE ONE:

15.

SCREEN NEGATIVE

Self administered:
Not self administered:

SCREEN POSITIVE REFER FOR SERVICES

Refugee Health Screener-15 (RHS-15) REPLICATION GUIDELINES

Counties and states resettling refugees differ in their approach to refugee health screening. The RHS-15 is best suited for communities that have mental health resources available to refugees or potential for building that capacity.

When adapting the RHS-15 for use in your community:

- Identify who will be screened using the RHS-15 and consider demographics
 - Which ethnic population(s)?
 - · What age(s) to target?
 - Literacy, gender, etc.
 - At what point in time during resettlement?

In King County, the RHS-15 was administered to newly arrived refugees age 14 years and older (among 4 ethnic groups) during their 1st month of resettlement and again at 12-16 months during the limited Civil Surgeon visit.

- Identify the refugee health screening entity in your community and consider the screening setting
 - · Public health department
 - Primary care clinic
 - Resettlement agency

In King County, health screening for refugees occurs at the public health department. Refugee clients are referred for ongoing care to primary care clinics. If a refugee client screens significant for emotional distress they are referred to a central referral source.

- Consider the capacity of community mental health providers and build capacity if needed
 - Are there mental health agencies that can effectively serve refugees?
 - What additional education, training or support do mainstream providers need to serve the population?
 - Expect referral rates to be 10-15 % of those screened per month
 - The cut off score can be based on your local conditions * (See "Development and Use" paper for more discussion)

In King County, while piloting the RHS-15 the average rate for screening positive was 25% of total screened per month. The project had a robust outreach component to build provider capacity.

- Innovate a better continuum of care for refugees and consider local conditions
 - · What does the structure of healthcare delivery look like in your community?
 - How can this system be improved to better serve refugees?
 - · Where are the gaps in service?
- Convene stakeholders to implement the RHS-15
 - Primary care doctors, refugee health-screening entity, and resettlement agencies can oversee the implementation and adaptation of the RHS-15 in your community.
 - Document your results and share with health, resettlement and social service communities.



Pathways to Wellness

Integrating Refugee Health & Well Being

Creating pathways for refugee survivors to heal

A program of:

Michael Hollifield, M.D. Psychiatrist, Family Practice Pacific Institute for Research & Evaluation







We want to hear from you! Please consider reporting information to our *Pathways* team so we can continue to improve.

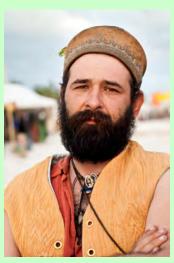
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Generously funded by The Robert Wood Johnson Foundation, The Bill and Melinda Gates Foundation, United Way of King County, The Medina Foundation, The Seattle Foundation, Boeing Employees Community Fund.

"It is so simple, but it makes such a huge difference." ~ Lisa Buckner, Registered Nurse





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Pathways to Wellness

Creating pathways for refugee survivors to heal

Pem came from a small country in Asia.

As a young mother, Pem fled her village when civil war broke out and soldiers began burning and looting homes. She spent over a month walking with her infant daughter to safety. For the next 13 years, Pem languished in a refugee camp. Fortunately, she was one of the lucky few that received an opportunity to come to the United States. When she arrived, Pem was given a required health screening that also looked for signs of depression and anxiety. Pem admitted to not being able to sleep at night and crying on an almost daily basis. Her body hurt, she said. "Too many thoughts. So many thoughts, I can not think well." Pem was immediately connected to support to help her with these symptoms, and is now thriving with a new job and new hope. Pem's assessment took less than 10 minutes, but it is not happening for most refugees.

Pathways to Wellness is a new approach to finding depression, anxiety, and traumatic stress in refugees and connecting them to the care they need to heal. We provide training for mental health providers to effectively deliver services to refugee populations, and partner with refugee communities to better understand and address mental health issues. Pathways is working with other cities across the United States to duplicate its success.

No refugee should suffer any more than they already have. Contact us to get more information on how *Pathways* can benefit your community.

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