

## Accredited CME Activity

# Facilitating Help-Seeking Behavior Among Medical Trainees and Physicians Using the Interactive Screening Program

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### Continuing Medical Education Information

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*This activity is provided by the Federation of State Medical Boards.*

### Learning Objectives

*Upon completion of this activity, participants should be able to:*

- *Identify the current scope of distress and suicide risk among medical students, residents, and physicians*
- *Define the Interactive Screening Program (ISP)*
- *Summarize the outcomes attained by the Interactive Screening Program (ISP)*

### Method of Participation

*This article is one of four in this CME section that must be read in order to receive CME credit. The others are "Physician Mental Health: An Evidence-Based Approach to Change," "FSMB Efforts on Physician Wellness and Burnout," and "Update on the UC San Diego Healer Education Assessment and Referral (HEAR) Program."*

*After reading all four of the articles, CME participants should log-in and register for the CME activity at the web address provided in the "How to Participate in the CME Activity" document, and complete and submit the online post-test and evaluation. The post-test includes questions about each article. The FSMB policy on wellness and burnout is not required for CME credit. It is provided as a supplemental resource.*

**ABSTRACT:** Physician and trainee distress, from burnout and depression to suicide risk, has been recognized as a serious threat to physicians, health care systems and to the optimal delivery of health care. To address this problem, the American Foundation for Suicide Prevention (AFSP) adapted the Interactive Screening Program (ISP) for use by medical schools nationwide. Much is known about the problem, but less is known about the effectiveness of programs and solutions. This program evaluation utilized data from six medical schools' implementation of ISP over a seven-year period (2007–2013) to quantify openness to help-seeking and engagement with each step of program outreach. Descriptive statistics were used to quantify participants' engagement: reviewing the counselor's response; exchanging dialogue messages with the counselor; requesting to meet with the counselor in person; and requesting referral for mental health treatment. Chi-square distribution tests were used to determine differences in level of risk and rates of engagement among medical students, residents and fellows, and faculty physicians. A total of 1,449 individuals, including medical students, residents and faculty physicians, completed the questionnaire; 1,413 (97.5%) were designated as having high or moderate distress and only 5.3% were receiving any type of counseling or therapy. Among program participants, prevalence rates of high distress were higher among medical students and residents versus faculty physicians. The rate of program engagement was high overall with 81.2% reviewing the counselor's response; further engagement was highest among those most distressed, with 32.2% engaging in online dialogue with a program counselor. ISP was a feasible tool for engaging at-risk medical students, residents and physicians who were not currently utilizing mental health services.

## Introduction

Suicide, the tenth leading cause of death, is a significant public health problem that affects individuals, families and communities across the United States.<sup>1</sup> Findings show that rates of suicide among physicians are higher than that of the general population,<sup>2</sup> with an estimated 300 to 400 physician suicide deaths each year.<sup>2-4</sup> Suicide deaths are more than 200% higher in female physicians and 40% higher in male physicians compared with the gender-matched general population.<sup>5</sup>

Depression and substance use disorders remain the most significant risk factors for suicide deaths and suicide attempts.<sup>6</sup> Among medical students, rates of depression are 15–30% higher than those of similar age and education.<sup>7</sup> However, many physicians with mental health problems do not seek mental health services, often causing conditions to be underdiagnosed and therefore untreated. Findings show that a third to half of physicians do not have a regular source of health care, and are less likely to have seen their primary care doctor in the past year compared to other adults.<sup>8</sup> For example, data from a 2008 national study of 7,905 members of the American College of Surgeons found 6.3% reported suicidal ideation in the past year.<sup>9</sup> Of those experiencing suicidal ideation, only 26% had sought professional help.<sup>9</sup> Furthermore, 60% reported that they were reluctant to seek care due to concerns that doing so could impact their licensure to practice.<sup>9</sup> Many other studies of physicians of all specialties, trainees and students identify high rates of distress, and low rates and significant barriers to help-seeking.<sup>4,10</sup> Therefore, while the profession is undergoing culture change toward destigmatizing mental health and help-seeking, this process of change takes time. When one's mental health is in the process of deteriorating, it can be additionally

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**DEPRESSION AND SUBSTANCE USE DISORDERS REMAIN THE MOST SIGNIFICANT RISK FACTORS FOR SUICIDE DEATHS AND SUICIDE ATTEMPTS. AMONG MEDICAL STUDENTS, RATES OF DEPRESSION ARE 15–30% HIGHER THAN THOSE OF SIMILAR AGE AND EDUCATION.**

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challenging to reach out for help. Thus, a critical missing piece is a comprehensive and “safe” method for engaging at risk medical students, residents, and physicians into mental health services.

In an ongoing effort to address this problem of high levels of distress and low rates of help-seeking, the American Foundation for Suicide Prevention (AFSP) developed the Interactive Screening Program (ISP). While ISP was initially developed for use by institutions of higher education, including undergraduate, graduate and medical schools, ISP has since been customized for other populations, including medical and other industries' workforces. This initiative identifies individuals who may be at risk for suicide by offering them the opportunity to participate in an anonymous online screening. Using an individualized and interactive approach, a designated program counselor (assigned by the medical school) reviews participant questionnaires and posts a confidential response on the secure ISP website, which participants can retrieve using their self-assigned user ID and password. Via the ISP website, participants have the option of exchanging online dialogue messages with the counselor and are encouraged to set up an appointment or referral to meet with a counselor in person. Among the many approaches to address medical student, resident, and physician well-being and suicide prevention, ISP seeks to reduce individuals' barriers to help-seeking by connecting them to a counselor who can “meet” individuals where they are, process their concerns or assumptions about the implications of getting help, and engage them into mental health services. In this article, outcomes and processes of ISP as implemented in medical training and practice settings are described in order to evaluate various aspects of the program, including the level of engagement and extent to which barriers to help-seeking are addressed among medical professionals.

## Methods

A secondary data analysis of data and program process outcomes collected from ISP at six United States medical schools over a seven-year period (2007–2013) was conducted using program data previously collected for a planned series of program evaluations led by AFSP. The data gathering and analytic procedures for the program evaluations, including this analysis, were reviewed by the New York State Psychiatric Institute Institutional Review Board (IRB) and deemed not to require IRB approval. As this study involved data-gathering via anonymous survey, signed informed consent from participants was deemed not necessary by the IRB. Furthermore, the information provided on the program platform where the screening is conducted

does contain the key elements of informed consent, and consent is implied by the participant's completion of the questionnaire.

The six medical schools included in this program-outcomes evaluation are schools that made the decision to implement ISP as part of health and wellness programming for their medical students,

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**THE SIX MEDICAL SCHOOLS INCLUDED IN THIS PROGRAM-OUTCOMES EVALUATION ARE SCHOOLS THAT MADE THE DECISION TO IMPLEMENT ISP AS PART OF HEALTH AND WELLNESS PROGRAMMING FOR THEIR MEDICAL STUDENTS, RESIDENTS AND/OR FACULTY PHYSICIANS.**

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residents and/or faculty physicians. Each medical school had its own ISP platform and was responsible for determining which individuals to target through the program, and these individuals received an email invitation to make use of ISP's service aimed at helping individuals assess whether stress, depression or other mental health problems may be interfering with their academic, work, or personal functioning. The timing, methods and number of individuals targeted was determined by each institution largely based on the clinical personnel and resources available to support the program. In some cases, all medical students, residents and faculty physicians at the institution were invited to participate annually, and in other cases targeted groups, such as medical students or residents, were invited at different times throughout the year. In addition to participating via invitation, individuals could also find ISP de novo by searching for wellness-related resources at their institution or they might have known about ISP as a safe resource through word of mouth.

The data used for this analysis included participant and counselor-generated data transmitted over each medical school's ISP platform. These data were automatically stored and organized in an administrative section of the program platform. The information documented in the data report included the participant's tier (indicating participant level of distress), the dates and times the participant submitted the questionnaire, when the counselor posted the response, and when the participant returned to the platform and accessed the counselor's response. Also included in the data report were coded responses to all questionnaire items, including

two demographic items (gender and age), the number of online dialogues participants exchanged with the counselor, and the outcome of the dialogue messages (if the participant requested an in-person appointment with the counselor or a mental-health referral). Information not collected by the program platform includes outreach data, such as the number of individuals invited to participate and the frequency of invitations, as well as long-term follow-up data, such as the number of individuals who engaged in treatment and treatment outcomes. Because program outreach data is not collected via the program platform, it was not included as part of this secondary data analysis. Some medical schools have engaged in tracking these longer-term outcomes via their own institutional programs or research.<sup>11</sup>

***Instrument***

The ISP platform, including the screening questionnaire, was initially designed and developed by AFSP for use by institutions of higher education, including undergraduate, graduate and medical schools. ISP was first evaluated in a three-year pilot study at two undergraduate universities<sup>12,13</sup> and has since been customized for use by other populations, including medical and other industries' workforces and further evaluated.<sup>5,14,15</sup> The program's questionnaire was evaluated in a latent class analysis of questionnaire data from 45 universities, which included undergraduate and medical students, indicating that this set of questions provides meaningful

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**THE ISP PLATFORM, INCLUDING THE SCREENING QUESTIONNAIRE, WAS INITIALLY DESIGNED AND DEVELOPED BY AFSP FOR USE BY INSTITUTIONS OF HIGHER EDUCATION, INCLUDING UNDERGRADUATE, GRADUATE AND MEDICAL SCHOOLS.**

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information for determining participant distress.<sup>16</sup> The ISP questionnaire contains the nine-item Patient Health Questionnaire (PHQ-9);<sup>17</sup> measures of intense emotional distress (anxiety, panic, rage, hopelessness, desperation and loss of control) that have been linked to depression with suicidal ideation (SI); alcohol and drug use; disordered eating behaviors; current suicidal thoughts, behaviors, and plans and past suicide attempts; current mental health treatment; and demographic items, including gender, position (medical student, resident, fellow, and faculty) and age. Most questions use a

four-point Likert scale (ranging from “not at all” to “most of the time”), and some ask for a “yes/no” answer. A final optional item asks participants to provide an email address, which is encrypted, to facilitate anonymous communication with the counselor through the program platform.

### **Program Procedures**

Individuals who participate in ISP create a self-assigned user ID and password to complete the online stress and depression questionnaire. Once participants submit their questionnaire, it is computer-analyzed and, based on specific answers, is classified into one of four tiers: Tier 1A, Tier 1B, Tier 2, and Tier 3, indicating high, moderate, or low distress (see Figure 1 for tier designation criteria).

Immediately after the questionnaire is posted to the ISP platform, the computer system generates notifications to the designated program counselors for that institution. The email notifications indicate each participant’s tier level and provide a link to the participant’s record on the ISP platform. Program guidelines call for all Tier 1 participants to be answered within 24 hours, Tier 2 participants within 36 hours and Tier 3 participants within 48 hours. Within the appropriate time frame, program counselors review the participants’ questionnaires and create

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**ONCE PARTICIPANTS SUBMIT THEIR QUESTIONNAIRE, IT IS COMPUTER-ANALYZED AND, BASED ON SPECIFIC ANSWERS, IS CLASSIFIED INTO ONE OF FOUR TIERS: TIER 1A, TIER 1B, TIER 2, AND TIER 3, INDICATING HIGH, MODERATE, OR LOW DISTRESS.**

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a detailed, personalized response and assessment for each participant, using a template specific to the participant’s distress tier, which encourages interaction between participant and counselor. In addition to the assessment, the counselor addresses any questions or comments left by participants in an open-ended comment box at the end of the questionnaire. Participants are invited to exchange dialogue messages with the counselor using the ISP platform’s messaging system, or to contact the counselor directly using contact information provided by the counselor, including the counselor’s name, office location and phone number. Therefore, participants maintain the ability to remain anonymous.

After the counselors post their responses to the ISP platform, the responses are accessible to participants by logging back onto the program platform with their user ID and password they created to take the questionnaire. Participants who provide an email address automatically receive an email notification alerting them of the response with a

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**ALL TIER 1 AND TIER 2 PARTICIPANTS ARE URGED TO CONTACT THE COUNSELOR TO ARRANGE AN IN-PERSON MEETING. ALL PARTICIPANTS ARE OFFERED THE OPTION OF USING THE PLATFORM’S ‘DIALOGUE’ FEATURE TO COMMUNICATE ONLINE WITH THE COUNSELOR WHILE REMAINING ANONYMOUS.**

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link to the program platform. Participants can also return independently to the platform and log in to view the counselor’s response, regardless of having provided an email address. It is worth noting that viewing the counselor’s response thus requires active effort, since it is only accessible to the participant after logging back onto the platform.

All Tier 1 and Tier 2 participants are urged to contact the counselor to arrange an in-person meeting. All participants, regardless of tier designation, are offered the option of using the platform’s “dialogue” feature to communicate online with the counselor while remaining anonymous. In general, the counselor’s key aims in the responses are to convey interest, support and availability, and to encourage engagement, whether in-person or through the anonymous online dialogue.

### **Data Analysis**

Data collected through ISP were stored on each institution’s program platform. Data reports were downloaded from each ISP platform into a Microsoft Excel spreadsheet and were then uploaded into SPSS 22.0 (IBM SPSS Statistics 22.0) for statistical analyses. The complete data set included 1,496 records. Participants who completed the questionnaire more than once (“repeat users”) were counted only once and those who did not identify their position at their institution were excluded. These steps resulted in 1,449 unique records (901 medical students, 187 residents and fellows, and 361 faculty physicians). Descriptive statistics were presented as frequencies and percentages or means and standard deviations in Figure 2 and

**Figure 1**  
**Tier Designation and Level of Distress**

Tier Designation	Level of Distress
<b>Tier 1</b> <b>Tier 1A</b>	<ul style="list-style-type: none"> <li>• High distress including current suicidal ideation, plans, or behaviors, or</li> <li>• A PHQ-9* score of 15 or higher, and intense feelings of anxiety, panic, anger, hopelessness, desperation, or loss of control</li> </ul>
<b>Tier 1B</b>	<ul style="list-style-type: none"> <li>• High distress without current suicidal ideation, plans, or behaviors, or</li> <li>• A PHQ-9 score of 10-14 and prior suicide attempt(s), or</li> <li>• Intense feelings of anxiety, panic, anger, hopelessness, desperation, or loss of control, or</li> <li>• Indication that the current problems make it difficult to function</li> </ul>
<b>Tier 2</b>	<ul style="list-style-type: none"> <li>• Moderate distress without current suicidal ideation, plans, or behaviors, or prior suicide attempt(s), or</li> <li>• A PHQ-9 score of 10-14, or</li> <li>• Problems related to alcohol or drug use or eating behaviors, or</li> <li>• Indication that current problems make it somewhat difficult to function</li> </ul>
<b>Tier 3</b>	<ul style="list-style-type: none"> <li>• Minimal to no distress</li> </ul>

\* A PHQ-9 score of 10 or more has a sensitivity and specificity of 88% for major depression. PHQ-9 scores of 5, 10, 15, and 20 represent mild, moderate, moderately severe, and severe depression, respectively.

Table 1. Chi-square distribution tests were used to determine between group differences in levels of distress between medical students, residents/fellows and faculty physicians. Chi-square distribution tests were also used to determine differences between medical students, residents/fellows and faculty physicians for each point of program engagement: reviewing the counselor’s response; exchanging dialogue messages with the counselor; and requesting an appointment or referral to meet with a counselor in person.

## Results

1,449 medical students, residents and faculty physicians completed the ISP questionnaire during the seven-year period. Of those, 901 (62.2%) were medical students, 187 (12.9%) were residents or fellows, and 361 (24.9%) were faculty. Of the 1,445 participants who answered the gender demographic question, 853 (59.0%) were female, 588 (40.7%) were male, and four (0.3%) selected prefer not to answer. The mean age of the 1,398 participants who provided their age at the end of the questionnaire was 32 (SD = 11) (see Table 1 for participant demographics).

Based on their responses to the questionnaire items, 524 (36.2%) of the 1,449 participants were designated as Tier 1, with 130 (24.8% of Tier 1, 9.0% overall) falling into the most at risk and distressed group Tier 1A (current suicidal ideation [SI]), and 394 (75.2% of Tier 1, 27.2% overall) into Tier 1B (no current SI but other indicators of risk). 889 (61.4%) participants were designated as Tier 2, and

36 (2.5%) as Tier 3. Although 97.5% of the participants indicated some level of psychological distress, less than 10% of Tier 1 and 2 participants (19.2% of Tier 1A, 12.7% of Tier 1B, and 7.1% of Tier 2) were currently receiving counseling or therapy.

As tracked by the ISP platform, 1,177 participants (81.2%) returned to the ISP platform to view the counselor’s posted response; 106 (81.5%) of Tier 1A, 344 (87.3%) of Tier 1B, 706 (79.4%) of Tier 2, and 21 (58.3%) of Tier 3. Subsequently, 323

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**1,449 MEDICAL STUDENTS, RESIDENTS AND FACULTY PHYSICIANS COMPLETED THE ISP QUESTIONNAIRE DURING THE SEVEN-YEAR PERIOD. OF THOSE, 901 (62.2%) WERE MEDICAL STUDENTS, 187 (12.9%) WERE RESIDENTS OR FELLOWS, AND 361 (24.9%) WERE FACULTY.**

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participants (27.4% of participants who viewed the counselor’s response and 22.3% of all questionnaire participants)—all of whom were in Tier 1 or 2—engaged in one or more anonymous online dialogues with the counselor. High-distress participants were the most likely to engage in dialogue, with 32.2% of Tier 1 participants having at least one online exchange with the counselor ( $\chi^2[1, N = 1,156] = 6.7, p < .01$ ).

### Medical Students

Of the 1,449 participants, 901 (62.2%) were medical students. Of those, 79 (8.8%) were designated as

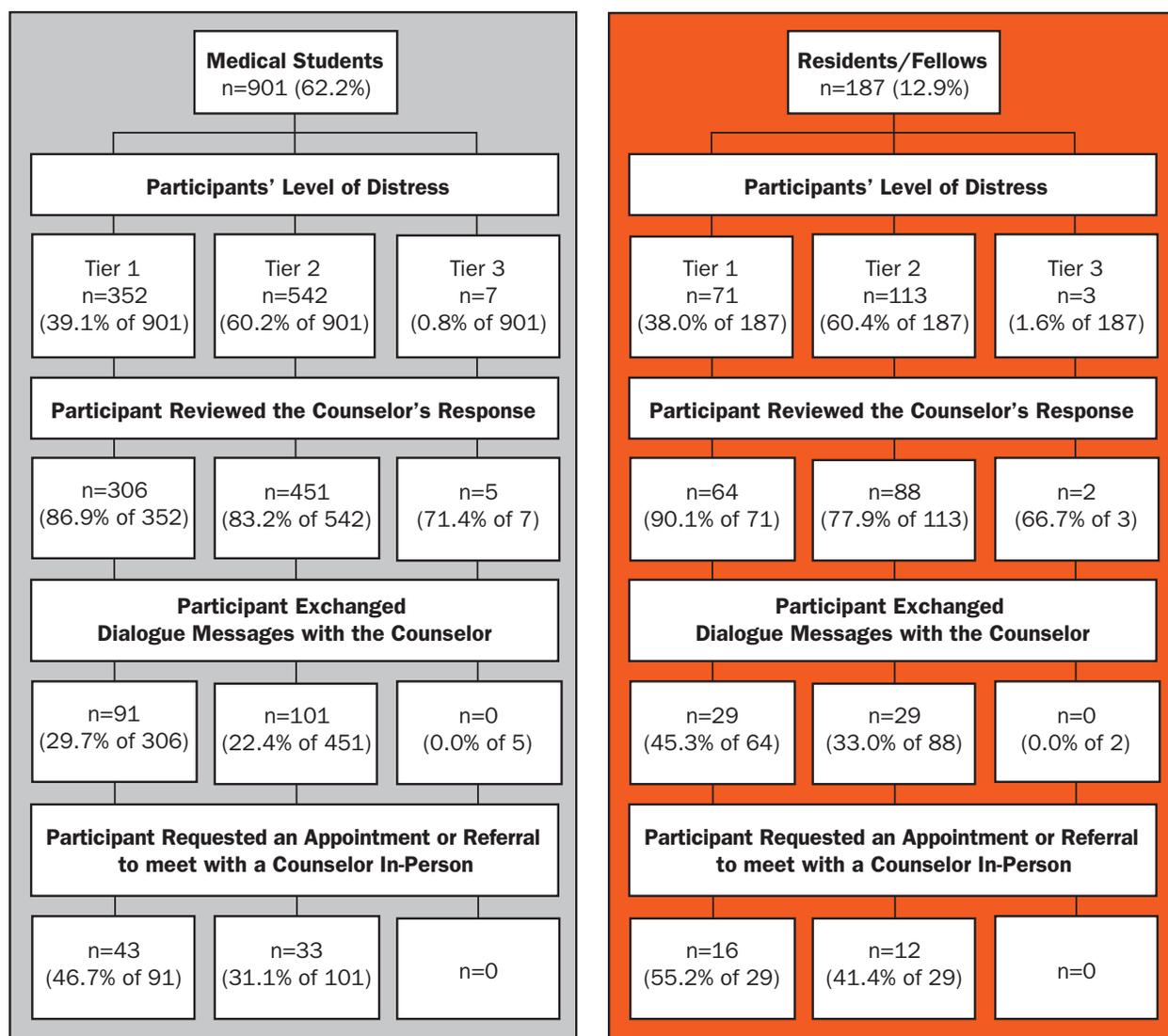
Tier 1A, 273 (30.3%) were Tier 1B, 542 (60.2%) were Tier 2, and 7 (0.8%) were Tier 3. Of the 79 Tier 1A participants and 273 Tier 1B participants, 67 (84.8%) and 239 (87.5%) respectively, logged back into the ISP platform to retrieve the counselor's response. Among the 542 Tier 2 participants and seven of Tier 3 participants, 451 (83.2%) and five (71.4%) respectively, logged back into the ISP platform and reviewed the counselor's response. Furthermore, of the 67 Tier 1A participants who reviewed the counselor's response, 29 (43.3%) participants engaged in at least one dialogue with the counselor, with 10 (34.5%) requesting an appointment or mental health referral. Of the 239 Tier 1B participants who reviewed the counselor's response, 62 (25.9%) further dialogued with the

counselor, with 33 (52.4%) requesting an in-person appointment with the program counselor or a mental health referral. Lastly, of the 451 Tier 2 participants who viewed the counselor's response, 101 (22.4%) dialogued with the counselor, with 33 (31.1%) requesting an in-person appointment with the program counselor or a mental health referral.

### Residents and Fellows

Of the 1,449 participants, 187 (12.9%) were residents or fellows. Of those, 17 (9.1%) were designated as Tier 1A, 54 (28.9%) were Tier 1B, 113 (60.4%) were Tier 2, and three (1.6%) were Tier 3. Of the 17 Tier 1A participants and 54 Tier 1B participants, 14 (82.4%) and 50 (92.6%) respectively, logged back into the ISP platform to retrieve the counselor's

**Figure 2**  
**Interactive Screening Program Flowchart** (Total Participants N=1,449)



response. Among the 113 Tier 2 participants and three Tier 3 participants, 88 (77.9%) and two (66.7%) respectively, logged back into the ISP platform and reviewed the counselor's response. Furthermore, of the 14 Tier 1A participants who viewed the counselor's response, five (35.7%) engaged in dialogue with the counselor, with two (40.0%) requesting an in-person appointment with the program counselor or mental health referral. Of the 50 Tier 1B participants who reviewed the counselor's response, 24 (48.0%) further dialogued with the counselor, with 14 (58.3%) requesting an appointment or referral to meet with a counselor. Lastly, of the 88 Tier 2 participants who viewed the counselor's response, 29 (33.0%) dialogued with the counselor, with 12 (41.4%) requesting an in-

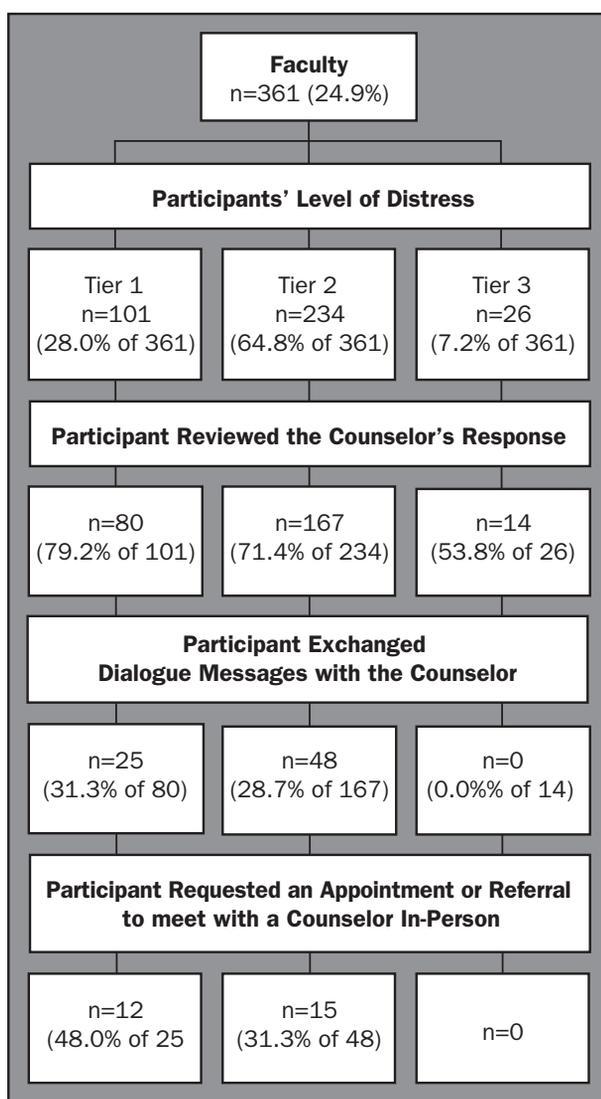
person appointment with the program counselor or a mental health referral.

### Faculty Physicians

Of the 1,449 participants, 361 (24.9%) were faculty. Of those, 34 (9.4%) were designated as Tier 1A, 67 (18.6%) were Tier 1B, 234 (64.8%) were Tier 2, and 26 (7.2%) were Tier 3. Of the 34 Tier 1A participants and 67 Tier 1B participants, 25 (73.5%) and 55 (82.1%) respectively, logged back into the ISP platform to retrieve the counselor's response. Among the 234 Tier 2 participants and 25 Tier 3 participants, 167 (71.4%) and 14 (53.8%) respectively, logged back into the ISP platform and reviewed the counselor's response. Furthermore, of the 25 Tier 1A participants to review the counselor's response, six (24.0%) participants engaged in dialogue with the counselor, with three (50.0%) requesting an in-person appointment with the program counselor or a mental health referral. Of the 55 Tier 1B participants who reviewed the counselor's response, 19 (34.5%) further dialogued with the counselor, with nine (47.4%) requesting an in-person appointment with the program counselor or a mental health referral. Lastly, of the 167 Tier 2 participants who viewed the counselor's response, 48 (28.7%) dialogued with the counselor, with 15 (31.3%) requesting an appointment or referral to meet with a counselor.

### Position, Levels of Distress, and Program Engagement

Although no differences were found between medical students and residents/fellows levels of distress ( $\chi^2[2, N = 1,088] = 1.20, p > .01$ ), there were significant differences between medical



**OVERALL, 131 TOTAL PARTICIPANTS REQUESTED AN IN-PERSON APPOINTMENT WITH THE PROGRAM COUNSELOR OR A MENTAL HEALTH REFERRAL. THESE INDIVIDUALS WHO REQUESTED REFERRAL WERE A MIXTURE OF TIER 1 AND TIER 2 PARTICIPANTS.**

students and faculty ( $\chi^2[2, N = 1,262] = 50.43, p < .01$ ), and residents/fellows and faculty ( $\chi^2[2, N = 548] = 11.6, p < .01$ ), with both of the less senior groups (medical students and residents/fellows) having higher rates of Tier 1 distress than faculty. In regard to program engagement, there were no differences among Tier 1 medical students,

**Table 1****Frequencies of Participant Demographics, Program Engagement, and Level of Distress**

	<b>Total N=1,449 N (% Yes) or M (SD)</b>	<b>Medical Students N=901 N (% Yes) or M (SD)</b>	<b>Residents/Fellows N=187 N (% Yes) or M (SD)</b>	<b>Faculty N=361 N (% Yes) or M (SD)</b>
<b>Mean Age (Years)</b>	32 (11)	25 (3)	31 (5)	48 (11)
<b>Gender (N=1,445)</b>				
<b>Female</b>	853 (59.0)	544 (60.5)	127 (68.3)	182 (50.6)
<b>Male</b>	588 (40.7)	353 (39.3)	59 (31.7)	176 (48.9)
<b>Prefer not to answer</b>	4 (0.3)	0 (0.0)	0 (0.0)	2 (0.6)
<b>Reviewed Counselor's Response</b>	1,177 (81.2)	762 (84.6)	154 (82.4)	261 (72.3)
<b>Dialogued with the Counselor</b>	323 (27.4)	192 (25.2)	58 (37.7)	73 (28.0)
<b>Requested Appointment or Referral</b>	131 (39.8)	76 (38.4)	28 (48.3)	27 (37.0)
<b>Tier (Level of Distress)</b>				
<b>Tier 1</b>	524 (36.2)	352 (39.1)	71 (38.0)	101 (28.0)
<b>Tier 2</b>	889 (61.4)	542 (60.2)	113 (60.4)	234 (64.8)
<b>Tier 3</b>	36 (2.5)	7 (0.8)	3 (1.6)	26 (7.2)

Frequencies and percentages of participant demographics, including mean age (SD) and gender, program engagement, including whether the participant viewed the counselor's response, exchanged dialogue messages with the counselor, or requested an appointment or referral to meet with a counselor in person, and participant level of distress.

residents/fellows, and faculty. All groups' high distress subgroups reviewed the counselors' response ( $\chi^2[2, N = 524] = 5.11, p > .01$ ), dialogued with the counselor ( $\chi^2[2, N = 450] = 5.92, p > .01$ ), and requested an appointment or referral to meet with a counselor in person at similar rates ( $\chi^2[2, N = 145] = 0.56, p > .01$ ).

Overall, 131 total participants requested an in-person appointment with the program counselor or a mental health referral. These individuals who requested referral were a mixture of Tier 1 (71 or 54.2% of those requesting referral) and Tier 2 (60 or 45.8%) participants. This represented 13.5% of the 524 total participants designated as Tier 1 and 6.7% of the 889 total participants designated as Tier 2.

## Discussion

ISP provides medical schools with an effective tool for accessing previously untreated, highly distressed medical students, residents and faculty physicians. The anonymity provided to each participant through the program's online platform reduces physician/trainee barriers to engagement, which in turn facilitates working through perceived barriers for seeking mental health services. This ISP data analysis confirms previous findings of significant distress, with 9% of physician and trainee ISP participants experiencing current suicidal ideation

and an additional 27% reporting other risk factors, such as prior suicide attempt or severe depressive symptoms, such as hopelessness and despair.<sup>18</sup> Among the 524 Tier 1 participants who submitted a questionnaire, 450 (85.9%) returned to the ISP platform to view the counselor's posted response—a very high rate of engagement. Of the 450 Tier 1 participants who viewed the counselor's response, 145 (32.2%) exchanged dialogue messages with the counselor, and of those, 71 (48.6%) requested an in-person appointment with the program counselor or a mental health referral.

Our ISP data analysis also confirms previous findings of low rates of "organic" help-seeking even among extremely distressed, suicidal medical students, residents and physicians. Among the most highly distressed (Tier 1) participants, 85.5% were not currently receiving counseling or therapy. Of the 104 Tier 1A participants, 85.6% viewed the counselor's response, 37.1% exchanged dialogue messages with the counselor and of those, 39.4% requested an in-person appointment with the program counselor or a mental health referral. Of the Tier 1B participants not currently receiving counseling or therapy, 88.4% viewed the counselor's response, 30.3% exchanged dialogue messages with the counselor, and of those, 54.8% requested an in-person appointment with the program counselor or a mental health referral. These results offer an

encouraging outcome, showing that a significant portion of distressed and at-risk medical students, residents and faculty physicians not currently receiving counseling or therapy are able to connect to a program counselor through ISP. A notable finding that the two junior groups — medical students and residents/fellows — had higher rates of suicidal distress than faculty may not be surprising to many who work in medical education, and is also consistent with general population findings that younger age demographic groups have higher rates of suicidal ideation than older age groups, even though rates of suicide completion are highest among middle and older age Americans.<sup>1</sup> Even Tier 2 participants, which included the majority of medical students, residents and faculty physicians who chose to participate in ISP, had high rates of engagement. This robust level of participation by Tier 2 respondents shows that even with the most commonly experienced types of distress — e.g., anxiety, lower levels of

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**MEDICAL SCHOOLS PROVIDE A UNIQUE SETTING FOR SUICIDE-PREVENTION INITIATIVES. WHEN MENTAL HEALTH SERVICES ARE MADE AVAILABLE TO MEDICAL STUDENTS, RESIDENTS AND PHYSICIANS, HELP-SEEKING BEHAVIOR CAN BE DEVELOPED AND ENCOURAGED.**

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depression and burnout — medical students, residents, and physicians are eager to engage, when the process and context feels safe and without threat of jeopardizing their standing. Also worth noting is that once participants reviewed the program counselors' response to their questionnaire, rates of engagement — including dialoging with the counselor and requesting or accepting referral to treatment — were consistent across levels of training and career, demonstrating a willingness to address mental health concerns regardless of seniority.

### **Implications**

Medical schools provide a unique setting for suicide-prevention initiatives. When mental health services are made available to medical students, residents and physicians, help-seeking behavior can be developed and encouraged. ISP is one approach that seems to be not only feasible and cost efficient, but unique in terms of the anonymity it affords participants, and the voluntary yet reasonably high levels of engagement it affords this population. In terms of financial cost, as each institution

receives its own program platform, the program has a one-time development fee as well as an annual licensing fee for the ongoing program management and technical support provided by the ISP staff team at AFSP. This includes training for program counselors, customized aggregate reports for the institution and IT support to ensure the platform remains operational and secure. The institution provides the program counselor, which is often part of an existing counseling staff member's time, or the role can be hired for the program — which can be particularly useful when the institution's programmatic efforts extend beyond ISP into education and other wellbeing approaches.<sup>11,18</sup>

### **Limitations**

A primary goal of ISP is to provide a method for distressed individuals to connect with mental health services in a safe and confidential way. Because we do not know how many individuals within the entire population were at risk of suicide during the implementation period, the proportion of the high-risk population identified through ISP is unable to be determined. However, the majority (97.6%) of program participants were designated as Tier 1 (36.2%) and Tier 2 (61.4%), combined with the low rate of current treatment among these participants (14.5% for Tier 1 and 7.1% for Tier 2) confirmed that ISP reached the intended target group — distressed individuals not currently receiving mental health services. While some medical schools with ISP conduct separate projects to track program outcomes of those who are referred to treatment via ISP, due to the anonymity of the program that data is not collected through the ISP platform, and therefore was not included as part of this analysis. Another limitation of the data is the fact that individuals voluntarily participate in ISP, responding to an email invitation or by finding the ISP website on their own. Therefore, it is possible that self-selecting ISP participants represent a subgroup within the physician and trainee population at each institution which is more distressed, more interested in the topic of wellbeing, or more willing or ready to be led to help. These possible selection-bias factors notwithstanding, the physician population has historically been extremely cautious and avoidant of help-seeking, even to the detriment of their own mental health and suicide risk.

### **Conclusion**

Addressing barriers to mental health care is critical to preventing suicide. Factors such as shame, stigma and fear of sanctions prevent many medical

students, residents and physicians from reaching out to get help. Implementing programs that provide a method for exploring and engaging in mental health services in a confidential manner is imperative to preventing suicide in this population. Our experience implementing ISP at multiple institutions and hospital settings is that it can be used as a stand-alone, or as part of an overarching wellbeing program.<sup>11,18</sup> ISP can be utilized in a targeted manner, whereby particular groups felt to be at higher risk can be reached out to more frequently, with the goal of linking those who need it to mental health treatment or extra support. Since the screening questionnaire is not meant to serve as a diagnostic tool, but rather for the purpose of self-identifying distress, and since the ISP program counselor functions in an educational and advisory capacity, the institution can be clear about the program not constituting clinical treatment. Therefore, anonymity can be protected in order to maximally engage a population that has a high degree of concern about the ramifications of mental-health diagnosis or treatment. The field is progressing in many ways to

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reduce stigma and treat mental health as a true aspect of health, but these transitions don't occur overnight. It will likely take time, as the profession's culture shifts, to significantly reduce physicians' sense of "safety" in addressing mental health concerns. The core components of ISP—participant anonymity, allowing participants to feel more comfortable addressing their concerns, and personalized interactive engagement with experienced counselors—offer an innovative method of overcoming barriers to help-seeking. ■

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