The SPDAT and VI-SPDAT: Tools Grounded in Evidence

Introduction:
The SPDAT is an evidence informed tool for assessing the needs of homeless individuals and families and for deciding the appropriate level of intervention to resolve each individual’s or family’s homelessness. When we say the SPDAT is evidence informed, we mean that it was developed in relation to existing scholarship, refined in the field, and proven to be both valid (the tool measures what it claims to measure) and reliable (the results of this assessment are consistent)\(^1\):

- Under the advisement of an outside panel of experts
- After an extensive review of existing literature and assessment tools
- Following several rounds of on-the-ground testing and refinement
- With ongoing, comprehensive rounds of evaluation and monitoring by OrgCode
- Through multiple independent, outside evaluations

The following pages describe the testing and evidence-basis for the SPDAT and the VI-SPDAT Prescreen Tool, its recently developed, street-based evolution.

Evolution of the SPDAT:
While OrgCode is the developer of the SPDAT, team leaders, frontline practitioners, service participants, and a panel of expert advisors have been instrumental in driving its development. The tool started with compilation, research and analysis on 13 different intake and assessment tools including such tools as the Denver Acuity Scale, Self-Sufficiency Matrix, Outcome Star, Camberwell Assessment of Needs, and HONOS. Interviews were conducted with 32 practitioners experienced with using those tools and the pros and cons of each, from across a range of jurisdictions, including: Alberta, Ontario, Michigan, New York, California; and among a variety of homeless service providers, including case managers, health care clinicians specializing in care to homeless persons, peer specialists, and support workers. A facilitated discussion ensued around what they would change or do differently if they had the power to do so.

Use of a Panel of Experts:
To strengthen the evidentiary base of the tool, OrgCode assembled an expert review panel. This panel consisted of academics across multiple disciplines – Social Work, Nursing, Psychology, Sociology, Anthropology, Social Planning, Women’s Studies, Education, Health Sciences and more. On the direction and advice of the expert panel, more than 160 journal articles have been reviewed, along with data sets from housing programs with positive housing rates (access and maintaining housing), program evaluations of various housing programs in several jurisdictions, and various white papers. In addition, clinical and quasi-clinical tools such as the Alcohol Severity Index, OSU’s Traumatic Brain Injury Screening Tool, Instrumental Activities of Daily Living Scale, and Assessment of Functional Living Skills were reviewed as used with homeless populations and residents of supporting housing.

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**Consulted Scholarly Articles and Works:**
OrgCode also conducted an exhaustive review of journal articles to inform the SPDAT. Given the volume of work that went into collecting, reading, analyzing and synthesizing this review, an exhaustive bibliography is not available. However, a broad sample of the articles and authors reviewed is provided in an appendix to this document. Additionally, OrgCode used data and program evaluations from programs such as DESC in Seattle, the Streets to Homes Program in Toronto, and the At Home/Chez Soi Project to inform the overall tool.

**Beta Testing and Version 1.0 of the SPDAT:**
In the early stages, OrgCode identified 12 team leaders in locations across North America to participate in various elements of development, testing and evaluation. Six team leaders participated in a brainstorming session of what the tool could and should include. The initial (beta) version of the SPDAT had 24 components and was used with 50 clients in four cities. OrgCode then gathered feedback from clients, frontline workers and team leaders. Based upon this feedback, the tool was consolidated to include 19 components and tested again with 50 clients in two different cities. Again, OrgCode gathered feedback from clients, frontline workers and team leaders. At this point the tool was amended to include 15 components and tested with an additional 50 clients in three cities. After another round of feedback from clients, frontline workers and team leaders, these 15 components were refined and shared again with the 12 initial team leaders (including some that had not tested implementation) as well as expert advisors. Final amendments and clarifications were then made for Version 1.

OrgCode invited twelve of the initial evaluating entities to roll out Version 1 in advance of other entities, and 11 chose to do so. Each selected a sample of clients with whom the SPDAT was not being used for comparison’s sake. Four of the initial entities were asked also to use HONOS, the Camberwell Assessment of Needs, the Denver Acuity Scale, and/or the Outcome/Recovery Star in addition to SPDAT.

**Creating and Evaluating Version 2 of the SPDAT:**
Internal amendments for Version 2 began in October 2010 after OrgCode staff shadowed practitioners using the tool. In December 2010, every entity that had used the SPDAT for three or more months was invited to complete a feedback survey. In total, 19 completed this survey. Key informant interviews with 15 team leaders, 15 frontline workers & 15 clients ensued. Eighty-seven percent of frontline staff reported that the SPDAT was easier to implement than other tools, while 97 percent reported that it was easier for clients to understand than other tools. Ninety-three percent of clients found that the language of the SPDAT provided a solid foundation for understanding what they needed to focus on in case management, and a full 100 percent felt that it was having a great or good impact on their overall housing stability.
Team leaders, reported that clients with whom they used the SPDAT had better housing outcomes at three months than non-SPDAT users (89% versus 72%), while both team leaders (87%) and frontline workers (100%) felt that the SPDAT improved their case planning efforts. OrgCode analyzed areas of consistent feedback for testing and inclusion in Version 2 (e.g., domestic violence; hoarding/collecting, etc.)

For Version 2, OrgCode identified 12 test sites (six of the initial 12 for Version 1, plus six new sites). Refined questions and descriptions were tested in each, and focus groups with clients, frontline workers and team leaders were completed in four sites. In addition, more analysis and testing on use of the tool with specific sub-populations was completed for groups such as: Aboriginal people; youth; seniors; childless couples; women; transgendered persons; persons with disclosed and diagnosed mental health issues; veterans; persons with diagnosed cognitive functioning impairments; and immigrants. Only youth did not score consistently with other populations. However, the SPDAT remained valid when youth were compared to other youth.

In a deeper examination of 43 clients of whose histories caseworkers already held an in-depth understanding, the SPDAT was tested to determine the accuracy of findings compared to known information. Based on this review, the answers to SPDAT were 96% accurate.

Three months into the rollout of Version 2, clients using the SPDAT had a 92 percent housing stability rate compared to 74 percent of non-SPDAT users. A full year in, SPDAT using clients had an 88 percent housing stability rate compared to a 63 percent rate for non-SPDAT users. Housing stability rates were highest in those communities that had made the greatest investments in training. Other factors that were common (though not universal) in SPDAT-using communities with higher housing stability rates included: standard review during team meetings; minimal staff turnover; and dedicated intake specialists/assessors.

Almost two thirds of clients using the SPDAT reported appreciating and using the visual graphing of changes over time. In the three months of testing Version 2, 92 percent of clients using the SPDAT were still housed compared to 74 percent of non-SPDAT clients.

Creating and Evaluating Version 3 of the SPDAT:
Working towards an update to Version 3, the feedback process began in the summer of 2012, and an initial rollout of the updated tool took place in the fall of 2012. Feedback, testing and development followed the same approach used in Version 2. Overall, Version 3 brought with it improvements to the clarity of sections regarding mental health & wellness and cognitive functioning, legal issues and abuse/trauma.

The development process for Version 3 of the tool involved direct input from more than 600 people with lived experience, more than 100 case managers, and more than 40 team leaders and program managers.
Since initial implementation of the tool, OrgCode has collected and analyzed anonymous data from 12 communities, including comparisons in service outcomes pre- and post-SPDAT. Across these communities – both rural and urban – the average recidivism rate prior to implementing the tool was 14.02 percent. Since the tool was put into place, this rate has been reduced to 9.12 percent. The percentage of clients exiting into permanent housing averaged 57 percent across these communities prior to implementing the tool. Since implementation, this rate has increased to 78 percent. Also, the percentage of clients achieving case plan goals has increased 150% across these communities since the tool was introduced.

**Outside Evaluation of the SPDAT (Versions 2 & 3):**

In 2011 and 2012, the SPDAT was subjected to extensive review by two provincial ministries in Canada for its use in housing programs as well as hospital discharge programs. In both instances, the SPDAT was deemed to be an acceptable tool, satisfying all conditions related to being evidence-informed, accurate, and rigorously tested.

Also in 2012, the SPDAT underwent an independent summative and outcome evaluation. Over a two-year period, the lead investigator in this evaluation examined the data from 85 programs where the SPDAT was used within a community of 90,000 people in Alberta, Canada. She concluded that the SPDAT:

- Provides a tiered-approach to services based on the scoring and the changes in scoring over time
- Provides baseline information that can be used to set reasonable indicators for years to come
- Provides evidence on when services can be phased out for clients demonstrating consistent, low and stable scoring
- Provides evidence on the ratio of clients to support workers
- Identifies areas where the support program does not appear to make a difference and leads to discussion on how things could be done differently
- Provides data that can be used reliably to inform a social return on investment analysis for programs
- Appropriately guides frontline workers and team leaders for intensive case management
- Reliably tracks the needs and service responses to clients over time.

In 2013, the SPDAT underwent an independent examination of inter-rater reliability. Four raters involving 469 different subjects were investigated. The model involved same-paired raters for subjects using a two-way model, examining consistency. The interclass correlation for single measures was 0.8748 and the average measure was 0.9673. The confidence interval for single measures was 0.9551, and the average confidence interval measure was 0.9901.
Development of the VI-SPDAT:
In 2013, OrgCode partnered with Community Solutions to merge the prescreen tool of the SPDAT with the Vulnerability Index, creating the VI-SPDAT. The Vulnerability Index is a tool based on medical research that helps communities identify homeless individuals who may face an elevated risk of death on the streets. Through Community Solutions’ 100,000 Homes Campaign, more than 120 communities have used the Vulnerability Index to house more than 80,000 of their most medically vulnerable homeless neighbors.

The partnership between OrgCode and Community Solutions has resulted in a very powerful tool to provide information on the priority of an assessed homeless person’s support and housing needs. The VI-SPDAT was tested with various homeless populations in California, Louisiana, Michigan and Alberta in the spring of 2013. Feedback from these sessions helped further refine the content, language and sequence of questions. A beta version of the VI-SPDAT was released at the National Alliance to End Homelessness Conference in Washington, DC in the summer of 2013. In the fall of 2013, the full first version of the tool was released.

Ongoing Use and Evaluation:
Both the SPDAT and VI-SPDAT continue to be vetted in many local communities, foundations, state and provincial governments, and service providers. For example, across dozens of communities in the US and Canada, these tools have become a vital part of coordinated access and common assessment. In Australia, the SPDAT and VI-SPDAT are being used by organizations that work with homeless populations with complex, co-occurring issues. In New Zealand the SPDAT has been reviewed and accepted by several consumer survivor groups. In some projects – for example a SAMSHA-CABHI grant for Michigan and a Freddie Mac Foundation grant in DC – the tool is also forming the backbone for new programs, research and analysis on better prioritizing and supporting homeless individuals and families.

More Information On the SPDAT and Vulnerability Index:
- For more information on the SPDAT, please visit the FAQ section of Org Code’s website.
- Please visit the website of the 100,000 Homes Campaign, coordinated by Community Solutions, for more information on the original Vulnerability Index.
APPENDIX A:
Scholarly articles and studies reviewed and considered in the development and ongoing refinement of the SPDAT include, but are not limited to (in no particular order, linked when openly available):

- Hwang
  - “Homelessness and Health”
  - “Mortality Amongst Homeless Men Using Homeless Shelters in Toronto, Ontario”
  - “Risk of Death Amongst Homeless Women”
  - “Multidimensional Social Support and the Health of Homeless Individuals”

- Jacobs
  - “The Homeless Assessment Program: A Service-Training Model for Providing Disability Evaluations for Homeless, Mentally Ill Individuals”

- Goldfinger
  - “Housing Placement and Subsequent Days Homeless Among Formerly Homeless Adults With Mental Illness”

- Goering
  - “Characteristics of Persons Who are Homeless for the First Time”
  - “What Difference Does Case Management Make?”
  - “Becoming and Remaining Homeless: A Qualitative Investigation”
  - “Improved Functioning for Case Management Clients”

- Chiu
  - “The Effect of Traumatic Brain Injury on the Health of Homeless People”

- Eynan
  - “Housing Placement and Subsequent Days Homeless Among Formerly Homeless Adults With Mental Illness”

- Tolomiczenko
  - “Assessing Homeless Mentally Ill Persons for Permanent Housing”
  - “Personality Assessment of Homeless Adults as a Tool for Service Planning”

- Finlayson
  - “The Process and Outcomes of a Multimethod Needs Assessment at a Homeless Shelter”
• **Wasylenko**
  - “Hostel Outreach Program: Assertive Case Management for Mentally Ill Homeless Persons”

• **Collins**
  - “Housing Retention in Single-Site Housing First for Chronically Homeless Individuals With Severe Alcohol Problems”
  - “Agreement Between Self-report and Archival Public Service Utilization Data among Chronically Homeless Individuals with Severe Alcohol Problems”

• **Pyke**
  - “Supporting People Not Structures: Changes in the Provision of Housing Support”

• **Letiecq**
  - “Social Support of Homeless and Housed Mothers”

• **Nelson**
  - “A Review of the Literature on the Effectiveness of Housing and Support, Assertive Community Treatment, and Intensive Case Management Interventions for Persons With Mental Illness Who Have Been Homeless”

• **Shinn**
  - “Social Relationships and Vulnerability to Becoming Homeless Among Poor Families”

• **Malone**
  - “Assessing Criminal History as a Predictor of Future Housing Success for Homeless Adults With Behavioral Health Disorders”

• **Schaffer**

• **Tsemberis**
  - “Pathways to Housing: Supported Housing for Street Dwelling Homeless Individuals with Psychiatric Disabilities”

• **Bates**
  - “Developing Measures to Assess Social Support Among Homeless and Poor People”

• **Padgett**
  - “Housing First Services For People Who Are Homeless with Co-occurring Serious Mental Illness and Substance Abuse”
• **Calsyn**
  ○ “Social Support, Psychiatric Symptoms and Housing: A Causal Analysis”

• **Lam**
  ○ “Correlates of Improvement in Quality of Life Among Homeless Persons With Serious Mental Illness”

• **Wolf**
  ○ “Changes in Subjective Quality of Life Among Homeless Adults who Obtain Housing: a Prospective Examination”

• **O’Connell**
  ○ “Rates and Risk Factors for Homelessness After Successful Housing in a Sample of Formerly Homeless Veterans”

• **Zanis**
  ○ “Reliability and Validity of the Addiction Severity Index with a Homeless Sample”

• **Drake**
  ○ “The Test-Retest Reliability of Standardized Instruments among Homeless Persons with Substance Use Disorders”