Case Description: Ms. E
Spine Surgery Candidate Interpretive Report

Ms. E is a 56-year-old, married retail clothing store assistant manager. She developed a herniated disc after a slip-and-fall type injury on the job. Her injury was covered under workers' compensation insurance. She underwent a lumbar discectomy 6 months after the injury, and initially felt significant pain relief. However, she never returned to work and 3 months after the first surgery she experienced a recurrence of severe back and right leg pain. She became a candidate for a 2-level lumbar spine fusion. This MMPI-2-RF protocol, which was a component of a presurgical psychological evaluation for the proposed fusion, was completed 1.5 years after the initial injury. Her physician has prescribed opioid medication for pain control during the last 6 months. Ms. E has no prior history of mental health intervention. She was raised in a family with an abusive, alcoholic father, and her parents divorced when she was 11. She hopes surgery will allow her to get off opioid medication and return to work.
MMPI-2-RF®
Spine Surgery Candidate Interpretive Report
Andrew R. Block, PhD, & Yossef S. Ben-Porath, PhD

ID Number: Ms. E
Age: 56
Gender: Female
Marital Status: Married
Years of Education: 15
Date Assessed: 08/10/2017
MMPI-2-RF Validity Scales

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Raw Score</th>
<th>T Score</th>
<th>Response %</th>
<th>Cannot Say (Raw)</th>
<th>Comparison Group Data: Spine Surgery Candidate (Women), N = 662</th>
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</thead>
<tbody>
<tr>
<td>Raw Score</td>
<td>3 10 4 1 3 13 9 0 8</td>
<td>48 57 F 61 51 66 67 67 37 52</td>
<td>98 100 100 100 100 100 100 100 100 100</td>
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<td>Percent True (of items answered): 38%</td>
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<tr>
<td>Mean Score</td>
<td>47 52 F 56 49 55 65 58 59 54</td>
<td>10 9 12 9 14 12 12 11 10</td>
<td>68 81 77 83 86 64 83 2 46</td>
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</tr>
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</table>

Comparison Group Data: Spine Surgery Candidate (Women), N = 662

Mean Score (±1 SD): 47 ±52 F ±56 ±49 ±55 ±65 ±58 ±59 ±54

Standard Dev (±1 SD): 10 9 12 9 14 12 12 11 10

Percent scoring at or below patient: 68 81 77 83 86 64 83 2 46
MMPI-2-RF Higher-Order (H-O) and Restructured Clinical (RC) Scales

Comparison Group Data: Spine Surgery Candidate (Women), N = 662

Mean Score (1 SD+): 51 48 43 52 64 53 46 45 49 46 47 42
Standard Dev (+1 SD): 11 9 8 11 11 10 10 8 9 10 9 8
Percent scoring at or below patient: 90 67 96 95 49 94 39 99 61 58 68 84

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.
MMPI-2-RF® Spine Surgery Candidate Interpretive Report
08/10/2017, Page 4

ID: Ms. E

MMPI-2-RF® Somatic/Cognitive and Internalizing Scales

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean Score (x+1 SD)</th>
<th>Standard Dev (x+1 SD)</th>
<th>Percent scoring at or below patient</th>
</tr>
</thead>
<tbody>
<tr>
<td>MLS</td>
<td>68</td>
<td>12</td>
<td>27</td>
</tr>
<tr>
<td>GIC</td>
<td>56</td>
<td>15</td>
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<td>HPC</td>
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<td>SUI</td>
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<td>9</td>
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<tr>
<td>HLP</td>
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<td>SFD</td>
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<td>11</td>
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<td>NFC</td>
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<td>AXY</td>
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<td>8</td>
<td>95</td>
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<tr>
<td>BRF</td>
<td>50</td>
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<td>MSF</td>
<td>51</td>
<td>8</td>
<td>18</td>
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Comparison Group Data: Spine Surgery Candidate (Women), N = 662

- Raw Score: 3 0 2 1 5 0 1 2 5 3 0 5 0 1
- T Score: 57 46 59 53 69 45 52 56 58 52 44 66 43 42
- Response %: 100 100 100 100 100 100 100 100 100 100 100 100 100

Somatic/Cognitive

Internalizing
MMPI-2-RF Externalizing, Interpersonal, and Interest Scales

<table>
<thead>
<tr>
<th>Scale</th>
<th>Raw Score</th>
<th>T Score</th>
<th>Response %</th>
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<tr>
<td>JCP</td>
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<tr>
<td>SUB</td>
<td>2</td>
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</tr>
<tr>
<td>AGG</td>
<td>2</td>
<td>51</td>
<td>100</td>
</tr>
<tr>
<td>ACT</td>
<td>1</td>
<td>39</td>
<td>100</td>
</tr>
<tr>
<td>FML</td>
<td>2</td>
<td>49</td>
<td>100</td>
</tr>
<tr>
<td>IPP</td>
<td>3</td>
<td>46</td>
<td>100</td>
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<tr>
<td>SAV</td>
<td>4</td>
<td>52</td>
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</tr>
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<td>SHY</td>
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</tr>
<tr>
<td>DSF</td>
<td>0</td>
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<td>AES</td>
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<td>MEC</td>
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Comparison Group Data: Spine Surgery Candidate (Women), N = 662

Mean Score ($\pm 1 SD$): 47 45 44 45 47 51 50 46 48 46 45

Percent scoring at or below patient: 95 96 89 42 76 43 71 55 77 96 99.5

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.
MMPI-2-RF PSY-5 Scales

<table>
<thead>
<tr>
<th>Scale</th>
<th>Raw Score</th>
<th>T Score</th>
<th>Response %</th>
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</thead>
<tbody>
<tr>
<td>AGGR-r</td>
<td>7</td>
<td>45</td>
<td>100</td>
</tr>
<tr>
<td>PSYC-r</td>
<td>3</td>
<td>56</td>
<td>100</td>
</tr>
<tr>
<td>DISC-r</td>
<td>13</td>
<td>69</td>
<td>100</td>
</tr>
<tr>
<td>NEGE-r</td>
<td>8</td>
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</tr>
<tr>
<td>INTR-r</td>
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<td>60</td>
<td>100</td>
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Comparison Group Data: Spine Surgery Candidate (Women), N = 662

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean Score</th>
<th>Standard Dev</th>
<th>Percent scoring at or below patient</th>
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<tbody>
<tr>
<td>AGGR-r</td>
<td>48</td>
<td>8</td>
<td>44</td>
</tr>
<tr>
<td>PSYC-r</td>
<td>47</td>
<td>8</td>
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<td>DISC-r</td>
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<td>11</td>
<td>80</td>
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</tbody>
</table>

The highest and lowest T scores possible on each scale are indicated by a "---"; MMPI-2-RF T scores are non-gendered.

AGGR-r    Aggressiveness-Revised
PSYC-r    Psychoticism-Revised
DISC-r    Disconstraint-Revised
NEGE-r    Negative Emotionality/Neuroticism-Revised
INTR-r    Introversion/Low Positive Emotionality-Revised
**MMPI-2-RF T SCORES (BY DOMAIN)**

### PROTOCOL VALIDITY

<table>
<thead>
<tr>
<th>Description</th>
<th>Score 1</th>
<th>Score 2</th>
<th>Score 3</th>
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<tr>
<td>Content Non-Responsiveness</td>
<td>1</td>
<td>48</td>
<td>57</td>
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<tr>
<td><strong>F, VRIN-r, TRIN-r</strong></td>
<td>CNS</td>
<td>VRIN-r</td>
<td>TRIN-r</td>
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<tr>
<td>Over-Reporting</td>
<td>61</td>
<td>51</td>
<td>66</td>
</tr>
<tr>
<td><strong>F-r, Fp-r, Fs, FBS-r, RBS</strong></td>
<td>F-r</td>
<td>Fp-r</td>
<td>Fs</td>
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<tr>
<td>Under-Reporting</td>
<td>37</td>
<td>52</td>
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<tr>
<td><strong>L-r, K-r</strong></td>
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### SUBSTANTIVE SCALES

<table>
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<tr>
<th>Domain</th>
<th>Score 1</th>
<th>Score 2</th>
<th>Score 3</th>
<th>Score 4</th>
<th>Score 5</th>
<th>Score 6</th>
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<tbody>
<tr>
<td>Somatic/Cognitive Dysfunction</td>
<td>61</td>
<td>57</td>
<td>46</td>
<td>59</td>
<td>53</td>
<td>69</td>
</tr>
<tr>
<td><strong>RC1, MLS, GIC, HPC, NUC, COG</strong></td>
<td>RC1</td>
<td>MLS</td>
<td>GIC</td>
<td>HPC</td>
<td>NUC</td>
<td>COG</td>
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<td>Emotional Dysfunction</td>
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<td>45</td>
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<td>56</td>
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<tr>
<td><strong>EID, RCd, SUI, HLP, SFD, NFC</strong></td>
<td>EID</td>
<td>RCd</td>
<td>SUI</td>
<td>HLP</td>
<td>SFD</td>
<td>NFC</td>
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<td><strong>THD, RC6, RC8</strong></td>
<td>THD</td>
<td>RC6</td>
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<td>Behavioral Dysfunction</td>
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<tr>
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<td>RC4</td>
<td>JCP</td>
<td>SUB</td>
<td></td>
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<tr>
<td>Interpersonal Functioning</td>
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<td>44</td>
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<tr>
<td><strong>FML, RC3, IPP, SAV, SHY, DSF</strong></td>
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<td>RC3</td>
<td>IPP</td>
<td>SAV</td>
<td>SHY</td>
<td>DSF</td>
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<td>Interests</td>
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<tr>
<td><strong>AES, MEC</strong></td>
<td>AES</td>
<td>MEC</td>
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</tr>
</tbody>
</table>

Scale scores shown in bold font are interpreted in the report.

*Note.* This information is provided to facilitate interpretation following the recommended structure for MMPI-2-RF interpretation in Chapter 5 of the *MMPI-2-RF Manual for Administration, Scoring, and Interpretation*, which provides details in the text and an outline in Table 5-1.
This interpretive report is intended for use by a professional qualified to interpret the MMPI-2-RF in the context of a presurgical psychological evaluation of spine surgery candidates. The information it contains should be considered in the context of the patient's background, the circumstances of the assessment, and other available information.

Interpretive statements in the Comparison Group Findings section are based on comparisons with the women of the Spine Surgery Candidate comparison group. Statements in the remaining sections of the report are based on T scores derived from the general MMPI-2-RF normative sample.

The report includes extensive annotation, which appears as superscripts following each statement in the narrative, keyed to Endnotes with accompanying Research References, which appear in the final two sections of the report. Additional information about the annotation features is provided in the headnotes to these sections and in the User's Guide for the Minnesota Multiphasic Personality Inventory-2-Restructured Form (MMPI-2-RF) Spine Surgery Candidate Interpretive Report (Spine-CIR) and Spinal Cord Stimulator Candidate Interpretive Report (Stim-CIR).

SYNOPSIS

This is a valid MMPI-2-RF protocol. Scores on the substantive scales indicate cognitive complaints and emotional and behavioral dysfunction. Cognitive complaints include difficulties in memory and concentration. Emotional-internalizing findings include demoralization, depression, and anger. Behavioral-externalizing problems relate to antisocial behavior.

Comparison group findings point to possible concerns about cognitive complaints, emotional problems including unhappiness and dissatisfaction, inefficacy, a low level of positive emotions, and anger, odd perceptions and beliefs, and behavioral problems including irresponsible behavior and substance use.

Possible presurgical risk factors are identified in the Demoralization and Depression, Pain and Somatic Sensitivity, Pain Coping, Health Orientation and Medical Adherence, Fear/Avoidance, Interpersonal, and Substance Abuse domains.

PROTOCOL VALIDITY

This is a valid MMPI-2-RF protocol. There are no problems with unscorable items. The patient responded to the items relevantly on the basis of their content, and there are no indications of over- or under-reporting.
SUBSTANTIVE SCALE INTERPRETATION

Clinical-level symptoms, personality characteristics, and behavioral tendencies of the patient are described in this section and organized according to an empirically guided framework. (Please see Chapter 8, Yossef S. Ben-Porath, Interpreting the MMPI-2-RF, for details.) Statements containing the word "reports" are based on the item content of MMPI-2-RF scales, whereas statements that include the word "likely" are based on empirical correlates of scale scores. Specific sources for each statement can be accessed with the annotation features of this report.

Somatic/Cognitive Dysfunction
The patient reports a diffuse pattern of cognitive difficulties. She is likely to complain about memory problems, not to cope well with stress, and to experience difficulties in concentration.

Emotional Dysfunction
The patient's responses indicate significant emotional distress. More specifically, she reports feeling sad and unhappy and being dissatisfied with her current life circumstances. She is likely to complain of feeling depressed.

She reports a lack of positive emotional experiences, significant anhedonia, and lack of interest.

The patient reports being anger-prone. She is indeed likely to have problems with anger, irritability, and low tolerance for frustration; to hold grudges; to have temper tantrums; and to be argumentative and abusive.

Thought Dysfunction
There are no indications of disordered thinking in this protocol.

Behavioral Dysfunction
The patient reports a significant history of acting-out, antisocial behavior and is likely to have poor impulse control, to have been involved with the criminal justice system, and to have difficulties with individuals in positions of authority. She is also likely to experience conflictual interpersonal relationships, to act out when bored, and to have antisocial characteristics.

Interpersonal Functioning Scales
These scales provide no further evidence of dysfunction.

Interest Scales
The patient reports an above average number of interests in activities or occupations of a mechanical or physical nature (e.g., fixing and building things, the outdoors, sports). Individuals who respond in this manner are likely to be adventure- and sensation-seeking. She reports an average number of interests in activities or occupations of an aesthetic or literary nature (e.g., writing, music, the theater).
DIAGNOSTIC CONSIDERATIONS

This section provides recommendations for psychodiagnostic assessment based on the patient's MMPI-2-RF results. It is recommended that she be evaluated for the following:

Emotional-Internalizing Disorders
- Depression-related disorder
- Anger-related disorders

Behavioral-Externalizing Disorders
- Antisocial personality disorder, substance use disorders, and other externalizing disorders

SPINE SURGERY COMPARISON GROUP FINDINGS

This section describes the MMPI-2-RF substantive scale findings in the context of the women of the Spine Surgery Candidate comparison group. Specific sources for each statement can be accessed with the annotation features of this report. Presurgical risk factors, postsurgical outcomes, and treatment recommendations associated with these results, if any, are provided in subsequent sections of this report.

The comparison group means reported on pages 2 through 6 of this report show that female spine surgery candidates score differently from the general MMPI-2-RF normative sample on several scales. Problems discussed earlier in the Substantive Scale Interpretation section are based on clinically elevated normative T scores of 65 and above. Potential difficulties identified in this section are based on scores that are unusually high in relation to the Spine Surgery Candidate (Women) comparison group, and thus may differ from those discussed earlier. If multiple risk factors are identified, the possibility of poor surgery results increases, but may be mitigated with psychological intervention.

Somatic/Cognitive Complaints
The patient reports a comparatively high level of cognitive complaints for a spine surgery candidate. Only 16.6% of comparison group members convey this or a greater number of cognitive problems.

Emotional/Internalizing Problems
The patient reports a comparatively large number of emotional problems for a spine surgery candidate. Only 11.9% of comparison group members convey this or a greater level of emotional difficulties. More specifically, she reports a relatively high level of unhappiness and dissatisfaction for this population. Only 7.3% of comparison group members convey this or a greater level of poor morale. In particular, she reports a comparatively high level of inefficacious decision making for a spine surgery candidate. Only 16.3% of comparison group members convey this or a greater level of perceived inefficacy.

She reports a comparatively low level of positive emotional experiences for a spine surgery candidate. Only 9.5% of comparison group members convey this or a lower level of positive emotions.
The patient reports a comparatively high level of problems with anger for a spine surgery candidate. Only 11.0% of comparison group members convey this or a greater level of anger proneness.

Unusual Thoughts, Perceptions, and Beliefs
The patient reports a comparatively high level of eccentric beliefs for a spine surgery candidate. Only 18.0% of comparison group members convey this or a greater level of peculiar thinking.

Behavioral/Externalizing Problems
The patient reports a comparatively large number of behavioral problems for a spine surgery candidate. Only 6.2% of comparison group members convey this or a greater level of behavioral difficulties. More specifically, her responses indicate a level of disconstraint reflecting behavioral control problems that may negatively affect surgical results. This level of poor impulse control is very uncommon among this population. Only 0.3% of comparison group members give evidence of this or a greater level of disconstraint. In particular, she reports a relatively high level of juvenile conduct problems for a spine surgery candidate. Only 8.8% of comparison group members convey this or a greater level of conduct problems during their teenage years. She also reports a comparatively large number of problems with substance use for this population. Only 11.6% of comparison group members convey this or a greater level of misusing substances.

PRESURGICAL PSYCHOLOGICAL RISK FACTORS

Psychological risk factors associated empirically with diminished surgical results are described in this section and organized according to nine problem domains identified in the professional literature as relevant to spine surgery outcomes. (Please see User's Guide for the MMPI-2-RF Spine Surgery Candidate Interpretive Report (Spine-CIR) and Spinal Cord Stimulator Candidate Interpretive Report (Stim-CIR) for details.) Specific sources for each statement can be accessed with the annotation features of this report.

Demoralization and Depression Problems
Compared with other spine surgery candidates, the patient is more likely to be experiencing depressive affect and to have a low energy level and feel exhausted.

Pain and Somatic Sensitivity Problems
Compared with other spine surgery candidates, the patient is more likely to perceive herself as deserving and needing assistance from others. She is also likely to report greater functional disability associated with pain.

Pain Coping Problems
Compared with other spine surgery candidates, the patient is more likely to catastrophize when experiencing pain. She is also likely to be less self-reliant.
Health Orientation and Medical Adherence Problems
Compared with other spine surgery candidates, the patient is less likely to seek out information about health\textsuperscript{39}, to feel confident in obtaining information from the physician\textsuperscript{39}, to be able to continue with exercise/diet recommendations when under stress\textsuperscript{39}, and to be engaged in overall health maintenance and improvement\textsuperscript{39}. She is also more likely to smoke\textsuperscript{40}.

Fear/Avoidance Problems
Compared with other spine surgery candidates, the patient is likely to express higher levels of fear and avoidance of work activities\textsuperscript{38}. She is also more likely to have been out of work for more than 2 months\textsuperscript{41}.

Interpersonal Problems
Compared with other spine surgery candidates, the patient is more likely to have had a chaotic or disrupted childhood\textsuperscript{42}, to have a partner who reinforces pain behavior\textsuperscript{43}, and to report a lack of social support\textsuperscript{44}. She is also likely to report higher levels of anger\textsuperscript{45}.

Substance Abuse Problems
Compared with other spine surgery candidates, the patient is more likely to have a diagnosis of Substance Use Disorder\textsuperscript{46}. She is also likely to be at increased risk for opioid abuse\textsuperscript{47}.

The candidate's scores are not associated with empirically identified risk factors in the following domains:
- Anxiety and Stress Problems
- Recovery Disincentive Problems

POSTSURGICAL OUTCOMES

The postsurgical outcome statements listed here are based on prospective empirical studies indicating that, relative to other candidates, this patient is at increased risk for these specific adverse results. Inclusion of an adverse outcome does not imply that it will definitely occur, nor can other negative outcomes be definitively ruled out. Specific sources for each statement can be accessed with the annotation features of this report.

Compared to other spine surgery candidates, post-surgery this patient is likely to:
- Report higher levels of pain\textsuperscript{48}
- Report greater levels of disability\textsuperscript{48}
- Experience more negative affect and higher levels of psychological distress\textsuperscript{48}
- Be more likely to take Schedule II opioid medication\textsuperscript{49}
- Be less likely to return to work\textsuperscript{50}
- Have lower levels of satisfaction with the results of surgery\textsuperscript{51}
- Convey stronger feelings that surgical results did not meet expectations\textsuperscript{51}
- Report a more negative overall outcome\textsuperscript{52}
TREATMENT RECOMMENDATIONS

This section contains inferential treatment-focused recommendations specifically for spine surgery candidates, based on the patient's MMPI-2-RF scores. Sources for each statement can be accessed with the annotation features of this report.

Recommendations Based on Elevated Emotional Dysfunction Scales
The patient is significantly demoralized, feels overwhelmed, and may be quite dissatisfied with life circumstances. She may have difficulty becoming motivated and following treatment recommendations. Helping the patient recognize positive aspects of her situation, and focusing on each improvement, however small, may help build momentum for recovery.

The patient may also be experiencing depressive affect, which could impact surgical outcome. Consideration should be given to antidepressant medication, which may also help with pain reduction, as depression can increase pain awareness. Including individual psychotherapy in the overall surgical treatment plan may help the patient identify and experience pleasurable activities while rehabilitating.

In addition, the patient is prone to experience anger, irritability, and poor frustration tolerance--all of which may impact relationships with the treatment team. It is recommended that providers collaborate with her in developing approaches to prepare for and recover from surgery, and help her anticipate and deal with setbacks in the recovery process.

Recommendations Based on Elevated Behavioral Dysfunction Scales
Test results indicate possible problems with authority figures. There may be increased risk of non-adherence to post-surgical treatment requirements. Having the patient participate and gain ownership in developing plans for rehabilitation and return to normal activity may reduce this risk.

ITEM-LEVEL INFORMATION

Unscorable Responses
Following is a list of items to which the patient did not provide scorable responses. Unanswered or double answered (both True and False) items are unscorable. The scales on which the items appear are in parentheses following the item content.

299. I feel helpless when I have to make some important decisions. (VRIN-r, RCd)

Critical Responses
Seven MMPI-2-RF scales--Suicidal/Death Ideation (SUI), Helplessness/Hopelessness (HLP), Anxiety (AXY), Ideas of Persecution (RC6), Aberrant Experiences (RC8), Substance Abuse (SUB), and Aggression (AGG)--have been designated by the test authors as having critical item content that may require immediate attention and follow-up. Items answered by the individual in the keyed direction (True or False) on a critical scale are listed below if her T score on that scale is 65 or higher.
The patient has not produced an elevated T score (≥ 65) on any of these scales.

User-Designated Item-Level Information

The following item-level information is based on the report user's selection of additional scales, and/or of lower cutoffs for the critical scales from the previous section. Items answered by the patient in the keyed direction (True or False) on a selected scale are listed below if her T score on that scale is at the user-designated cutoff score or higher. The percentage of the MMPI-2-RF normative sample (NS) and of the Spine Surgery Candidate (Women) comparison group (CG) that answered each item in the keyed direction are provided in parentheses following the item content.

Somatic Complaints (RC1, T Score = 61)

52. Item Content Omitted. (False; NS 17.5%, CG 46.5%)
65. Item Content Omitted. (False; NS 17.1%, CG 18.6%)
88. Item Content Omitted. (False; NS 29.2%, CG 66.2%)
137. Item Content Omitted. (True; NS 10.8%, CG 8.0%)
265. Item Content Omitted. (False; NS 18.7%, CG 96.4%)
290. Item Content Omitted. (False; NS 19.2%, CG 30.1%)
301. Item Content Omitted. (True; NS 9.0%, CG 54.8%)

Low Positive Emotions (RC2, T Score = 69)

25. Item Content Omitted. (False; NS 14.5%, CG 79.2%)
102. Item Content Omitted. (False; NS 6.2%, CG 8.8%)
160. Item Content Omitted. (False; NS 23.1%, CG 23.9%)
182. Item Content Omitted. (False; NS 66.3%, CG 53.6%)
195. Item Content Omitted. (False; NS 28.0%, CG 27.5%)
202. Item Content Omitted. (False; NS 53.4%, CG 91.8%)
222. Item Content Omitted. False; NS 19.6%, CG 14.4%)
246. Item Content Omitted. (False; NS 5.9%, CG 3.8%)
323. Item Content Omitted. (False; NS 34.9%, CG 16.3%)

Antisocial Behavior (RC4, T Score = 68)

5. Item Content Omitted. (True; NS 36.7%, CG 21.0%)
21. Item Content Omitted. (True; NS 47.1%, CG 17.7%)
38. Item Content Omitted. (False; NS 18.8%, CG 11.2%)
49. Item Content Omitted. (True; NS 29.6%, CG 11.2%)
66. Item Content Omitted. (True; NS 20.3%, CG 14.2%)
80. Item Content Omitted. (False; NS 21.2%, CG 15.9%)
126. Item Content Omitted. (False; NS 17.3%, CG 21.1%)
141. Item Content Omitted. (True; NS 34.2%, CG 15.3%)
156. Item Content Omitted. (True; NS 59.8%, CG 46.5%)
190. Item Content Omitted. (False; NS 28.6%, CG 18.1%)
253. Item Content Omitted. (True; NS 5.8%, CG 4.2%)
Cognitive Complaints (COG, T Score = 69)

59. Item Content Omitted. (False; NS 9.4%, CG 26.0%)
102. Item Content Omitted. (False; NS 6.2%, CG 8.8%)
136. Item Content Omitted. (True; NS 15.0%, CG 26.9%)
200. Item Content Omitted. (True; NS 17.8%, CG 31.7%)
306. Item Content Omitted. (True; NS 38.5%, CG 51.7%)

Anger Proneness (ANP, T Score = 66)

119. Item Content Omitted. (True; NS 39.5%, CG 34.0%)
134. Item Content Omitted. (False; NS 32.5%, CG 21.1%)
155. Item Content Omitted. (True; NS 41.6%, CG 24.2%)
293. Item Content Omitted. (False; NS 18.5%, CG 18.9%)
303. Item Content Omitted. (True; NS 28.6%, CG 27.2%)

Substance Abuse (SUB, T Score = 55)

49. Item Content Omitted. (True; NS 29.6%, CG 11.2%)
141. Item Content Omitted. (True; NS 34.2%, CG 15.3%)

Disconstraint-Revised (DISC-r, T Score = 69)

21. Item Content Omitted. (True; NS 47.1%, CG 17.7%)
42. Item Content Omitted. (True; NS 10.3%, CG 6.0%)
49. Item Content Omitted. (True; NS 29.6%, CG 11.2%)
61. Item Content Omitted. (False; NS 61.6%, CG 43.5%)
66. Item Content Omitted. (True; NS 20.3%, CG 14.2%)
75. Item Content Omitted. (True; NS 50.3%, CG 28.5%)
107. Item Content Omitted. (True; NS 47.3%, CG 14.8%)
115. Item Content Omitted. (True; NS 55.0%, CG 44.0%)
156. Item Content Omitted. (True; NS 59.8%, CG 46.5%)
190. Item Content Omitted. (False; NS 28.6%, CG 18.1%)
226. Item Content Omitted. (True; NS 21.5%, CG 17.4%)
253. Item Content Omitted. (True; NS 5.8%, CG 4.2%)
300. Item Content Omitted. (True; NS 26.5%, CG 14.7%)

Items for Follow-up

This section contains a list of items to which the patient responded in a manner warranting follow-up. The items were identified by presurgical assessment experts as having critical content. Clinicians are encouraged to follow up on these statements with the patient by making related inquiries, rather than reciting the item(s) verbatim. Each item is followed by the patient's response, the percentage of the Spine Surgery Candidate (Women) comparison group members who gave this response, and the scale(s) on which the item appears.

23. Item Content Omitted. (True; 16.5%; K-r, RC7, AGG, NEGE-r)
25. Item Content Omitted. (False; 79.2%; VRIN-r, EID, RC2, MLS)
49. Item Content Omitted. (True; 11.2%; BXD, RC4, SUB, DISC-r)
65. Item Content Omitted. (False; 18.6%; RC1)
105. Item Content Omitted. (False; 15.3%; VRIN-r, EID, RCd)
135. Item Content Omitted. (True; 22.1%; HLP)
141. Item Content Omitted. (True; 15.3%; VRIN-r, FBS-r, RC4, SUB)
152. Item Content Omitted. (True; 13.4%; VRIN-r, NFC)
156. Item Content Omitted. (True; 46.5%; VRIN-r, FBS-r, RBS, BXD, RC4, DISC-r)
172. Item Content Omitted. (True; 9.8%; EID, RCd)
246. Item Content Omitted. (False; 3.8%; VRIN-r, TRIN-r, EID, RC2, INTR-r)
261. Item Content Omitted. (True; 29.2%; VRIN-r, TRIN-r, FBS-r, EID, RCd)
331. Item Content Omitted. (True; 10.7%; VRIN-r, EID, RCd)
ENDNOTES

This section lists for each statement in the report the MMPI-2-RF score(s) that triggered it. In addition, each statement is identified as a Test Response, if based on item content, a Correlate, if based on empirical correlates, or an Inference, if based on the report authors' judgment. (This information can also be accessed on-screen by placing the cursor on a given statement.) For correlate-based statements, research references (Ref. No.) are provided, keyed to the consecutively numbered reference list following the endnotes.

1 Test Response: COG=69
2 Correlate: COG=69, Ref. 8, 16, 31, 50
3 Correlate: RCd=71, Ref. 50; COG=69, Ref. 50
4 Correlate: COG=69, Ref. 8, 31, 50
5 Correlate: EID=66, Ref. 22, 34, 50
6 Test Response: RCd=71
7 Correlate: RCd=71, Ref. 1, 3, 4, 5, 8, 9, 10, 11, 13, 14, 18, 19, 30, 31, 35, 38, 41, 45, 46, 47, 49, 50, 51, 52, 55, 56; RC2=69, Ref. 1, 3, 4, 5, 8, 11, 13, 14, 18, 19, 35, 38, 41, 45, 46, 47, 50, 51, 52, 55, 56
8 Test Response: RC2=69
9 Test Response: ANP=66
10 Correlate: ANP=66, Ref. 1, 8, 10, 15, 31, 33, 35, 50
11 Correlate: ANP=66, Ref. 50
12 Correlate: ANP=66, Ref. 31, 50
13 Test Response: RC4=68
14 Correlate: RC4=68, Ref. 1, 10, 12, 13, 14, 32, 35, 37, 39, 40, 42, 47, 50, 56; DISC-r=69, Ref. 50
15 Correlate: RC4=68, Ref. 3, 18, 31, 40, 44, 50
16 Correlate: RC4=68, Ref. 50
17 Correlate: RC4=68, Ref. 1, 50
18 Correlate: RC4=68, Ref. 10, 50
19 Correlate: RC4=68, Ref. 1, 2, 7, 8, 10, 18, 19, 20, 21, 31, 32, 35, 41, 42, 43, 44, 45, 46, 47, 48, 50, 53, 55
20 Test Response: MEC=69
21 Correlate: MEC=69, Ref. 50
22 Test Response: AES=62
23 Correlate: RCd=71, Ref. 17, 23, 29, 36, 47, 50, 54; RC2=69, Ref. 17, 23, 29, 36, 47, 50, 54
24 Inference: ANP=66
25 Correlate: RC4=68, Ref. 2, 19, 42, 47, 50, 54, 55, 57
26 Test Response: EID=66
27 Test Response: NFC=58
28 Test Response: PSYC-r=56
29 Test Response: BXD=57
30 Inference: RC4=68; DISC-r=69
31 Test Response: DISC-r=69
32 Test Response: JCP=63
33 Test Response: SUB=55
34 Correlate: RCd=71, Ref. 5, 29; RC2=69, Ref. 5, 29
35 Correlate: RCd=71, Ref. 24; RC2=69, Ref. 24
36 Correlate: RC2=69, Ref. 5; COG=69, Ref. 5
37 Correlate: RC2=69, Ref. 49
38 Correlate: RCd=71, Ref. 5
39 Correlate: EID=66, Ref. 28; RC2=69, Ref. 28
40 Correlate: RC4=68, Ref. 5; DISC-r=69, Ref. 5
41 Correlate: RCd=71, Ref. 5; RC2=69, Ref. 5
42 Correlate: RC4=68, Ref. 24
43 Correlate: ANP=66, Ref. 24
44 Correlate: RC2=69, Ref. 5
45 Correlate: RCd=71, Ref. 6; ANP=66, Ref. 6
46 Correlate: RC4=68, Ref. 25
47 Correlate: DISC-r=69, Ref. 5, 49
48 Correlate: RCd=71, Ref. 6, 26
49 Correlate: RCd=71, Ref. 6, 26; RC2=69, Ref. 6, 26
50 Correlate: EID=66, Ref. 6, 26; RCd=71, Ref. 6, 26
51 Correlate: RCd=71, Ref. 6, 27
52 Correlate: RCd=71, Ref. 6; RC2=69, Ref. 6
53 Inference: RCd=71
54 Inference: RC2=69
55 Inference: RC4=68
RESEARCH REFERENCE LIST

The following studies are sources for empirical correlates identified in the Endnotes section of this report.


28. Marek, R. J., Block, A. R., & Ben-Porath, Y. S. (under review). The adverse impact of psychosocial factors on spine surgery procedures is mitigated by patient activation.


End of Report
ITEM RESPONSES

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Note: The responses are for the ID: Ms. E, MMPI-2-RF® Spine Surgery Candidate Interpretive Report, dated 08/10/2017, Page 24.