PATIENT VERSUS PHYSICIAN VARIATION IN PERCEIVED CLINICAL USEFULNESS AND COSTS OF A BARIATRIC SURGERY PROGNOSTIC ENGINE

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Background

In deciding whether or not to have bariatric surgery, and which operation is best for each of them, morbidly obese patients consult many sources, including print and TV/radio media, libraries, internet, family and friends, primary providers and bariatric surgeons. Available information describes average weight loss and resolution of obesity co-morbidities for each operation, but it does not prognosticate outcomes for each individual patient. A new program uses pre-operative data to predict weight loss and co-morbidity status in individual obese patients for open and laparoscopic gastric bypass, adjustable gastric band, sleeve gastrectomy, and biliopancreatic bypass/duodenal switch up to 24 months in advance. How this program might be used by providers and patients and families is untested.

Objective

This investigation evaluated variations among morbidly obese patients and their families/friends and between patients and providers regarding the clinical usefulness and projected costs of a program that predicts weight and the resolution or presence of obesity co-morbidities up to two years in advance.

Methods

In an anonymous voluntary survey, physicians and other healthcare providers, morbidly obese patients who had undergone bariatric surgery or who were considering weight loss operations, their families and friends read a description of the bariatric surgery prediction program. They then completed a survey about their opinions of the program. Data included clinical role (patient, family/friends, physician, nurse, other providers), would the program be used, who would use it, and what should out of pocket costs be if the program were not covered by health insurance. Statistics were by the Chi-squared equation.

Results

• 76 individuals completed the survey: 21 post-operative bariatric surgery patients, 21 morbidly obese patients who were considering weight loss surgery, 3 non-obese patients, 4 family/friends of obese patients, 2 nurses, 2 bariatric surgery office staff, and 17 physicians (9 bariatric surgeons).
• 100% of respondents thought that the program would benefit morbidly obese patients in making decisions about whether or not to have bariatric surgery and which operation would be best for each.
• 76% of physicians would use the program in counseling morbidly obese patients in their practices. One doctor included the program for patients’ family and friends.
• 25% of medical physicians opposed bariatric surgery philosophically but still would use the program in their practices.

WHO WILL USE THIS PROGRAM? SURVEY OF POST-OPERATIVE BARIATRIC SURGERY PATIENTS AND MORBIDLY OBSE Patients CONSIDERING WEIGHT LOSS SURGERY

<table>
<thead>
<tr>
<th>Morbidly Obese</th>
<th>Family/Friends</th>
<th>Physicians</th>
<th>Nurses</th>
<th>Dieticians</th>
<th>Others*</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>60%</td>
<td>46%</td>
<td>9%</td>
<td>5%</td>
<td>6%</td>
</tr>
</tbody>
</table>

*Bariatric Coordinators, office staff, support groups, psychologists, case managers, clinics, insurance companies

IF IT IS NOT COVERED BY HEALTH INSURANCE, WHAT WOULD TO BARIATRIC SURGERY PREDICTION PROGRAM BE WORTH IN OUT-OF-POCKET COSTS?

<table>
<thead>
<tr>
<th>No estimate</th>
<th>Free</th>
<th>Up to $25</th>
<th>$50 and Higher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bariatric Patients</td>
<td>0%</td>
<td>31%</td>
<td>21%</td>
</tr>
<tr>
<td>Physicians</td>
<td>40%</td>
<td>6%</td>
<td>20%</td>
</tr>
</tbody>
</table>

P<0.0001
• 12.5% of Post-Operative Bariatric/Morbidly Obese patients valued the advance knowledge of the program at from $100 to $5,000
• Relative value to costs of the program did not vary Post-Operative Bariatric patients versus morbidly obese patients considering surgery.

Conclusions

• A program that predicts from pre-operative data up to 24 months in advance weight loss, BMI, and the resolution of hypertension, diabetes, obstructive sleep apnea, cholelithiasis, liver disease, and GERD after open and laparoscopic RYGB, adjustable gastric band, sleeve gastrectomy and biliopancreatic bypass/duodenal switch is embraced by both patients and providers.
• Physicians would use the program in counseling, planning and management of morbidly obese patients.
• The program had broad appeal among patients for morbidly obese individuals, family/friends, doctors, nurses, allied health and office staff, and even insurance companies all would use it.
• 40% of physicians could not estimate relative value of the program.
• More patients than physicians thought the program should be available for free.
• Conversely, more patients than physicians valued the program at $50 and higher.
• The program predicting results after five different bariatric operations can benefit patients and will be accessed by both morbidly obese patients and providers.