

## OBESITY CHRONIC CARE MANAGEMENT PLAN

### OBESITY OVERVIEW

Obesity is a complex, multifactorial condition in which excess body fat may put a person at health risk. Basic treatment of overweight and obese patients requires a comprehensive approach involving diet and nutrition, regular physical activity, and behavioral change, with an emphasis on long-term weight management rather than short-term extreme weight reduction. Obese persons have a greater mortality risk, compared with non-obese persons. In particular, obesity increases the risk of multiple co-morbid medical conditions, including hypertension, dyslipidemia, coronary artery disease, type 2 diabetes via insulin resistance, gallbladder disease, sleep apnea, osteoarthritis, and various forms of cancer. Obesity often affects self-esteem, self-confidence, and emotional health. Obesity via all of these health risks may affect employability.

#### Diagnosis:

Obesity is defined as a body mass index (BMI = weight in kilograms divided by height in meters squared), but if weight is measured in pounds and inches, the BMI is calculated as [weight (in pounds)/height (in inches)<sup>2</sup>] multiplied by 703 (conversion factor).

- A BMI of 25.0 to 29.9 kg per m<sup>2</sup> is defined as overweight.
- There are three classes of obesity severity:
  - Class I (BMI of 30.0 to 34.9 kg per m<sup>2</sup>)
  - Class II (BMI of 35.0 to 39.9 kg per m<sup>2</sup>)
  - Class III (BMI of equal to or greater than 40.0 kg per m<sup>2</sup>)

#### Plan:

Successful management of the overweight and obese student involves multiple treatment strategies, most focusing on modification of the student's lifestyle (e.g., diet and physical activity habits).

Behavior modification techniques include:

- Self-monitoring with stimulus control and avoiding triggers for unhealthy food choices, which may mean avoiding the desert tray with baked pies and cakes and sticking to fruit or jello.
- Portion control with less food on the plate and discouraging second helpings, where 1/2 of the plate should be fruits and vegetables and 1/4 of the plate lean meat/protein source (1/4 starch or carbohydrate if desired).
- Stress management that encourages exercise activities; remind them that motion/activity produces weight loss and promotes energy.
- Social support for weight management and the buddy exercise system, which are also an integral part of intervention.
- Replacing calorie-dense fried food choices with lower calorie/lower fat substitutes.
- Working with the food services manager at your center to provide healthier menu options on a daily basis.
- Offering students who participate in this program non-food incentives such as fun-filled field trips (allow students to suggest what they would like to do) to help motivate them.
- Starting with very small steps for the many students who may need to. With these students, the importance of avoiding weight gain should also be stressed. Weight loss goals can be introduced gradually.
- Aiming for a weight reduction of 1 to 2 pounds per week. Remind students that a weight reduction program that is gradual and sensible is more likely to be sustainable and long-lasting.
- Educating students that health and weight issues affect employability.

#### Pre-arrival Activities:

- Review height and weight and calculate BMI when possible.  
Note: This information may not be available unless the student has other co-morbid disorders such as asthma, hypertension, sleep apnea, diabetes type 2, or a musculoskeletal disorder.
- When possible, obtain previous weight and pattern of weight status (weight gain vs. weight loss) over time.

**Upon Arrival on Center:**

- During admission physical, obtain accurate height and weight and calculate BMI. Students who are noted to fall within any category of overweight or obesity should be offered help in managing their weight.
- They should return for a scheduled follow-up session to discuss weight loss/weight management.
- Diet preferences, triggers to overeating, a history of eating disorders (anorexia or bulimia), weight history including weight loss attempts in the past, drug and/or alcohol use, health history of co-morbid disorders (such as asthma, hypertension, diabetes, sleep apnea), and emotional/psychological disorders (such as depression, anxiety, bipolar disorder) should be assessed and treated.
- Concurrent symptoms (shortness of breath, chest pain, and decreased exercise tolerance) that may occur with exercise should also be assessed.

**Documentation of Chronic Care Management Plan (CCMP) Implementation:**

- In addition to appropriate entries on the chronic problem list, the progress note should annotate all ongoing care and interaction.
- An obesity management flowsheet can be used to document ongoing care (see sample).
- Student weigh-in frequency may occur weekly, biweekly, or monthly at times and frequencies agreed upon and convenient for student and staff.

**Transition to Employability/Community:**

- A post-weight and BMI assessment should occur and be recorded prior to separation from Job Corps.
- Students should be encouraged to continue lifestyle changes that have helped them to manage their weight loss.
- A copy of the flowsheet may be given to the student as a reminder of progress and success.

**References:**

"Successful Management of the Obese Patient," *American Family Physician*, 61/12 (June 15, 2000).

"Obesity: Assessment and Management in Primary Care," *American Family Physician*, 63/11 (June 1, 2001).

**Applicant/Student Name:** \_\_\_\_\_

**OBESITY CHRONIC CARE MANAGEMENT PLAN**

**OUTREACH AND ADMISSIONS PERIOD**

Please provide us with the following information.

1. Date of diagnosis: \_\_\_\_\_
2. Age of onset: \_\_\_\_\_ Severity: \_\_\_\_\_
3. List current medications and/or treatment including dosage and frequency prescribed.  
\_\_\_\_\_  
\_\_\_\_\_
4. Has applicant been compliant with medications and treatment? If no, please explain.  
\_\_\_\_\_  
\_\_\_\_\_
5. List past hospitalizations for co-morbid conditions including dates, reason for admission, and discharge summaries.  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
6. What is current status and prognosis for co-morbid conditions?  
\_\_\_\_\_
7. Will the applicant need to continue follow-up under your care? If yes, please list the date and/or frequency of follow-up appointments.  
\_\_\_\_\_  
\_\_\_\_\_
8. In your opinion, will the applicant be able to self-manage his medications unsupervised and participate in a vocational training program? If no, please explain.  
\_\_\_\_\_  
\_\_\_\_\_
9. In your opinion, will the applicant be appropriate to reside in a dormitory style residence with minimal supervision? If no, please explain.  
\_\_\_\_\_  
\_\_\_\_\_
10. What is the applicant's current regimen of diet and exercise?  
\_\_\_\_\_
11. Is there an anticipated need for bariatric surgery?  
\_\_\_\_\_
12. What is the applicant's smoking history?  
\_\_\_\_\_
13. Does the applicant use hormonal contraception? (females only)  
\_\_\_\_\_

**Applicant/Student Name:** \_\_\_\_\_

14. Does the applicant have health insurance documentation?

\_\_\_\_\_

Please sign below and return the form in the attached addressed envelope.

\_\_\_\_\_  
**Print Name and Title**

\_\_\_\_\_  
**Signature**

\_\_\_\_\_  
**Phone**

\_\_\_\_\_  
**Date**

For any questions, please call

\_\_\_\_\_  
**Admission Counselor/Health and Wellness Staff**

\_\_\_\_\_  
**Phone**

Name: \_\_\_\_\_

Student ID#: \_\_\_\_\_ DOB: \_\_\_\_\_

**OBESITY CHRONIC CARE MANAGEMENT PLAN**

**CAREER PREPARATION PERIOD, CAREER DEVELOPMENT PERIOD, CAREER TRANSITION PERIOD**

**Goals:**

1. Enhance employability by optimizing weight management.
2. Educate the student regarding self-management.
3. Reduce the likelihood of long-term complications.
4. Optimize therapy with diet and exercise.
5. Implement regularly scheduled follow-up visits.

| <b>CAREER PREPARATION PERIOD</b> |           |   |
|----------------------------------|-----------|---|
| <b>YES</b>                       | <b>NO</b> |   |
|                                  |           | Establish an obesity action plan for obese students, defined as BMI $\geq$ 30   |
|                                  |           | Weekly visits initially when engaged in weight management program   |
|                                  |           | Visits every 2-3 months for monitoring if not engaged in weight management program  |
|                                  |           | Assess vocational training match  |
|                                  |           | Mandatory TUPP/smoking cessation enrollment   |
|                                  |           | Annual influenza vaccination in October or November   |
|                                  |           | Emergency response plan   |
|                                  |           | <b>Educate student about potential obesity complications</b> <ul style="list-style-type: none"> <li>• Cardiovascular (hypertension, hyperlipidemia, cor pulmonale)</li> <li>• Diabetes mellitus, type 2</li> <li>• Pulmonary (sleep apnea)</li> <li>• Liver (steatohepatitis)</li> <li>• Gallbladder (gallstones)</li> <li>• Reproductive (PCOS)</li> <li>• Orthopedic (SCFE)</li> <li>• Skin (acanthosis Nigricans, striae)</li> <li>• CNS (pseudotumor cerebri)</li> <li>• Psychosocial/quality-of-life issues</li> </ul> |
|                                  |           | <b>Educate student about lifestyle choices</b> <ul style="list-style-type: none"> <li>• Weight management</li> <li>• Encourage whole fruits, vegetables, low fat milk, increased fiber</li> <li>• Avoid soda and fruit juices</li> <li>• Encourage aerobic physical activity (exercise 30 minutes per day, 5 days per week)</li> <li>• Avoid sedentary lifestyle (limit TV)</li> <li>• Avoid smoking</li> <li>• Limit alcohol use</li> </ul>  |
|                                  |           | <b>Educate student on weight management as it relates to employment</b>   |
|                                  |           | <b>Encourage participation in a weight management program (on or off center)</b>  |
| <b>CAREER DEVELOPMENT PERIOD</b> |           |   |
|                                  |           | <b>Monitor adherence issues</b> <ul style="list-style-type: none"> <li>• Medication regimen</li> <li>• Medication refills</li> <li>• Routine medical care</li> <li>• Urgent medical care</li> <li>• Environmental control</li> <li>• Self-monitoring</li> <li>• Physiotherapy</li> <li>• Rest</li> <li>• Exercise</li> <li>• Nutrition</li> <li>• Tobacco, alcohol, drug use</li> </ul>   |

Name: \_\_\_\_\_

Student ID#: \_\_\_\_\_ DOB: \_\_\_\_\_

| CAREER TRANSITION PERIOD |  |  |
|--------------------------|--|--|
|                          |  | Conduct a Wellness Center exit interview approximately 2 weeks before program completion.  |
|                          |  | Identify potential sources of primary health care, and specialty care if needed, in the work community.                            |
|                          |  | Obtain signed HIPAA authorizations for the transfer of student health records to identified health care providers.                 |
|                          |  | Assist the student in enrolling or maintaining enrollment in a public or private health insurance program.                         |
|                          |  | Provide the student with a copy of the SF-93, SF-88, immunization records, and chronic care management plan, including flowsheets. |
|                          |  | Provide the student with an adequate amount of medication(s) and supplies at departure.  |

### Barriers to Weight Management

- Lack of access to healthy food choices
- Inadequate knowledge of the health consequences of obesity
- Lack of cultural emphasis on healthy eating
- Lack of access to exercise facilities
- Inadequate knowledge of the health benefits of physical activity
- Low levels of peer support and time to exercise

### Promising Practices

- Weight improvement programs
- Nutrition education
- Partner with Food Services staff—gather student input on foods offered in the cafeteria through tasting parties, surveys, and informal conversation; allow student preferences to guide the menu, while ensuring the food is nutrient-rich
- Survey students on physical activity preferences and implement these preferences
- “Heart Healthy” logo on food choices
- Exercise classes offered  $\geq 3$  times weekly
- Involvement of personal trainers and registered dietitians
- Involvement of center staff
- Student incentives
- Make learning about nutrition fun through strategies such as playing games, hosting a cooking club, or field trips to grocery stores
- Teamwork on centers—students who are interested in weight management can benefit from the involvement of health staff, recreation staff, food service staff, Residential Advisors (RAs), and instructors

### Principles of Weight Management

- “Eat different, not significantly less”; change the way your plate looks: think of a plate in four sections and try a plate with  $\frac{1}{2}$  fruit and vegetables,  $\frac{1}{4}$  lean meat/protein, and  $\frac{1}{4}$  starch/carbohydrate if desired
- Three meals, including breakfast!
- Scheduled, healthy snacks
- Fruit, vegetables, and fiber-rich foods
- Limited calorie-dense foods
- Increase time and intensity of physical activity
- Decrease sedentary activity
- Establish social support/reinforcement

**See Obesity Flowsheet to track student progress.**



## Body Mass Index Table

|                 | Normal               |     |     |     |     | Overweight |     |     |     |     | Obese |     |     |     |     | Extreme Obesity |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----------------|----------------------|-----|-----|-----|-----|------------|-----|-----|-----|-----|-------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| BMI             | 19                   | 20  | 21  | 22  | 23  | 24         | 25  | 26  | 27  | 28  | 29    | 30  | 31  | 32  | 33  | 34              | 35  | 36  | 37  | 38  | 39  | 40  | 41  | 42  | 43  | 44  | 45  | 46  | 47  | 48  | 49  | 50  | 51  | 52  | 53  | 54  |
| Height (inches) | Body Weight (pounds) |     |     |     |     |            |     |     |     |     |       |     |     |     |     |                 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 58              | 91                   | 96  | 100 | 105 | 110 | 115        | 119 | 124 | 129 | 134 | 138   | 143 | 148 | 153 | 158 | 162             | 167 | 172 | 177 | 181 | 186 | 191 | 196 | 201 | 205 | 210 | 215 | 220 | 224 | 229 | 234 | 239 | 244 | 248 | 253 | 258 |
| 59              | 94                   | 99  | 104 | 109 | 114 | 119        | 124 | 128 | 133 | 138 | 143   | 148 | 153 | 158 | 163 | 168             | 173 | 178 | 183 | 188 | 193 | 198 | 203 | 208 | 212 | 217 | 222 | 227 | 232 | 237 | 242 | 247 | 252 | 257 | 262 | 267 |
| 60              | 97                   | 102 | 107 | 112 | 118 | 123        | 128 | 133 | 138 | 143 | 148   | 153 | 158 | 163 | 168 | 174             | 179 | 184 | 189 | 194 | 199 | 204 | 209 | 215 | 220 | 225 | 230 | 235 | 240 | 245 | 250 | 255 | 261 | 266 | 271 | 276 |
| 61              | 100                  | 106 | 111 | 116 | 122 | 127        | 132 | 137 | 143 | 148 | 153   | 158 | 164 | 169 | 174 | 180             | 185 | 190 | 195 | 201 | 206 | 211 | 217 | 222 | 227 | 232 | 238 | 243 | 248 | 254 | 259 | 264 | 269 | 275 | 280 | 285 |
| 62              | 104                  | 109 | 115 | 120 | 126 | 131        | 136 | 142 | 147 | 153 | 158   | 164 | 169 | 175 | 180 | 186             | 191 | 196 | 202 | 207 | 213 | 218 | 224 | 229 | 235 | 240 | 246 | 251 | 256 | 262 | 267 | 273 | 278 | 284 | 289 | 295 |
| 63              | 107                  | 113 | 118 | 124 | 130 | 135        | 141 | 146 | 152 | 158 | 163   | 169 | 175 | 180 | 186 | 191             | 197 | 203 | 208 | 214 | 220 | 225 | 231 | 237 | 242 | 248 | 254 | 259 | 265 | 270 | 278 | 282 | 287 | 293 | 299 | 304 |
| 64              | 110                  | 116 | 122 | 128 | 134 | 140        | 145 | 151 | 157 | 163 | 169   | 174 | 180 | 186 | 192 | 197             | 204 | 209 | 215 | 221 | 227 | 232 | 238 | 244 | 250 | 256 | 262 | 267 | 273 | 279 | 285 | 291 | 296 | 302 | 308 | 314 |
| 65              | 114                  | 120 | 126 | 132 | 138 | 144        | 150 | 156 | 162 | 168 | 174   | 180 | 186 | 192 | 198 | 204             | 210 | 216 | 222 | 228 | 234 | 240 | 246 | 252 | 258 | 264 | 270 | 276 | 282 | 288 | 294 | 300 | 306 | 312 | 318 | 324 |
| 66              | 118                  | 124 | 130 | 136 | 142 | 148        | 155 | 161 | 167 | 173 | 179   | 186 | 192 | 198 | 204 | 210             | 216 | 223 | 229 | 235 | 241 | 247 | 253 | 260 | 266 | 272 | 278 | 284 | 291 | 297 | 303 | 309 | 315 | 322 | 328 | 334 |
| 67              | 121                  | 127 | 134 | 140 | 146 | 153        | 159 | 166 | 172 | 178 | 185   | 191 | 198 | 204 | 211 | 217             | 223 | 230 | 236 | 242 | 249 | 255 | 261 | 268 | 274 | 280 | 287 | 293 | 299 | 306 | 312 | 319 | 325 | 331 | 338 | 344 |
| 68              | 125                  | 131 | 138 | 144 | 151 | 158        | 164 | 171 | 177 | 184 | 190   | 197 | 203 | 210 | 216 | 223             | 230 | 236 | 243 | 249 | 256 | 262 | 269 | 276 | 282 | 289 | 295 | 302 | 308 | 315 | 322 | 328 | 335 | 341 | 348 | 354 |
| 69              | 128                  | 135 | 142 | 149 | 155 | 162        | 169 | 176 | 182 | 189 | 196   | 203 | 209 | 216 | 223 | 230             | 236 | 243 | 250 | 257 | 263 | 270 | 277 | 284 | 291 | 297 | 304 | 311 | 318 | 324 | 331 | 338 | 345 | 351 | 358 | 365 |
| 70              | 132                  | 139 | 146 | 153 | 160 | 167        | 174 | 181 | 188 | 195 | 202   | 209 | 216 | 222 | 229 | 236             | 243 | 250 | 257 | 264 | 271 | 278 | 285 | 292 | 299 | 306 | 313 | 320 | 327 | 334 | 341 | 348 | 355 | 362 | 369 | 376 |
| 71              | 136                  | 143 | 150 | 157 | 165 | 172        | 179 | 186 | 193 | 200 | 208   | 215 | 222 | 229 | 236 | 243             | 250 | 257 | 265 | 272 | 279 | 286 | 293 | 301 | 308 | 315 | 322 | 329 | 338 | 343 | 351 | 358 | 365 | 372 | 379 | 386 |
| 72              | 140                  | 147 | 154 | 162 | 169 | 177        | 184 | 191 | 199 | 206 | 213   | 221 | 228 | 235 | 242 | 250             | 258 | 265 | 272 | 279 | 287 | 294 | 302 | 309 | 316 | 324 | 331 | 338 | 346 | 353 | 361 | 368 | 375 | 383 | 390 | 397 |
| 73              | 144                  | 151 | 159 | 166 | 174 | 182        | 189 | 197 | 204 | 212 | 219   | 227 | 235 | 242 | 250 | 257             | 265 | 272 | 280 | 288 | 295 | 302 | 310 | 318 | 325 | 333 | 340 | 348 | 355 | 363 | 371 | 378 | 386 | 393 | 401 | 408 |
| 74              | 148                  | 155 | 163 | 171 | 179 | 186        | 194 | 202 | 210 | 218 | 225   | 233 | 241 | 249 | 256 | 264             | 272 | 280 | 287 | 295 | 303 | 311 | 319 | 326 | 334 | 342 | 350 | 358 | 365 | 373 | 381 | 389 | 396 | 404 | 412 | 420 |
| 75              | 152                  | 160 | 168 | 176 | 184 | 192        | 200 | 208 | 216 | 224 | 232   | 240 | 248 | 256 | 264 | 272             | 279 | 287 | 295 | 303 | 311 | 319 | 327 | 335 | 343 | 351 | 359 | 367 | 375 | 383 | 391 | 399 | 407 | 415 | 423 | 431 |
| 76              | 156                  | 164 | 172 | 180 | 189 | 197        | 205 | 213 | 221 | 230 | 238   | 246 | 254 | 263 | 271 | 279             | 287 | 295 | 304 | 312 | 320 | 328 | 336 | 344 | 353 | 361 | 369 | 377 | 385 | 394 | 402 | 410 | 418 | 426 | 435 | 443 |

Source: Adapted from *Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report*.