Path to bariatric nurse certification: the practice analysis

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Abstract
Background: In 2005, the American Society for Metabolic and Bariatric Surgery (ASMBS) nursing membership embarked on a journey to develop a specialty certification program for nurses caring for morbidly obese and bariatric surgical patients. In keeping with the certification industry best practices, a practice analysis study was conducted to create an empirically sound foundation for the new nursing specialty certification examination.

Methods: Task force meetings, subject-matter expert interviews, and an external review process were implemented to create a definition of the specialty in terms of 4 domains of practice, 45 nursing tasks, and 54 knowledge areas. The definition encompassed the work of bariatric nurse coordinators, bariatric program directors, and floor nurses caring for morbidly obese and bariatric surgical patients. A survey was administered to 1084 nurses practicing in the specialty to validate the domains, tasks, and knowledge.

Results: Some differences in the time spent in each of the domains and tasks were noted for the survey respondents in the different job roles. Nevertheless, the respondents for all job roles rated the domains and tasks moderately or highly important in optimizing the outcomes for morbidly obese and bariatric surgery patients. In addition, most respondents agreed that the 54 knowledge areas were acquired during the first 2 years of practice in the specialty.

Conclusion: The survey results validated a specialized body of nursing knowledge rooted in the tasks that define professional practice. The results are being used to guide the development of a certification program for nurses practicing in the specialty and to provide guidance for education and training initiatives. (Surg Obes Relat Dis 2010;6:399–407.) © 2010 American Society for Metabolic and Bariatric Surgery. All rights reserved.

Keywords: Practice analysis; Bariatric nursing; Certification; Bariatric surgery

Registered nurses constitute the majority of the Integrated Health Science Section (formerly the Allied Health Science Section) of the American Society for Metabolic and Bariatric Surgery (ASMBS). ASMBS members voiced an interest in developing a certifica-
tion program for bariatric surgical nurses in the early 1990s.

Certification within any professional field measures competence in a specific set of knowledge, tasks, and skills that define that field and distinguish it from others. The process of creating a certification examination is stringent and well-defined [1]. It is a serious undertaking, preceded by consensus that the goal of certification is worthwhile to pursue [2], that it will have value to the targeted professionals [3–5], and that the field is unique and subject to examination [6,7]. The process begins with a comprehensive delineation of the work done within the field, otherwise known as a practice analysis.

A strategic planning group, formed from leaders within the ASMBS nurse membership, issued a call for volunteers from the bariatric nursing community to participate in the practice analysis process. A practice analysis task force of subject matter experts was selected from the volunteers by the strategic planning group with the aim of representing differing geographic regions, practice environments, levels of bariatric surgical nursing experience, and surgical procedures. The present report provides the process of the practice analysis of bariatric nursing. Professional Examination Service, a not-for-profit organization specializing in national licensing and certification program development and administration, was contracted to coordinate the study. Professional Examination Service has been instrumental in assisting in the development of several nursing certification programs [1,7,8]. By working with a certification expert, the ASMBS ensured that the practice analysis would adhere to the certification industry standards and provide the foundation for a psychometrically sound and legally defensible certification process.

The ASMBS was established as an organization whose purpose is to advance the art and science of bariatric surgery and the care of bariatric patients [9]. The Integrated Health Science Section of the ASMSB first identified the need to pursue registered nurse certification in bariatric surgery in 1996. The creation of a certification examination in the field of bariatric surgical nursing was identified as a method to test the working body of knowledge necessary and to provide guidelines for a fundamental level of competency that would promote excellence in clinical practice while caring for the morbidly obese/bariatric surgical population.

The American Board of Nursing Specialties has defined a nursing specialty certification as “formal recognition of specialized knowledge, skills, and experience demonstrated by the achievement of standards identified by a nursing specialty to promote optimal health outcomes” [10]. Certification offers validation of knowledge and clinical expertise [4]. It promotes excellence, helps to achieve and maintain a current knowledge base [11], and has been shown to increase the quality of nursing care [12].

In 2002, a proposal was presented to the ASMSB executive council to develop a program. A committee was established to do the background work and bring the certification program and examination to fruition. Representatives of the American Nurses Association and their credentialing arm, the American Nurses Credentialing Center, the Association of Perioperative Registered Nurses, and the Oncology Nurses Certification Corporation were consulted for their experience with certification program development [13].

By October 2005, with the encouragement and approval of the then Allied Health Science Section of the ASMSB and the encouragement and financial support of the ASMSB Executive Council, Foundation, and Corporate Council, a mission statement and action plan for the practice analysis and certification process were developed. This set the stage for conducting the practice analysis to define the activities performed and the advanced body of knowledge and clinical decision-making skills necessary to practice bariatric surgical nursing. In addition to serving as the template for constructing the new certification examination, the practice analysis can also serve as a resource for others in related health care fields, guide the development of standards of practice in the care of the morbidly obese/bariatric surgical patient, and provide a basis for incorporating this specialty into the basic curriculum for nursing education.

**Methods**

The delineation of the skills of the nurse working with morbidly obese and bariatric surgical patients was performed from 2 perspectives: the tasks performed in clinical practice and the knowledge base of the nurse performing the tasks. Several methods were used to identify the key elements of practice, including interviews, focus groups, subject-matter expert meetings, and a survey of practitioners in the specialty.

A task force of subject-matter experts was charged with creating a description of practice that included the tasks performed and the advanced body of knowledge and clinical decision-making skills necessary to practice bariatric surgical nursing. Through their combined experience, the task force reflected the entire spectrum of care from preoperative through follow-up and incorporated the principles and practices of nonoperative weight loss. Two 2-day task force meetings were held.

In performing their analysis, the task force focused on describing the practice of nurses with 2 years of experience in the specialty. Two years of experience was selected, because it was identified as the length of time it would take to acquire and become proficient in the bariatric nursing fundamentals and because it was consistent with the eligibility requirements of many existing nursing certifications.

A larger pool of bariatric nurse volunteers participated in a series of interviews, focus groups, and surveys. Before the first task force meeting, telephone interviews concerning critical incidents were conducted with 10 additional bariat-
ric nurses who represented the 3 roles of interest (i.e., nurse coordinators, program coordinators, and floor nurses). The critical incident technique was designed to identify the subset of knowledge that has a critical effect on successful job performance. In this process, interviewees were asked to reflect on successful and unsuccessful incidents on the job and to describe the knowledge base that enabled success (or that was missing in the case of unsuccessful performance).

At the first task force meeting, the group created an initial draft delineation of the domains (or major areas) of practice, tasks performed, and knowledge required in the bariatric nursing specialty. After the meeting, 2 focus panels were conducted in different regions of the United States, during which participants reacted to the task force’s initial delineation of bariatric nursing practice. Additionally, the draft was circulated by electronic mail to a group of 10 independent reviewers for comment. The reviewers were all noted experts and/or published authors in the field. The task force reviewed the results of these 2 data collection activities at their second meeting and finalized the description of practice.

The final description of bariatric nursing practice consisted of 4 domains: clinical management (including preoperative/prehospital, perioperative, and follow-up), multidisciplinary team collaboration, outreach, and program administration. A total of 45 specific tasks performed by nurses caring for morbidly obese and bariatric surgical patients and 54 knowledge areas required for the successful performance of the tasks were identified (see Appendix “Certified Bariatric Nurse Practice Analysis: Nursing Care of the Morbidly Obese and Bariatric Surgical Patient”).

To validate the practice description developed by the task force, a Web-based survey was conducted of registered nurses practicing in the bariatric specialty. Before dissemination, the survey was piloted by 60 bariatric surgical nurses and was found to demonstrate content and face validity. Because no national database of specialty practitioners exists, a number of sources were tapped to identify bariatric nurses to serve as potential survey participants. The sample of 1084 nurses included ASMBS members, nonmember attendees at ASMBS meetings, and nominees obtained from academia and from bariatric programs across the United States.

The sequence of contacts with the survey sample included a presurvey invitation, a message containing the link to the survey, and a reminder to nonrespondents. For members of the sample for whom electronic mail addresses were available, the communications were sent by electronic mail. For the remainder of the sample, ground mail was used. As an incentive for participation, 2 continuing education contact hours were offered for completing the survey.

In the survey, the participants were asked to rate the domains, tasks, and knowledge areas and to complete a demographic questionnaire. Two ratings were collected for each of the domains: how important each domain was to optimizing the outcomes for morbidly obese and bariatric surgery patients and how much time respondents spent in each domain. For each task, the respondents rated the importance and how frequently they performed the task. For each knowledge area, the respondents rated the importance and the point in specialty practice at which the knowledge was acquired.

Results

Response rate

Of the 1084 surveys distributed, 56 were either undeliverable or the registered nurse was no longer practicing in bariatric nursing. Of the 1028 eligible participants, 504 surveys were returned, correlating to a 49% response rate. This response rate was in the middle of the range reported in the published data (21–96%) [14] and was greater than the Professional Examination Service had obtained in previous job analysis surveys associated with new certification programs.

Demographic characteristics of survey respondents

At the end of the survey, a demographic section was included to identify specific practice information for each respondent. Of the 504 surveys returned, about 95% completed this section.

By state. Respondents represented all states except New Mexico, Vermont, Hawaii, and Rhode Island. The states with the largest representation included Texas (9%), California (7%), Florida (6%), Minnesota (6%), and Ohio (5%).

Years of experience. The average experience as a registered nurse was 20 years (range 1–31). Most respondents indicated they had worked 1–10 years (average 5) with bariatric surgical patients.

Current position title. The respondents were asked to identify their current title as a registered nurse working with bariatric surgical patients. If their title was not listed, the respondent was asked to write in their actual title. Of the respondents, 33% were bariatric nurse coordinators, 28% were bariatric program coordinators, 24% were hospital floor nurses, and 15% held an “other” position title. The category “other” included operating room nurses, nurse practitioners, administrators, registered nurses working in the bariatric industry with minimal direct patient contact, and registered nurses working in the office setting.

Time worked with bariatric surgical patients. The respondents indicated the proportion of their work time spent with bariatric surgical patients as follows: bariatric nurse coordinator, 78%; bariatric program coordinator, 86%; hospital floor nurse, 48%; and other, 60%.

Number of procedures. The respondents identified the number of procedures performed at their facilities. Of the re-
spondents, 44% indicated their facilities performed >200 procedures annually, 34% of the respondents indicated their facilities performed 101–200 procedures annually, and 22% indicated their facilities performed <100 procedures annually.

Procedure types. The respondents were asked to identify which procedures were performed at their facility (Table 1). The top procedures included laparoscopic (91%) and open (73%) Roux-en-Y gastric bypass, laparoscopic adjustable banding (70%), and laparoscopic (41%) and open (44%) revision of bariatric surgery. Other procedures identified included laparoscopic and open gastric sleeve, laparoscopic and open duodenal switch, and laparoscopic and open vertical banded gastroplasty.

Ratings for domains

The time spent ratings for the domains (Table 2) indicated that all respondent subgroups spent the largest proportion of their time in the clinical management domain, with a range of 38–63%, depending on the position title. Both nurse coordinators and floor nurses spent their second greatest amount of time in multidisciplinary team collaboration. In contrast, program coordinators spent their second greatest amount of time in the program administration domain. The domain that all groups spent the least amount of time in was outreach.

The respondents were also asked to rate the importance of each domain on a scale of 1–4 (minimally important to highly important). All groups rated the clinical management domain as highly important (mean 3.9). Multidisciplinary team collaboration (mean 3.7), program administration (mean 3.6), and outreach (mean 3.5) were all rated at or greater than the midpoint between moderately important and highly important.

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**Table 1**

Procedures performed at program/practice affiliation by position

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Bariatric nurse coordinator</th>
<th>Bariatric program coordinator</th>
<th>Hospital floor nurse</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open VBG</td>
<td>3 (2)</td>
<td>2 (2)</td>
<td>6 (11)</td>
<td>10 (5)</td>
<td>21 (4)</td>
</tr>
<tr>
<td>Laparoscopic VBG</td>
<td>7 (6)</td>
<td>4 (3)</td>
<td>10 (18)</td>
<td>14 (7)</td>
<td>35 (7)</td>
</tr>
<tr>
<td>LAGB</td>
<td>92 (75)</td>
<td>84 (69)</td>
<td>37 (65)</td>
<td>130 (70)</td>
<td>343 (70)</td>
</tr>
<tr>
<td>Gastric pacemaker</td>
<td>4 (3)</td>
<td>0 (0)</td>
<td>3 (5)</td>
<td>7 (4)</td>
<td>14 (3)</td>
</tr>
<tr>
<td>Open RYGB</td>
<td>89 (72)</td>
<td>93 (77)</td>
<td>43 (75)</td>
<td>130 (70)</td>
<td>355 (73)</td>
</tr>
<tr>
<td>Laparoscopic RYGB</td>
<td>116 (94)</td>
<td>111 (92)</td>
<td>54 (95)</td>
<td>164 (88)</td>
<td>445 (91)</td>
</tr>
<tr>
<td>Open BPD</td>
<td>6 (5)</td>
<td>5 (4)</td>
<td>1 (2)</td>
<td>9 (5)</td>
<td>21 (4)</td>
</tr>
<tr>
<td>Laparoscopic BPD</td>
<td>7 (6)</td>
<td>0 (0)</td>
<td>2 (4)</td>
<td>8 (4)</td>
<td>17 (3)</td>
</tr>
<tr>
<td>Open BPD with DS</td>
<td>10 (8)</td>
<td>8 (7)</td>
<td>3 (5)</td>
<td>13 (7)</td>
<td>34 (7)</td>
</tr>
<tr>
<td>Laparoscopic BPD with DS</td>
<td>9 (7)</td>
<td>8 (7)</td>
<td>4 (7)</td>
<td>11 (6)</td>
<td>32 (7)</td>
</tr>
<tr>
<td>Open bariatric surgery revision</td>
<td>57 (46)</td>
<td>53 (44)</td>
<td>28 (49)</td>
<td>77 (41)</td>
<td>215 (44)</td>
</tr>
<tr>
<td>Laparoscopic bariatric surgery revision</td>
<td>50 (41)</td>
<td>46 (38)</td>
<td>31 (54)</td>
<td>71 (38)</td>
<td>198 (41)</td>
</tr>
<tr>
<td>Open gastric sleeve</td>
<td>5 (4)</td>
<td>6 (5)</td>
<td>3 (5)</td>
<td>5 (3)</td>
<td>19 (4)</td>
</tr>
<tr>
<td>Laparoscopic gastric sleeve</td>
<td>20 (16)</td>
<td>12 (10)</td>
<td>7 (12)</td>
<td>17 (9)</td>
<td>56 (11)</td>
</tr>
<tr>
<td>Other</td>
<td>1 (1)</td>
<td>3 (2)</td>
<td>2 (4)</td>
<td>11 (6)</td>
<td>17 (3)</td>
</tr>
<tr>
<td>Total</td>
<td>123</td>
<td>121</td>
<td>57</td>
<td>187</td>
<td>488</td>
</tr>
</tbody>
</table>

*VBG = vertical banded gastroplasty; LAGB = laparoscopic adjustable gastric banding; RYGB = Roux-en-Y gastric bypass; BPD = biliopancreatic diversion; DS = duodenal switch.*

Data presented as numbers, with percentages in parentheses.

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**Table 2**

Percentage of time ratings for domains of practice by position

<table>
<thead>
<tr>
<th>Domain</th>
<th>Bariatric nurse coordinator (n = 123)</th>
<th>Bariatric program coordinator (n = 121)</th>
<th>Hospital floor nurse (n = 57)</th>
<th>Other (n = 188)</th>
<th>Total (n = 489)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical management</td>
<td>46.7 ± 20.1</td>
<td>38.1 ± 18.8</td>
<td>63.2 ± 28.5</td>
<td>42.5 ± 27.9</td>
<td>44.9 ± 25.2</td>
</tr>
<tr>
<td>Multidisciplinary team collaboration</td>
<td>19.0 ± 10.4</td>
<td>18.4 ± 8.4</td>
<td>15.6 ± 11.3</td>
<td>19.0 ± 15.0</td>
<td>18.4 ± 12.1</td>
</tr>
<tr>
<td>Outreach</td>
<td>13.4 ± 9.9</td>
<td>16.3 ± 8.9</td>
<td>6.0 ± 8.4</td>
<td>11.9 ± 12.9</td>
<td>12.7 ± 11.2</td>
</tr>
<tr>
<td>Program administration</td>
<td>17.6 ± 14.4</td>
<td>25.6 ± 15.6</td>
<td>9.1 ± 14.4</td>
<td>20.1 ± 19.4</td>
<td>19.6 ± 17.4</td>
</tr>
<tr>
<td>Other</td>
<td>3.3 ± 11.5</td>
<td>1.6 ± 5.5</td>
<td>6.1 ± 20.7</td>
<td>6.6 ± 21.3</td>
<td>4.5 ± 16.4</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

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Ratings for tasks

The 45 tasks were rated at least moderately important to optimizing outcomes for the morbidly obese and bariatric surgery patients. Of the 54 tasks, 17 were performed at least quarterly, semiannually, or annually, 24 were performed at least monthly or almost monthly, and 4 were performed weekly or almost weekly. The tasks that the survey respondents performed most frequently were in the clinical management domain and those performed least frequently were in the program administration domain.

The pre- and postoperative clinical management tasks were performed more frequently by bariatric nurse coordinators and bariatric program coordinators than by floor nurses and nurses with “other” position titles. Registered nurses in all position titles performed tasks related to multidisciplinary team collaboration at a similar frequency level. The bariatric program coordinators and nurses with “other” position titles performed outreach tasks more frequently than did the bariatric nurse coordinators and floor nurses.

Despite performing tasks at different frequencies, all 4 groups of nurses unanimously rated all tasks exceptionally high in importance (mean 3.3–3.9). Even if the registered nurse did not perform a task often, they rated it as important in optimizing the outcome of the bariatric patient.

Ratings for knowledge statements

The 54 knowledge areas were rated at least moderately important to optimizing outcomes for morbidly obese and bariatric surgery patients. The importance ratings of the respondents in the different position titles were virtually identical. In addition, each of the 54 knowledge areas was rated as being acquired during the first 2 years of specialized practice in bariatrics by most respondents.

Discussion

In the present study, the practice of bariatric nursing was defined in terms of 4 domains of clinical practice, 45 tasks performed, and 54 knowledge areas required. The 4 domains were defined as follows:

- Clinical management: provide and document direct and indirect clinical care and education to morbidly obese and bariatric surgery patients/family/support persons.
- Multidisciplinary team collaboration: communicate and educate to facilitate continuity of care among multidisciplinary teams for optimal patient outcomes, and to improve the quality of care for morbidly obese and bariatric surgery patients.
- Outreach: provide advocacy, support, and education to individuals, support groups, community groups, and healthcare professionals related to morbidly obese and bariatric surgery patients.
- Program administration: provide leadership and a framework to coordinate services for optimal outcomes, and to improve the quality of care for morbidly obese and bariatric surgery patients.

The domains were each seen as moderately to highly important for optimal patient care outcomes. The small percentage of time that survey respondents spent in any other domains attests to the completeness of the domain structure as a vehicle for describing the specialty and organizing the certification examination.

The practice analysis resulted in the creation and validation of a detailed description of the scope of work (i.e., tasks performed) and knowledge base a bariatric nurse must have to become certified. The 45 tasks were all performed with sufficient frequency and were rated sufficiently important to optimal patient care outcome to warrant their inclusion in a test content outline. Similarly, excluding research, the 54 knowledge areas were all acquired within a period of 2 years of clinical experience with morbidly obese/bariatric surgical patients, supporting the establishment of a 2-year experience eligibility requirement for the certification.

The information gathered in the practice analysis study formed the foundation for the development of the ASMBS certification examination for the specialty of bariatric nursing.

By establishing the linkage between the content of the examination and the work performed by the bariatric nurse, implementation of the findings from the study lend support to the argument that scores on the certification examination indicate the level of competence a candidate possesses in terms of the knowledge requirements for clinical practice in the specialty.

Respondents in all 3 position titles spent a significant portion of their work time with bariatric surgical patients. There were some position-related differences in the frequency of task performance. Floor nurses performed several tasks less frequently than bariatric nurse coordinators or bariatric program coordinators; however, floor nurses rated those same tasks as important to optimal care. Based on these findings, it was determined that a single certification examination could reasonable serve the needs of nurses in all three roles.

Conclusion

The present practice analysis is the first systematic and comprehensive attempt at delineating the practice of bariatric nursing, defined as care of the morbidly obese and bariatric surgical patient. The practice analysis was developed to serve as a foundation for the certified bariatric nurse certification program and examination. In addition, the practice analysis might assist in the development of best practice guidelines for the nursing care of the morbidly obese/bariatric surgical patient, play a significant role in the develop-
ment of educational curriculum for basic registered nurse education and bariatric nursing specialty education, and serve as a resource for other related bariatric healthcare disciplines.

As the scope and practice of bariatric nursing evolves, the certification process will respond by updating the practice analysis at a minimal interval of 5 years.

The certification examination was developed according to this practice analysis, using strict psychometric standards. The first examination was administered in June 2007. As of September 2009, >700 nurses have achieved certification from 48 states and the District of Columbia.

Disclosures

The authors have no commercial associations that might be a conflict of interest in relation to this article.

Appendix:

Certified bariatric nurse practice analysis: nursing care of the morbidly obese and bariatric surgical patient

Domain 01: Clinical management (64%)—provide and document direct and indirect clinical care and education to morbidly obese and bariatric surgery patients/family/support persons.

Clinical management—preoperative (prehospital) tasks

01. Provide and educate candidate/family/support persons with information and resources to assist them in making an informed decision regarding bariatric surgery (e.g., preoperative process, surgical options, risks and benefits, lifestyle changes).

02. Assess and document candidate’s understanding of bariatric surgery options.

03. Obtain and review medical, surgical, psychosocial, and cultural history to minimize risks and identify unique needs of the morbidly obese as a bariatric surgery candidate.

04. Coordinate referrals and communicate with the inpatient and outpatient multidisciplinary team to increase opportunity for optimal outcomes.

05. Educate patient/family/support persons regarding preventative measures, signs and symptoms of short- and long-term complications, and appropriate reporting of signs/symptoms of complications.

06. Educate patient/family/support persons about phases of bariatric surgery, including patient responsibilities (e.g., preoperative evaluation, hospital stay, physical activity, nutrition and supplementation, follow-up, support groups).

07. Evaluate and address patient/family/support persons’ knowledge deficits specific to bariatric surgery.

Clinical management—perioperative tasks (hospitalization)

08. Assess and individualize patient care according to unique needs of morbidly obese and bariatric surgery patients.

09. Obtain specialized equipment with appropriate tolerances for morbidly obese and bariatric surgery patients.

10. Implement patient care protocols (e.g., airway, transfer, position, medication, pain management) that address the special needs of morbidly obese and bariatric surgery patients.

11. Monitor for complications and take preventive and remedial actions.

12. Assess, modify, and review preoperative education appropriate to needs of patient/family/support persons.

13. Create and implement discharge plan appropriate to specific needs of bariatric patient/family/support persons, including providing written materials for reinforcement and review.

Clinical management—follow-up tasks (posthospital)

14. Assess, clarify, modify, and reinforce bariatric education and provide additional intervention (e.g., education, referral), as needed.

15. Review and evaluate patient understanding of, and compliance with, medical regimen (e.g., medications, physical activity, nutrition and supplementation, self-care) and intervene as needed.

16. Assess psychosocial adjustment/accommodation to physical changes and intervene, as appropriate.

17. Identify short- and long-term complications unique to bariatric surgery patients (e.g., obstructions, strictures, leaks, gastric prolapse) and take appropriate action.

18. Encourage healthy behaviors (e.g., nutrition and supplementation, physical activity) to enhance long-term weight loss success.

19. Encourage participation in support group(s) to promote successful long-term weight loss.

20. Instruct and encourage the patient to follow-up with appropriate healthcare providers.

21. Identify, evaluate, and report secondary effects of surgery (e.g., dumping, redundant skin, and psychosocial issues), document, and take appropriate actions.

22. Identify and intervene with noncompliant patients (e.g., maladaptive eating, failure to follow-up with care provider)

23. Evaluate and report resolution or improvement of co-morbid conditions.
Perform quality-of-life measurements to assess improvements in social and cognitive levels and general well-being relative to preoperative levels.

**Domain 02: Multidisciplinary team collaboration (16%)**—communicate and educate to facilitate continuity of care among multidisciplinary teams for optimal patient outcomes and to improve the quality of care for morbidly obese and bariatric surgery patients.

01. Assess the multidisciplinary team’s knowledge level related to the special considerations of morbidly obese and bariatric surgery patients.

02. Create and implement formal and informal multidisciplinary education supported by evidence-based practice related to the care of morbidly obese and bariatric surgery patients for optimal patient outcomes.

03. Evaluate and document formal and informal multidisciplinary education related to the care of morbidly obese and bariatric surgery patients for optimal patient outcomes.

04. Coordinate and communicate the unique needs of bariatric surgery patients to various multidisciplinary healthcare care providers outside of the multidisciplinary team (e.g., chiropractors, nonlocal healthcare providers, dentists, obstetricians).

05. Collaborate with multidisciplinary team to maintain teaching that is appropriate to the psychosocial, cultural, economic, and educational level of morbidly obese and bariatric surgery patients.

06. Initiate and facilitate collaborative relationships within the multidisciplinary team to foster sensitivity to morbidly obese and bariatric surgery patients.

07. Coordinate delivery of the multidisciplinary education related to the care of morbidly obese and bariatric surgery patients to improve patient outcomes/quality of care.

08. Create, implement, and evaluate perioperative protocols (e.g., airway, transfer, position, medications, pain management) to address the special needs of morbidly obese and bariatric surgery patients.

**Domain 03: Outreach (6%)**—provide advocacy, support, and education to individuals, support groups, community groups, and healthcare professionals related to morbidity obese and bariatric surgery patients.

01. Contribute to and advance the knowledge base of individuals, support groups, community groups, and healthcare professionals through interactions, presentations, publications, research, and/or involvement with professional organizations related to the morbidly obese.

02. Facilitate and foster advocacy in the general and professional population related to the morbidly obese through role modeling, teaching, and/or mentoring.

03. Promote the development of, encourage participation in, and/or facilitate support groups and programs for bariatric surgery patients, families, and support persons for optimal patient outcomes.

04. Provide general education using varied media (e.g., web sites, newsletters, seminars) on the subject of bariatric surgery to the community at large.

**Domain 04: Program administration (14%)**—provide leadership and a framework to coordinate services for optimal outcomes, and to improve the quality of care for morbidly obese and bariatric surgery patients.

01. Establish patient safety standards and staff safety protocols, including furniture, patient transport/transfer systems, medical and surgical equipment.

02. Apply bariatric ergonomic principles, implement patient safety standards, and staff safety protocols to decrease risk of patient and staff injury.

03. Evaluate innovations in technology and advances in care supported by benchmark studies, literature reviews, evidence-based practice, and/or research and facilitate incorporation into practice.

04. Gather and evaluate internal and external outcomes data for benchmarking/evaluation of bariatric surgery outcomes.

05. Update patient care practices (e.g., policies, protocols, clinical pathways, order sets) related to the care of morbidly obese and bariatric surgery patients based on clinical outcomes.

06. Review and incorporate current guidelines and recommendations of agencies such as the National Institute of Health, American Society for Bariatric Surgery, and Surgical Review Corporation.

07. Review and evaluate the policies of insurance providers regarding their implications on the care of morbidly obese and bariatric surgery patients and implement the corresponding education and policy.

08. Perform quality assurance activities to identify process improvement opportunities for the care of morbidly obese and bariatric surgery patients.

09. Identify specific competencies necessary for delivery of care to morbidly obese and bariatric surgery patients.

**Knowledge statements**

01. Incidence and prevalence of morbid obesity

02. Sensitivity issues in the morbidly obese person

03. Etiology of the disease of obesity

04. Co-morbid medical conditions associated with morbid obesity

05. Fundamental principles of weight loss and weight gain
06. Medical management of weight loss modalities
07. History of bariatric surgical procedures
08. Bariatric surgical procedure revisions and associated risks
09. Criteria for candidacy as a bariatric surgery patient
10. Contraindications for candidacy as a bariatric surgery patient
11. Special considerations for the treatment of adolescent and geriatric morbidly obese and bariatric surgery patients
12. Abnormal eating behaviors and disorders in morbidly obese and bariatric surgical patients
13. Psychological disorders in relation to morbidly obese and bariatric surgery patients (e.g., depression, addiction, schizophrenia, obsessive compulsive disorder)
14. Special considerations for the treatment of high-risk conditions (multiple severe co-morbidities, multiple previous abdominal procedures, psychological impairment, previous bariatric surgery, severe morbid obesity)
15. Normal anatomy and physiology of the gastrointestinal system
16. Anatomic and physiologic changes associated with specific bariatric surgical procedures
17. Risks and benefits of specific bariatric surgical procedures
18. Preoperative process for bariatric surgery patients
19. Intraoperative process for bariatric surgery patients
20. Co-morbidity improvement and/or resolution related to specific bariatric surgical procedures
21. Early and late complications of specific bariatric surgical procedures
22. Clinical presentation of complications in the bariatric surgery patient
23. Prevention and treatment of complications of specific surgical procedures
24. Secondary effects of specific bariatric surgical procedures
25. Pulmonary implications of bariatric surgery in morbidly obese and bariatric surgery patients
26. Cardiovascular implications of bariatric surgery in morbidly obese and bariatric surgery patients
27. Thromboembolic implications of bariatric surgery in morbidly obese and bariatric surgery patients
28. Potential risks and complications of nasogastric tube insertion in bariatric surgery patients
29. Skin integrity, skin care, and hygiene of morbidly obese and bariatric surgery patients
30. Fluid and electrolyte management of bariatric surgery patients
31. Implications of morbid obesity and specific bariatric surgical procedures on drug therapies
32. Laboratory and diagnostic testing related to morbidly obese and bariatric surgery patients
33. Implications of laboratory and diagnostic test results for bariatric surgery patients
34. Specialized equipment needs for morbidly obese and bariatric surgery patients
35. Nutrition and supplementation requirements for specific bariatric surgical procedures
36. Identification, treatment, and prevention of nutritional deficiencies
37. Eating behaviors and recommendations specific to bariatric surgical procedures
38. Phases of dietary progression after specific bariatric surgical procedures
39. Bariatric ergonomics
40. Role of physical activity for morbidly obese and bariatric surgery patients
41. Benefits of healthy lifestyle changes
42. Psychosocial implications of morbid obesity, bariatric surgery, and bariatric surgical weight management
43. Implications of pregnancy in postoperative bariatric surgical patients
44. Implications of alcohol consumption by patients after specific bariatric surgical procedures
45. Modalities to improve patient compliance with the postoperative regimen
46. Discharge planning process for postoperative bariatric surgical patients
47. Role of support groups for bariatric surgical patients/family/support persons
48. Implications of insurance coverage for bariatric surgical patients
49. Risk management related to morbidly obese and bariatric surgery patients
50. Quality improvement principles
51. Professional organization and government agency guidelines and recommendations for the care of morbidly obese and bariatric surgical patients
52. Research principles
53. Informational resources related to morbid obesity and bariatric surgery
54. Professional associations related to morbid obesity and bariatric surgery

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References