

Certified Bariatric Nurse (CBN) Certification Examination STUDY GUIDE



The CBN Handbook and Study Guide have been updated as of April 1, 2017 with the most recent test specifications from the 2016 Practice Analysis.

Purpose of this study guide is to provide an outline format of topics that are potentially included in the certification examination. Due to standards of the certification accreditation process, there can be no relationship or communication between the authors of this outline and those that actually develop the examination; therefore this study guide does not represent the actual content of the examination.

This study guide was developed by the Examination Preparation Subcommittee of the Certified Bariatric Nurse Certification Committee based on:

- Thoughtful review of the domains (principal areas of responsibility), tasks (specific goal directed set of activities) and knowledge statements (fundamental knowledge and skill base) derived from the bariatric surgical nurse practice analysis (Berger et al., 2010).
- The experience of the CBN's on the subcommittee
- Numerous surveys of CBN candidates regarding their examination preparation after taking the examination,

- The development and revision of CBN Examination Preparation course since 2007.
- Comments and recommendation from a pilot group of CBN candidates after preparing and sitting for the examination
- This study guide also includes a list of references and resources.

Practice Analysis Domains/Tasks

As mentioned above, this practice analysis served as a resource in developing the study guide. Described in the CBN Candidate Handbook, the domains and tasks are the foundation for the exam development.

ASMBS Domains/Tasks

Domain 1: Clinical Management: Preoperative (Pre-hospital) - 18%

- A. Assess a patient/support person's knowledge of
 1. disease of obesity and associated comorbid conditions
 2. treatment options
 3. risks and benefits of treatment options
- B. Educate a patient/support persons about
 1. disease of obesity and associated comorbid conditions
 2. treatment options
 3. risks and benefits of treatment options
- C. Obtain medical, surgical, psychosocial, cultural, and weight change history to identify risks and unique needs of the patient
- D. Identify unique age-related needs (e.g., adolescent, geriatric)
- E. Assist patient/support persons in making an informed decision regarding bariatric treatment options
- F. Discuss goals and expected outcomes with the patient
- G. Establish goals and expected outcomes with the patient
- H. Educate patient/support persons regarding complications
 1. short- and long-term complications
 2. reporting of signs and symptoms of complications
 3. measures to prevent complications
- I. Educate patient/support persons about
 1. steps in the bariatric surgical process (preoperative preparation, hospital stay, follow-up care)
 2. lifestyle changes after surgery (e.g., physical activity, nutrition and supplementation, psychosocial support)
 3. expected medical outcomes and changes after surgery
- J. Evaluate the effectiveness of education for patient/support persons and readiness for surgery

Domain 2: Clinical Management: Perioperative (Hospital) - 24%

- A. Assess patient understanding of preoperative education
- B. Utilize size-appropriate equipment for bariatric surgery patients

- C. Implement patient care protocols (e.g., airway, transfer, position, medication, pain management)
- D. Practice safe bariatric patient handling
- E. Implement preventative measures for complications
- F. Monitor for abnormal signs, symptoms, and diagnostic tests
- G. Respond to early and late warning signs and symptoms of complications
- H. Implement discharge plan and review instructions for immediate post-operative period
 - 1. wound care
 - 2. reporting signs and symptoms of complications
 - 3. nutrition and diet accommodation
 - 4. physical activity/limitations
 - 5. vitamin and mineral supplementation
 - 6. fluid management
 - 7. medication management
 - 8. follow-up appointment

Domain 3: Clinical Management: Follow-up (Post-hospital) - 25%

- A. Assess the patient for
 - 1. short- and long-term complications
 - 2. short- and long-term weight change
 - 3. adherence to plan of care and lifestyle changes (e.g., medications, nutrition and supplementation, diet, physical activity, self-care)
 - 4. psychosocial adjustment and accommodation to physical changes
 - 5. need for additional bariatric education
- B. Evaluate and report improvement, remission, or resolution of comorbid conditions
- C. Perform quality of life assessment for changes from preoperative levels
- D. Identify barriers to recommended lifestyle modifications
- E. Offer tools or resources to help patients manage barriers to recommended lifestyle modifications
- F. Address secondary effects of surgery (e.g., dumping, reactive hypoglycemia, redundant skin, psychosocial issues)
- G. Provide additional education or referrals
- H. Reinforce long-term healthy behaviors
- I. Encourage participation in support group(s) and other available psychosocial support

Domain 4: Multidisciplinary Team Collaboration - 15%

- A. Assess the multidisciplinary team's knowledge related to the care of bariatric surgery patients
- B. Implement formal and informal multidisciplinary team education related to the unique needs of bariatric surgery patients
- C. Evaluate the effectiveness of multidisciplinary team education
- D. Collaborate with multidisciplinary team to provide patient-centered education

- E. Collaborate with multidisciplinary team to ensure successful progression of patient through continuum of care
- F. Evaluate perioperative patient care protocols with the multidisciplinary team
- G. Coordinate pre- and post-operative referrals
- H. Foster bariatric sensitivity within multidisciplinary team
- I. Foster awareness of surgical complications within multidisciplinary team
- J. Foster awareness of proper body mechanics within multidisciplinary team

Domain 5: Outreach - 6%

- A. Provide general education to the community on the subject of bariatric surgery using varied media (e.g., web sites, social media, newsletters, informational presentations)
- B. Foster advocacy in the general and professional population related to the care of bariatric patients
- C. Contribute to the profession through presentations, publications, research, or involvement with professional organizations
- D. Promote bariatric awareness to healthcare students through educational outreach (e.g., role modeling, precepting, teaching, and/or mentoring)
- E. Support bariatric awareness and access programs in the community

Domain 6: Program Quality - 12%

- A. Promote patient safety standards involving furniture, patient transport/transfer systems, medical and surgical equipment
- B. Promote the use of bariatric ergonomic protocols to decrease risk of patient and staff injury
- C. Evaluate innovations in technology and advances in care through benchmark studies, literature reviews, evidence-based practice, or research
- D. Facilitate incorporation of innovations in technology and advances in care into practice
- E. Participate in data collection (process or outcome data)
- F. Participate in the analysis of internal or external process and outcomes data
- G. Participate in updating patient care practices (e.g., policies, protocols, clinical pathways, order sets) based on clinical outcomes
- H. Develop patient education programs, materials, and tools
- I. Promote compliance with current best practice guidelines and recommendations
- J. Promote optimization of the patient experience (e.g., safety, financial issues, sensitivity)
- K. Identify specific competencies necessary for delivery of patient care (e.g., safe patient handling, early recognition of complications, sensitivity training)
- L. Facilitate staff competency training to optimize the delivery of patient care (e.g., safe patient handling, early recognition of complications, sensitivity training)

*Each item is linked to a task and has a secondary classification from the Topic List.

*Each test form will include 1 set of 25 unscored pretest items in addition to the 150 scored items.

3 hours of testing time.

TOPIC LIST (Secondary Classification)

1. *Severe obesity:*

- A. Epidemiology (incidence and prevalence)
- B. Sensitivity issues or weight bias issues
- C. Etiology
- D. Comorbid medical conditions :
 - 1) endocrine (e.g., diabetes, metabolic syndrome, PCOS)
 - 2) cardiovascular (e.g., hypertension, dyslipidemia, stroke, CVD, CHF)
 - 3) musculoskeletal (e.g., degenerative joint disease, back pain)
 - 4) gastrointestinal (e.g., GERD, fatty liver disease)
 - 5) pulmonary (e.g., obstructive sleep apnea, asthma, Pickwickian syndrome)
 - 6) urinary/gynecological (e.g., incontinence, infertility)
 - 7) neurological (e.g., pseudotumor cerebri)
 - 8) cancer (e.g., breast, uterus, cervix)
- E. Normal anatomy and physiology of the gastrointestinal system
- F. Physiology and mechanisms of weight loss and weight gain

2. *Considerations for bariatric surgery patients:*

- A. Criteria for surgery candidacy
- B. Financial implications (e.g., insurance coverage, cash payment)
- C. Contraindications for surgery candidacy
- D. Age-related considerations (e.g., adolescent, geriatric)
- E. Ethnicity and cultural considerations
- F. Patients with high-risk conditions (multiple severe comorbidities, multiple previous abdominal surgeries, psychological impairment, prior bariatric surgery, severe obesity)
- G. Abnormal eating behaviors and disorders
- H. Psychological disorders (e.g., depression, anxiety, addiction, schizophrenia, OCD, bipolar disorder)

3. *Bariatric surgical procedures:*

- A. Evolution of bariatric surgical procedures
- B. Types of primary bariatric procedures:
 - 1) Adjustable gastric band
 - 2) Sleeve gastrectomy
 - 3) Roux-en-Y gastric bypass
 - 4) Biliopancreatic diversion-duodenal switch
 - 5) Endoscopic therapy (e.g., balloon, stent)
 - 6) Other emerging procedures, technologies, or treatments
- C. Revisional, conversion, or reversal procedures and associated risks
- D. Procedure-specific considerations:
 - 1) Anatomical and physiological changes
 - 2) Risks and benefits

- 3) Pre-operative process
- 4) Intraoperative process
- 5) Post-operative process
- 6) Weight change expectations
- 7) Comorbidity improvement, remission, and/or resolution
- 8) Secondary effects (e.g., dumping syndrome, hypoglycemia, excess skin)

4. *Surgical complications:*

- A. Types of complications (e.g., bleed, leak, ulceration, VTE, bowel obstruction, infection, internal hernia, stenosis, band complications, gastro-gastric fistula, rhabdomyolysis)
- B. Prevention of complications
- C. Clinical presentation of early and late complications
- D. Treatment of complications
- E. Emergency interventions
- F. Diagnostic testing for complications
- G. Risks of nasogastric tube insertion

5. *Patient management across the continuum:*

- A. Skin integrity, skin care, and hygiene
- B. Oral hygiene and dental considerations
- C. Fluid and electrolyte management
- D. Pain management
- E. Laboratory and diagnostic testing and results
- F. Medical weight management modalities
- G. Bariatric ergonomics
- H. Specialized equipment needs
- I. Implications of bariatric surgery on:
 - 1) fertility and pregnancy
 - 2) alcohol metabolism and effects
 - 3) medication management
 - 4) psychosocial adjustments
- J. Discharge planning process
- K. Long-term follow-up

6. *Nutritional considerations:*

- A. Nutrition and supplementation guidelines
- B. Prevention of nutritional deficiencies (e.g., protein, vitamin & mineral deficiencies)
- C. Identification of nutritional deficiencies (e.g., protein, vitamin & mineral deficiencies)
- D. Treatment of nutritional deficiencies (e.g., protein, vitamin & mineral deficiencies)
- E. Eating behaviors and recommendations
- F. Dietary progression following surgery

7. *Lifestyle changes:*

- A. Physical activity/exercise
- B. Behavior-modification counseling
- C. Risks of smoking behavior related to bariatric surgery

- D. Modalities to improve patient adherence
- E. Role of support groups for patients/support persons

8. *Professional practice:*

- A. Quality improvement principles
- B. Risk management
- C. Professional organization and government agency guidelines and recommendations
- D. Research principles
- E. Informational resources related to severe obesity and bariatric surgery
- F. Professional associations (e.g., The Obesity Society, ASMBS, OAC, NABN).
- G. Bariatric surgical program accreditation

Certified Bariatric Nurse Exam Study Guide

1. Review the disease of obesity
 - Endocrine
 - Socio-economic impact
 - Comorbidities
 - Environmental factors
 - Calculation of body mass index
 - Obesity categories

2. Review normal anatomy/physiology
 - GI tract

3. Review medical management of obesity
 - Diet
 - Exercise
 - Pharmacological interventions
 - Nutrition

4. Review surgical management of obesity
 - History

5. Review peri-op, OR, PACU considerations related to bariatric surgeries
 - Equipment
 - Transfer
 - Patient Prep Considerations
 - Consent
 - Scrub
 - Antibiotics
 - Anti-coagulation
 - Urinary Catheter
 - Positioning/Padding
 - Rhabdomyolysis
 - Anesthesia
 - Intubation/Airway
 - Types
 - Pain management

6. Review RNY Gastric Bypass
 - Surgical procedure
 - Altered anatomy
 - Complications
 - Nursing care
 - Patient Education/Understanding
 - Pre-Surgery
 - Post-Surgery
 - Follow-up
 - Nutrition
 - Pain Management
 - Nursing assessment/diagnosis/planning

-Outcomes

7. Review Adjustable Gastric Band

- Surgical procedure
- Altered anatomy
- Complications
- Nursing care
 - Patient Education/Understanding
 - Pre-Surgery
 - Post-Surgery
 - Follow-up
 - Nutrition
 - Pain Management
 - Nursing assessment/diagnosis/planning
 - Outcomes

8. Review Biliopancreatic Diversion/Duodenal Switch

- Surgical procedure
- Altered anatomy
- Complications
- Nursing care
 - Patient Education/Understanding
 - Pre-Surgery
 - Post-Surgery
 - Follow-up
 - Nutrition
 - Pain Management
 - Nursing assessment/diagnosis/planning
 - Outcomes

9. Review Vertical Sleeve Gastrectomy

- Surgical procedure
- Altered anatomy
- Complications
- Nursing Care
 - Patient Education/Understanding
 - Pre-Surgery
 - Post-Surgery
 - Follow-up
 - Nutrition
 - Pain Management
 - Nursing assessment/diagnosis/planning
- Outcomes

10. Review Nutritional Guidelines

- Vitamins/Minerals
- Medical Nutrition Therapy
 - TPN
 - Wounds
 - Malabsorption/Vitamin Deficiencies
 - Thiamin Deficiency/Supplement Recommendations

- Vitamin B12 Deficiency/Supplement Recommendations
- Folic Acid Deficiency/Supplement Recommendations
- Iron Deficiency/Supplement Recommendations
- Calcium Deficiency/Supplement Recommendations
- Vitamin D Deficiency/Supplement Recommendations
- Fat Soluble (A,E,K) Deficiency/Supplement Recommendations
- Copper Deficiency/Supplement Recommendations
- Vitamin B Complex Deficiency/Supplement Recommendations
- Specific diseases related to vitamin deficiencies
 - Wernicke-Korsakoff
 - Beri-Beri
 - Anemia
- Diet

11. Review MultiDisciplinary Team Collaboration

- Competency
 - Age Specific
 - Cultural Sensitivity
 - Psychosocial
- Evidence based practice
- Role/Responsibilities of each member of team
- Collaboration with other health providers
- Bariatric Sensitivity

12. Review Outreach

- Support Group
- Research
- Community awareness, education
- Media (web site, newsletters, seminars)
- Patient advocacy
- Access to care

13. Review Program Administration

- Patient safety
- Staff safety
- Standards of Care
- Accreditation standards (Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program)
- Evidenced based practice, benchmarking
- Knowledge of insurance criteria
- Foster relationships with insurance providers

14. Review Special Populations

- Adolescents
- Post-Surgical pregnancy
- Maladaptive eating
- Mature adults
- Non-compliance

15. Review Pharmacological Considerations
 - Absorption
 - Medication reconciliation
 - Medication re-evaluation

16. Review Mental Health Considerations
 - Behavior modifications
 - Maladaptive eating
 - Body image
 - Re-evaluate current psychological axis
 - Consider support systems

17. Review Physical Activity Standards
 - Understanding metabolism
 - Evaluation/Assessment of mobility and gait
 - Pre and post surgery
 - Measurement of % of body fat
 - Motivation strategies

Study Resources/ References

Reference List

This list is provided as a resource to identify appropriate material that may be useful in preparing for the CBN Examination. This list is not intended to be inclusive of all potentially useful resources nor does it constitute an endorsement by the ASMBS or any officers or representatives of the ASMBS. To assist in locating the listed publications, the web addresses of the publishers are listed when available.

ASMBS Nutrition Guidelines

<http://asmbs.org/resources/integrated-health-nutritional-guidelines>

ASMBS Psychological Guidelines

<http://asmbs.org/resources/pre-surgical-psychological-assessment>

Other ASMBS Guidelines

<http://asmbs.org/resource-categories/guidelines-recommendations>

- Adolescent Bariatric Surgery Best Practice Guidelines
- Bariatric Surgery: Postoperative Concerns
- Clinical Practice Guidelines for the Perioperative Nutritional, Metabolic, and Nonsurgical Support of the Bariatric Surgery Patient
- Gastric Band Adjustment Credentialing Guidelines for Physician Extenders
- Gastric Plication Statement
- Granting Privileges in Bariatric Surgery
- New Expert Witness Policy Statement

- Pediatric Best Practice Guidelines
- Pediatric Committee Best Practice Guidelines

ASMBS Position Statements <http://asmbs.org/resource-categories/position-statements>

- Access To Care for Obesity Treatment
- American Heart Association Statement
- ASMBS Updated position statement on prophylactic measures to reduce the risk of venous thromboembolism in bariatric surgery patients
- Bariatric Surgery in Class 1 Obesity (BMI 30-35 kg/m²)
- Emerging Endosurgical Interventions for Treatment of Obesity
- Global Bariatric Healthcare
- Peri-Operative Management of Obstructive Sleep Apnea
- Preoperative Supervised Weight Loss Requirements
- Sleeve Gastrectomy as a Bariatric Procedure

CBN Review Course

ASMBS will offer a review course for the CBN Examination at various times during the year. In addition, there is an online version of the CBN Examination Review Course. This course costs \$129 and also includes 8 CEUs. To pay for and get access to this course, please contact ASMBS at 352.331.4900 or cbn@asmbs.org

CBN Candidate Handbook/Reference List

<https://asmbs.org/wp/uploads/2015/11/2016-CBN-Handbook.pdf>

American College of Sports Medicine

<http://www.acsm.org/>

American Nutrition Association

<http://americannutritionassociation.org/>

Academy of Nutrition and Dietetics

<http://www.eatright.org/>

CLINICAL GUIDELINES

Clinical guidelines regarding weight loss and weight loss surgery published by medical and nursing organizations are good resources to study from. Examples of this type of guideline include:

Clinical Practice Guidelines for the Perioperative Nutritional, Metabolic and Nonsurgical Support of the Bariatric Surgery Patient – 2013 Update. Cosponsored by the American Association of Clinical Endocrinologists, The Obesity Society, and American Society for Metabolic & Bariatric Surgery. *Surgery for Obesity and Related Diseases*, 9(2),159-191 S109-S184.

ASMBS Allied Health Nutritional Guidelines for the Surgical Weight Loss Patient, (2008). *Surgery for Obesity and Related Diseases*, 9(2), S73-S108.

ASMBS Pediatric Committee Best Practice Guidelines, 2011. *Surgery for Obesity and Related Diseases*, 8(1), p1-7.

Peri-operative management of obstructive sleep apnea. (2012). *Surgery for Obesity and Related Diseases*, 8(3), e27-e32.

Endocrine and Nutritional Management of the Post Bariatric Surgery Patient: An Endocrine Society Clinical Practice Guideline, 2010. Published in *J Clin Endocrinol Metab*, 95(11): 4823-4843.

SAGES guideline for clinical application of laparoscopic bariatric surgery. (2009) *Surgery for Obesity and Related Diseases*, 5(3), 387-405.

Gastric band adjustment credentialing guidelines for physician extenders (2012). *Surgery for Obesity and Related Diseases*, 8(6), e69-e71.

ASMBS updated position statement on prophylactic measures to reduce the risk of venous thromboembolism in bariatric surgery patients. (2013). *Surgery for Obesity and Related Diseases*, 9(4), p493-497.

TEXTS

This is listing of current scholarly texts related to the topic of metabolic and bariatric surgery. Inclusion on this list is not a recommendation of any specific text.

Alvarez A., Brodsky, J. B., Lemmens, H. J. M., & Morton, J. M., editors (2010). *Morbid Obesity: Peri-operative Management*, 2nd edition, New York: Cambridge University Press.

Andres, A. & Saldana, C., editors. (2013). *A Multidisciplinary Approach to Bariatric Surgery*. Nova Science Pub Inc.

Bray, GA. (2004). *Office Management of Obesity*. Saunders/El Sevier

Bray, G.A., & Bouchard, C., editors. (2014). *Handbook of Obesity, Clinical Applications*, 4th edition. Informa Healthcare.

Buchwald, H., Cowan, G.S.M., Pories, W.J. 2007, *Surgical Management of Obesity*, Saunders El Sevier.

Choi, S. H., & Kazunori, K. (2014). *Bariatric and Metabolic Surgery*. Berlin, Springer.

Dawes, B. S. (2006). Bariatric Surgery, An issue of Perioperative Nursing Clinics. *Perioperative Nursing Clinics*, Bariatric Surgery, Vol. 1, Num. 1,. WB Saunders.

Deitel M. and Cowan Jr., G.S.M., editors. (2000). *Update: Surgery for the morbidly obese patient* FD-Communications,

- DeMaria, EJ, Latifi,R, Sugerman, HJ. 2002. *Laparoscopic Bariatric Surgery: techniques and outcomes*, Landes, Bioscience.
- Farraye, F.A., & Forse, R.A., editors. (2006). *Bariatric Surgery, A Primer for your Medical Practice*. Slack, Inc.
- Gallagher S, *The Challenges of Caring for the Obese Patient*, Matrix Medical Communications, 2005
- Hakim, N., Favretti, F., Segato, G., & Dillemans, B., editors. (2011). *Bariatric Surgery*, World Scientific Publishing.
- Iavazzo, C. R. (2013). *Bariatric Surgery, From Indications to Postoperative Care*. Nova Science.
- Inabnet W. B., Demaria, E.J., and Ikramuddin, S. (2005). *Laparoscopic Bariatric Surgery*, Lippincott Williams and Wilkins.
- Jacques J. (2006). *Micronutrition for the Weight Loss Surgery Patient*, Matrix Medical Communications,.
- Kothari, S. (2011). *Bariatric and Metabolic Surgery, an issue of Surgical Clinics. Surgical Clinics of North America*, 91(6).
- Mitchell, J. E., & de Zwaan, M. editors, (2012). *Psychosocial Assessment and Treatment of Bariatric Surgery Patients*. Taylor and Francis.
- Patel, N., & Koche, L. S., editors. (2007). *Bariatric Surgery Primer for the Internist, an issue of Medical Clinics. Medical Clinics of North America*, 91(3).
- Pitombo, C., Jones, K., Higa, K., and Pareja, J, editors. (2008). *Obesity Surgery, Principles and Practices*. McGraw Hill.
- Martin, L.F. editor. (2004). *Obesity Surgery*, McGraw-Hill Medical Publishing Division,
- Nguyen, N. T., DeMaria, E., Ikramuddin, S., & Hutter, M. M., editors. (2008). *The SAGES Manual, A Practical Guide to Bariatric Surgery*. Springer.
- Schauer, P. R., Schirmer, B. D. and Brethauer, S. A., editors (2007). *Minimally invasive Bariatric Surgery*. New York, Springer.
- Shahzeer, K., Birch, D. W., editors. (2013). *The Fundamentals of Bariatric Surgery*. Nova Science Pub Inc
- Sugarman, H. J., & Nguyen, N., editors. (2006). *Management of Morbid Obesity*. CRC Press.
- Wadden, T.A., and Stunkard, A.J., editors. (2004). *Handbook of Obesity Treatment*. The Guilford Press

JOURNALS

Bariatric Surgical Practice and Patient Care, previously *Bariatric Nursing and Surgical Patient Care*, Mary Ann Liebert Inc.

Obesity Surgery, Springer.

Surgery for Obesity and Related Diseases,

Annals of Surgery

Journal of the American Medical Association

Obesity Management

Journal Articles:

Aills, L, Blankenship, J, Buffington, C, Fortado, M & Parrott, J. ASMBS Allied Health Nutritional Guidelines for the Weight Loss Surgery Patient. *Surgery for Obesity and Related Diseases*, 2008, 4: S73-S108.

Berger, NK, Carr, JJ, Erickson, J, Gourash, WF, Muenzen, P, Smolenak, L, Tea, CG, & Thomas, K (Practice Analysis Writing Group). Path to bariatric nurse certification: the practice analysis. *Surgery for Obesity and Related Diseases*, 2010, 6: 399-407.

Complications:

- Evidenced based strategies to prevent post-operative respiratory dysfunction for patient with obstructive sleep apnea undergoing laparoscopic bariatric surgery.
 - Ernst, David et al. *Bariatric Nursing and Surgical Patient Care*, 2011 June; 6(2) 79-84.
- Acute Bariatric Surgery Complications: Managing Parenteral Nutrition in the Morbidly Obese.
 - Chen Y.; *Journal of the American Dietetic Association*, 2010; November; 110(11): 1734-1737.
- Pulmonary Considerations and management of the morbidly obese patient.
 - Sherwood, Suzanne et al. *Bariatric Nursing & Surgical Patient Care*, 2012 December; 7 (\$): 160-166.
- Complication of adjustable gastric banding surgery for obesity.
 - Kodner C et al. *American Family Physician*. 2014 May 15; 89 (10): 813-818.
- Complications of bariatric surgery: dumping syndrome, reflux and vitamin deficiencies.
 - Tack J et al. *Best Pract Res Clin Gastroenterol*. 2014 August; 28 (4): 741-9.
- Gastric leaks post sleeve gastrectomy: review of its prevention and management t.
 - Abou Rached et al. *World J Gastroenterology*. 2014 October 14; 20(38): 13904-13910.
- Outcomes and complications After Bariatric Surgery.

- Gagnon, Lauren et al. American Journal of Nursing, 2012 September 112 (9)L 26-37. Program Administration:
- Pharmacologic and mechanical strategies for preventing venous thromboembolism after bariatric surgery: a systematic review and meta-analysis
 - Brotman DJ et al. JAMA surgery 2013 July: 148 (7):675-686.
- Diagnosis and management of acute and early complications of/after bariatric surgery.
 - Car Peterko A et al. Dig Dis 2012; 30(2):178-181.
- Obstructive sleep apnea and perioperative complications in bariatric patients.
 - Weingarten TN et al. British Journal of Anaesthesia. 2011 January 106 (1)131-139.
- Monitoring for and preventing the long-term sequelae of bariatric surgery.
 - Thomas CM et al. Journal of American Academy of Nurse Practitioners 2011 September; 23 (9); 449-458.
- Outcomes and complications after bariatric surgery.
 - Gagnon LE et al. American Journal of Nursing. 2012 September; 112 (9): 26-36.
- Safety culture and complications after bariatric surgery.
 - Birkmeyer NJ et al. Annals of Surgery. 2013 February; 257 (2): 260-265.

Nutrition:

- Vitamin and Mineral Supplementation for the Bariatric Patient: Why, What, When, and How?
 - Joyner, Kim; Bariatric Nursing & Surgical Patient Care, 2012 June; 7 (2): 87-92.
- The bariatric surgery patient-Nutrition considerations.
 - Shannon, Caroline et al. Australian Family Physician, 2013 August; 42 (8): 547-552.
- Complications from micronutrient deficiency following bariatric surgery.
 - Wilson HO et al. Ann Clin Biochem. 2014 November; 51 (Pt 6): 705-709.
- The nutritional and pharmacological consequences of obesity surgery.
 - Stein J et al. Aliment Pharmacology Therapeutics. 2014 September; 49 (6): 582-609.
- Nutrient deficiencies after gastric bypass surgery
 - Saltzman e et al. Annu Rev Nutr. 2013: 33:183-203.
- Early onset copper deficiency following Roux-en-Y gastric bypass.
 - O'Donnell KB et al. Nutrition Clinical Practice. 2011 February 26 (1): 66-69.
- Bariatric surgery: nutritional considerations for patients.
 - Rickers Letal. Nursing Standard 2012 August 8-14; 26 (49): 41-48.
- Nutrition and metabolic support recommendation for the bariatric patient.
 - Isom KA et al. Nutrition Clinical Practice. 2014 December; 29 (6): 718-739.

Psycho-Social:

- Supporting and encouraging the bariatric surgical patient: tips for keeping patients on track and engaged throughout their journey.
 - Seidl, Kristin; *Bariatric Nursing & Surgical Patient Care* 4, 2012 March; 7 (1):3-9.
- Back on Track: Confronting post-surgical weight gain.
 - Stewart KE et al. *Bariatric Nursing & Surgical Patient Care*, 2010 June; 5 (2): 179-185.
- Psychiatric aspects of bariatric surgery.
 - Yen YC et al. *Current Opinions Psychiatry*. 2014 September; 27 (5): 374-379.
- Psychological predictors of mental health and health-related quality of life after bariatric surgery: a review of the recent research
 - Wimmelmann CL et al. *Obes Res Clin Pract*. 2014 July-August; 8 (4): e314-324.
- Psychological predictors of weight loss after bariatric surgery: a review of the recent research.
 - Wimmelmann CL et al. *Obes Res Clin Pract*. 2014 July-August; 8 (4): e299-313.
- Lifestyle management for enhancing outcomes after bariatric surgery.
 - Kalarchian M et al. *Curr Diab Rep*. 2014 October 14 (10): 540.
- Psychological aspects of bariatric surgery.
 - Green DD et al. *Current Opinions in Psychiatry*. 2014 November; 27 (6): 448-452.
- Utilizing a bariatric sensitivity educational module to decrease bariatric stigmatization by healthcare professionals.
 - Antoinette J et al. *Bariatric Nursing & Surgical Patient Care*, 2011 June 6 (2) 73-78.
- Psychological factors and weight loss in bariatric surgery.
 - Pataky Zoltan et al. *Current Opinion in Gastroenterology*, 2011 March 27 (2): 167-173.
- Do postoperative psychotherapeutic interventions and support groups influence weight loss following bariatric surgery? A systematic review and meta-analysis of randomized and nonrandomized trials.
 - Beck NN et al. *Obesity Surgery*. 2012 November; 22 (11) 1790-1797.
- Post-operative behavioral management in bariatric surgery: a systematic review and meta-analysis of randomized controlled trials
 - Rudopph A et al. *Obesity Rev*. 2013 April; 14 (4): 292-302.
- Psychological assessment of the adolescent bariatric surgery candidate.
 - Austin H et al. *Surg Obes Relat Dis*. 2013 May-June; 9 (3): 474-480.
- The impact of bariatric surgery on psychological health.
 - Kubic JF et al. *Journal of Obesity*. 2013; 2013:837989
- Body Image concerns amongst massive weight loss patients
 - Gilmartin J. *Journal of clinical Nursing* 2013 May; 22 (9-10): 1299-1209.

- Psychosocial adjustments following weight loss surgery.
 - Grimaldi D et al. Journal of Psychosocial Nurse Mental Health Services 2010 March 48 (3):24-29.

Clinical:

- Impact of bariatric pre-operative education on patient knowledge and satisfaction with overall hospital experience.
 - Goldstein N et al. Bariatric Nursing & Surgical Patient Care, 2010 June; 5 (2): 137-144.
- Sleeve gastrectomy and Roux EN Y gastric bypass: current state of metabolic surgery.
 - Torgersen z et al. Current Opinions in Endocrinology Diabetes obesity. 2014 October; 21 (5): 352-357.
- Bariatric surgery for obesity and metabolic conditions in adults
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