

National Recommendations for the Development of Metabolic and Bariatric Surgery in the Republic of Kazakhstan: a Review and Consensus Statement

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ABSTRACT

Obesity and metabolic disease require a coordinated national response in Kazakhstan. The SBMSK Statement Working Group developed 60 consensus recommendations to strengthen access to safe, evidence-informed metabolic and bariatric surgery (MBS). International IFSO/ASMBS guidance and contemporary literature informed a national process that addressed patient selection, multidisciplinary care, procedure selection, complication prevention, long-term follow-up, workforce development, accreditation, financing, and registry participation. The recommendations preserve the evidence level and recommendation grade ratified by the Working Group and contextualize their implementation within Kazakhstan's health system. This consensus statement proposes a staged national MBS pathway that centers patient safety, lifelong nutritional and clinical follow-up, multidisciplinary service delivery, quality assurance, and outcomes reporting. It also identifies priorities requiring formal national regulation, investment, research, and prospective registry evaluation.

Keywords: Metabolic Bariatric Surgery, National Statement, Clinical Recommendation, Republic of Kazakhstan, Multidisciplinary Service Delivery, Society of Bariatric and Metabolic surgeons of Kazakhstan, KaSBariMeT-2026.

Introduction

Obesity is a chronic, relapsing disease that is associated with substantial cardiometabolic, reproductive, hepatic, respiratory, musculoskeletal, and psychosocial burden. The Global Nutrition Report country profile estimates that 25.3% of adult women and 21.4% of adult men in Kazakhstan are living with obesity [1]. The International Diabetes Federation reports that 842.3 thousand adults aged 20–79 years in Kazakhstan were living with diabetes in 2024 [2]. These data support the need for a coordinated health-system response that includes prevention, evidence-based medical therapy, endoscopic intervention, and metabolic and bariatric surgery (MBS) when clinically indicated.

The contemporary term “metabolic and bariatric surgery (MBS)” is used in this manuscript in accordance with IFSO/ASMBS usage [3–5]. Within Kazakhstan, the established statutory and professional designation is “bariatric and metabolic surgery”; this English-language manuscript therefore uses MBS as the internationally aligned umbrella term while recognizing the national designation. MBS should be understood as one component of comprehensive obesity care rather than a stand-alone technical intervention.

Kazakhstan has developed MBS capacity over the past decade, including professional organization, surgeon training, and national outcome reporting initiatives. The remaining challenges include uneven multidisciplinary integration, lack of unified care pathways, inconsistent long-term follow-up, limited center accreditation, incomplete integration into financing mechanisms, and incomplete registry capture. The present consensus statement addresses these gaps through 60 nationally focused recommendations.

Methods

The SBMSK Statement Working Group reviewed international MBS publications and guidance, including IFSO/ASMBS documents, and considered national service-development needs. According to the source record, 50 draft recommendations were circulated for Working Group discussion on 19 June 2026. The recommendations were presented and discussed at the III International Congress of the Kazakhstan Society of Bariatric and Metabolic Surgeons (KaSBariMeT-2026) on 3–4 July 2026; ten additional recommendations were incorporated, yielding 60 ratified statements.

This article is a national consensus statement informed by a narrative evidence review. It is not presented as a systematic review because the source record did not describe a reproducible search strategy, formal risk-of-bias assessment, voting threshold, or independent evidence re-grading framework. The original Working Group’s evidence levels and recommendation grades are reproduced without modification. Each recommendation is linked to at least one traceable scholarly source, international guideline, or recognized policy/quality source in the reference list.

Recommendations

Role of Metabolic and Bariatric Surgery
The recommendations for role of metabolic and bariatric surgery are summarized in Table 1. Metabolic and bariatric surgery (MBS) is positioned as a clinically effective treatment for obesity because it can deliver substantial, durable weight loss together with meaningful improvement in metabolic disease [6]. Its therapeutic role extends beyond weight reduction: in appropriately selected patients with type 2 diabetes, MBS is among the most effective treatment options and may achieve

partial or complete remission, although remission is not universal and can relapse over time [7]. Accordingly, treatment goals should be patient-centred and multidimensional, emphasizing durable glycaemic and broader metabolic benefit rather than maximal weight loss alone [8]. This framing supports the contemporary shift from “bariatric surgery” to the IFSO-aligned term MBS, reflecting the procedure’s metabolic as well as weight-related objectives. Clinical interpretation should nevertheless account for variation by procedure, patient selection, complications, and the need for lifelong follow-up [6].

Table 1 Role of Metabolic and Bariatric Surgery	
Recommendation	Original evidence rating
Recommendation 1. Metabolic and bariatric surgery (MBS) is a clinically effective and cost-effective treatment for obesity, producing durable weight loss and improvement in metabolic disease. [6]	Evidence Level: 1 Recommendation Grade: A
Recommendation 2. MBS should be considered among the most effective treatments for type 2 diabetes, with clinically meaningful partial or complete remission in appropriately selected patients. [7]	Evidence Level: 1 Recommendation Grade: A
Recommendation 3. MBS strategy should prioritize durable and clinically meaningful metabolic improvement rather than maximal weight loss alone. [8]	Evidence Level: 2 Recommendation Grade: B

Patient Selection
The recommendations for patient selection are summarized in Table 2. Patient selection for metabolic and bariatric surgery

Table 2 Patient Selection	
Recommendation	Original evidence rating
Recommendation 4. Kazakhstan should adopt the 2022 ASMBS/IFSO body mass index (BMI) eligibility thresholds to enable timely MBS for severe obesity and metabolic comorbidity. [4]	Evidence Level: 1 Recommendation Grade: A
Recommendation 5. BMI-based eligibility in Kazakhstan should account for European and Asian population thresholds: BMI ≥35 kg/m ² , or ≥30 kg/m ² with comorbidity, for people of European ancestry; and BMI ≥32.5 kg/m ² , or ≥27.5 kg/m ² with comorbidity, for Asian populations. [8]	Evidence Level: 1 Recommendation Grade: A
Recommendation 6. In patients with class I obesity, inadequately controlled metabolic disease, including type 2 diabetes, hypertension, dyslipidemia, infertility, or other metabolic disorders, are an indication for MBS. [8]	Evidence Level: 1 Recommendation Grade: A
Recommendation 7. A comprehensive multidisciplinary assessment should be an essential component of MBS selection. The core team should include an MBS surgeon, endocrinologist, clinical dietitian, psychologist when indicated. Nutritional assessment should include screening for protein-energy malnutrition, sarcopenia, micronutrient deficiencies, and maladaptive eating behaviors. [8]	Evidence Level: 1 Recommendation Grade: A
Recommendation 8. Patients with BMI >60 kg/m ² require a specialized treatment protocol covering selection, preoperative preparation, procedure selection, and postoperative care. [9]	Evidence Level: 3 Recommendation Grade: C
Recommendation 9. MBS may form part of the treatment strategy for reproductive health, especially polycystic ovary syndrome, metabolic dysfunction-associated steatotic liver disease, obstructive sleep apnea, gout, hypertension, dyslipidemia, and gastroesophageal reflux disease. [8]	Evidence Level: 1 Recommendation Grade: A

(MBS) should apply BMI thresholds while recognizing ethnic variation in obesity-related risk and the clinical context of each candidate. The proposed Kazakhstan policy aligns with 2022 ASMBS/IFSO indications for severe obesity and metabolic disease, although its adoption is a national policy proposal that should be implemented with local governance and pathway development [4]. For people of European ancestry, eligibility is proposed at BMI ≥ 35 kg/m², or ≥ 30 kg/m² with comorbidity, whereas lower thresholds are proposed for Asian populations (≥ 32.5 kg/m², or ≥ 27.5 kg/m² with comorbidity) [8]. In class I obesity, inadequately controlled metabolic disease may support consideration of MBS, including type 2 diabetes, hypertension, dyslipidemia, or infertility. Selection should follow comprehensive multidisciplinary assessment, including an MBS surgeon, endocrinologist, and clinical dietitian [8]. Patients with BMI >60 kg/m² warrant a specialized protocol spanning preparation, procedure selection, and postoperative care [9].

Multidisciplinary Perioperative Care

The recommendations for multidisciplinary perioperative care are summarized in Table 3.

Multidisciplinary perioperative care for metabolic and bariatric surgery (MBS) should begin with individualized psychological screening to identify maladaptive eating behaviours and relevant psychosocial risks, while recognizing that available guidance supports assessment rather than one universally validated standardized protocol [10]. Dietitian-led nutritional optimization is more firmly established: preoperative assessment and correction of micronutrient deficiencies, together with education before and after surgery, should be integrated into care [11]. In patients with type 2 diabetes, glycaemic status should be addressed and optimized where clinically appropriate; current sources do not establish that surgery should be delayed solely to achieve a lower HbA1c or that optimization independently reduces complications [12]. Cardiovascular evaluation should be structured and risk-based, informed by symptoms, comorbidity, functional capacity, and planned procedure rather than identical testing for every candidate [13]. Finally, selection should use locally adopted, periodically updated, evidence-informed criteria for relative and absolute contraindications, since no single universally validated list is established [14].

Table 3 Multidisciplinary Perioperative Care

Recommendation	Original evidence rating
Recommendation 10. Standardized preoperative psychological screening protocols should be implemented to identify maladaptive eating behaviors and psychosocial risks. [10]	2 Evidence Level: Recommendation Grade: B
Recommendation 11. Dietitians should implement pre- and postoperative nutritional optimization programs including screening and correction of iron, vitamin B12, folate, vitamin D, calcium and protein deficiencies. [11]	2 Evidence Level: Recommendation Grade: B
Recommendation 12. Preoperative glycemic optimization in patients with type 2 diabetes should be implemented to reduce perioperative risk in metabolic surgery. [12]	2 Evidence Level: Recommendation Grade: B
Recommendation 13. A structured cardiovascular assessment should be established for MBS candidates to reduce perioperative complications. [13]	2 Evidence Level: Recommendation Grade: B
Recommendation 14. The multidisciplinary team should adopt evidence-informed relative and absolute contraindications to MBS to improve patient safety. [14]	2 Evidence Level: Recommendation Grade: B

Table 4 Surgical Strategy

Recommendation	Original evidence rating
Recommendation 15. A laparoscopic approach should be the standard operative access for MBS, except when patient- or procedure-specific circumstances require another approach. [15]	Evidence Level: 1 Recommendation Grade: A
Recommendation 16. When clinically appropriate, procedures with a lower malabsorptive component should be selected to reduce malnutrition and long-term nutritional complications. [16]	Evidence Level: 2 Recommendation Grade: B
Recommendation 17. For patients with BMI >60 kg/m ² and American Society of Anesthesiologists physical status III, initial pharmacotherapy or an endoscopic weight-loss intervention may be considered before MBS. [17]	Evidence Level: 3 Recommendation Grade: C
Recommendation 18. Simultaneous procedures, such as cholecystectomy, should be performed selectively by experienced MBS surgeons in adequately resourced settings. [18]	Evidence Level: 2 Recommendation Grade: B
Recommendation 19. Complex revisional MBS should be performed in specialized high-volume centers by experienced surgeons. [19]	Evidence Level: 2 Recommendation Grade: B

Surgical Strategy

The recommendations for surgical strategy are summarized in Table 4.

For MBS, laparoscopic access should remain the preferred operative approach because it is associated with fewer wound infections and incisional hernias than open surgery, while allowing patient-, procedure-, and surgeon-specific exceptions [15]. Procedure selection should also consider malabsorptive burden: operations with greater malabsorption may increase nutritional deficiency and malnutrition risks, but lower-malabsorptive options do not eliminate these complications and may involve trade-offs in metabolic efficacy; choice therefore requires individualized nutritional and metabolic assessment [16]. In patients with BMI >60 kg/m² and ASA physical status III, pharmacotherapy or endoscopic sleeve gastropasty may be considered before MBS within multidisciplinary planning, although evidence that these strategies reduce operative risk is limited and the proposed threshold remains specific to this recommendation [17]. Concomitant procedures should be selective and clinically indicated [18], whereas complex revisional MBS is best referred, where feasible, to specialized high-volume centers with experienced multidisciplinary teams; no universal volume threshold is established [19].

Recommended and Non-routine Procedures

The recommendations for recommended and non-routine procedures are summarized in Table 5.

Sleeve gastrectomy and Roux-en-Y gastric bypass remain established common primary metabolic and bariatric surgery (MBS) procedures, while one-anastomosis gastric bypass is an accepted, although less prevalent, mainstream option [8].

During classic (standard) bypass surgery, to prevent weight gain, surgeons sometimes apply a silicone ring (adjustable banding) around gastric pouch. The "FundoRing" method replaces the foreign material with biologically derived (autologous) material. The fundus of the excluded portion of the stomach is used to create a restrictive ring ("living ring") around the upper part of the gastric pouch with double calibration. FundoRing may improve reflux-related outcomes in selected one-anastomosis gastric bypass patients, but its routine use, applicability to other bypass procedures, and effects on dumping or weight regain remain insufficiently established; it also requires advanced expertise and careful patient selection [20, 21].

Table 5

Recommended and Non-routine Procedures

Recommendation	Original evidence rating
Recommendation 20. Sleeve gastrectomy, Roux-en-Y gastric bypass, and one-anastomosis gastric bypass are recommended common primary MBS procedures. [8]	Evidence Level: 1 Recommendation Grade: A
Recommendation 21. Use of FundoRing techniques with gastric bypass is recommended to prevent reflux esophagitis, dumping syndrome, and recurrent weight gain. [20]	Evidence Level: 3 Recommendation Grade: C
Recommendation 22. FundoRing should not be used without substantial Nissen fundoplication expertise or in patients with BMI >60 kg/m ² and marked hepatomegaly. [21]	Evidence Level: 3 Recommendation Grade: C
Recommendation 23. For selected individual indications, including class I obesity with metabolic syndrome or type 2 diabetes, double-path procedures, duodenoileal or jejunoileal transit bipartition. [8]	Evidence Level: 1 Recommendation Grade: A
Recommendation 24. Ileal interposition combined with sleeve gastrectomy should not be used routinely because durable benefits over safer MBS options have not been convincingly demonstrated. [22]	Evidence Level: 2 Recommendation Grade: B
Recommendation 25. Gastric plication should not be used in routine clinical practice because of limited efficacy and a substantial complication and reoperation burden. [23]	Evidence Level: 2 Recommendation Grade: B
Recommendation 26. Adjustable gastric banding should not be used as a routine procedure because device-related complications and intensive follow-up requirements are frequent. [24]	Evidence Level: 1 Recommendation Grade: A
Recommendation 27. Endoscopic sleeve gastroplasty should not be used routinely within the national pathway until long-term safety and effectiveness, local governance, training, and follow-up requirements are established. [25]	Evidence Level: 2 Recommendation Grade: B
Recommendation 28. Sleeve gastrectomy combined with fundoplication, or gastric plication combined with fundoplication, should not be used routinely pending convincing evidence of safety and effectiveness. [26]	Evidence Level: 2 Recommendation Grade: B
Recommendation 29. Intra-gastric balloon treatment may be used for preoperative weight loss in patients with BMI >60 kg/m ² . [27]	Evidence Level: 3 Recommendation Grade: C

Ileal interposition, gastric plication, and adjustable gastric banding should not be routine given limited comparative durability, substantial revision or complication burdens, and intensive follow-up requirements [22–24]. Endoscopic sleeve gastroplasty is an emerging option for selected patients, but not for routine unselected use pending stronger long-term evidence and governance [25]. Combined sleeve or plication fundoplication remains non-routine, whereas intra-gastric balloon may serve selectively as a preoperative bridge in very high BMI [26, 27].

Prevention and Management of Surgical Complications

The recommendations for prevention and management of surgical complications are summarized in Table 6.

Perioperative safety in metabolic and bariatric surgery (MBS) is best supported by coordinated, evidence-informed pathways rather than by uniformly prescriptive technical rules. ERAS implementation is associated with shorter hospitalization, although effects on complications are less consistent and ambulatory care should depend on patient selection, monitoring, and local protocols [9]. Antibiotic prophylaxis should generally be timed before incision, with redosing when procedure duration

Table 6

Prevention and Management of Surgical Complications

Recommendation	Original evidence rating
Recommendation 30. Enhanced Recovery After Surgery (ERAS) protocols should be rigorously implemented, including in ambulatory pathways, to reduce complications and length of stay. [9]	Evidence Level: 1 Recommendation Grade: A
Recommendation 31. A single dose of perioperative antibiotic prophylaxis should be administered within 60 minutes before incision to prevent infection. [28]	Evidence Level: 2 Recommendation Grade: B
Recommendation 32. Risk-stratified venous thromboembolism prophylaxis combining mechanical and pharmacologic measures, adjusted for body weight, should be used. [9]	Evidence Level: 1 Recommendation Grade: A
Recommendation 33. An intraoperative quality-control protocol that includes staple-line or anastomotic integrity testing with methylene blue and/or pneumatic testing is recommended. [29]	Evidence Level: 2 Recommendation Grade: B
Recommendation 34. Hand oversewing of the stapler line is recommended by the consensus group to prevent bleeding and staple-line leak. [30]	Evidence Level: 1 Recommendation Grade: A
Recommendation 35. A calibration bougie of at least 32 Fr should be used to reduce stenosis or stricture after sleeve gastrectomy or gastric bypass. [31]	Evidence Level: 2 Recommendation Grade: B
Recommendation 36. Early relaparoscopy and/or diagnostic endoscopy is recommended when intra-abdominal bleeding, leak, or another acute surgical condition is suspected. [32]	Evidence Level: 2 Recommendation Grade: B
Recommendation 37. In hemodynamic instability with suspected massive hemorrhage, emergency laparotomy with the minimum necessary preoperative preparation is recommended. [33]	Evidence Level: 2 Recommendation Grade: B

or blood loss warrants it [28]. Venous thromboembolism prevention should combine mechanical and pharmacologic measures, while dose and duration are individualized because superiority of routine intensified or weight-adjusted regimens remains uncertain [9]. Intraoperative integrity testing may be used selectively, and staple-line oversewing is a procedure- and surgeon-dependent reinforcement option rather than a universal requirement [29–30]. Bougie calibration should likewise be procedure-specific. Suspected bleeding, leak, or other acute complications warrant prompt multidisciplinary assessment, diagnostic endoscopy, or re-exploration when indicated [32]; emergency laparotomy guidance is principally derived from unstable abdominal-trauma care and requires adaptation to local protocols [33].

Long-term Postoperative Management

The recommendations for long-term postoperative management are summarized in Table 7.

Long-term care after metabolic and bariatric surgery (MBS) should be lifelong, structured, and shared across the patient, surgical team, primary care, and relevant specialists. Follow-up should include procedure-specific biochemical surveillance and individualized protein, mineral, and vitamin replacement, recognizing that supplementation protocols and laboratory targets vary by operation and clinical status [11]. Protein goals may be adjusted toward higher targets when indicated, but routine whey-isolate use and a universal 1.5 g/kg target are not established [35]. Dumping syndrome is best managed initially with dietary measures, reserving acarbose or somatostatin analogues for selected persistent or refractory cases [36]. Ursodeoxycholic acid and proton-pump-inhibitor prophylaxis may reduce gallstone and marginal-ulcer risk,

Table 7

Long-term Postoperative Management

Recommendation	Original evidence rating
Recommendation 38. A national post-MBS monitoring schedule at 1, 3, 6, and 12 months and then annually should include nutritional and biochemical surveillance including complete blood count, ferritin, iron studies, vitamin B12, folate, calcium, vitamin D, parathyroid hormone, albumin and liver function tests. [34]	Evidence Level: 2 Recommendation Grade: B
Recommendation 39. A framework for documented shared responsibility should be developed for lifelong adherence to protein, mineral, and vitamin supplementation, annual nutritional assessment, and scheduled primary-care follow-up. [11]	Evidence Level: 2 Recommendation Grade: B
Recommendation 40. National standardized protocols for macro- and micronutrient supplementation should be procedure-specific and include guidance on iron, vitamin B12, folate, vitamin D, calcium, thiamine and protein replacement. [11]	Evidence Level: 2 Recommendation Grade: B
Recommendation 41. Daily protein intake should be sufficient to preserve lean body mass and prevent protein malnutrition after MBS. High-quality protein supplementation may be used during the early postoperative period when dietary intake is inadequate. [35] Routine assessment and prevention of sarcopenia should be incorporated into post-MBS care using body composition analysis and functional assessment where available.	Evidence Level: 2 Recommendation Grade: B
Recommendation 42. National protocols should be developed for diagnosis and treatment of dumping syndrome, including dietary therapy and pharmacotherapy such as acarbose and somatostatin analogues. [36]	Evidence Level: 2 Recommendation Grade: B
Recommendation 43. Ursodeoxycholic acid should be used for at least one year after MBS to prevent gallstone disease. [37]	Evidence Level: 1 Recommendation Grade: A
Recommendation 44. Proton-pump inhibitors should be prescribed for two months, and for six months in smokers, to prevent peptic or marginal ulcers. [38]	Evidence Level: 2 Recommendation Grade: B
Recommendation 45. Adequate water intake of at least 1.5-2.0 liters daily, adjusted for clinical status, is recommended to prevent dehydration, electrolyte disturbances and nephrolithiasis. [9]	Evidence Level: 3 Recommendation Grade: C
Recommendation 46. Pregnancy should be avoided through effective contraception for 12-18 months after MBS. Preconception assessment should include iron, folate, vitamin B12, vitamin D and calcium status. [39]	Evidence Level: 2 Recommendation Grade: B
Recommendation 47. Psychological support to improve eating behavior should be integrated into standard post-MBS primary-care pathways. [40]	Evidence Level: 2 Recommendation Grade: B
Recommendation 48. A national multidisciplinary protocol should be developed for recurrent weight gain, including nutritional assessment, eating-behavior evaluation, physical activity assessment, pharmacotherapy and revisional surgery indications. [41]	Evidence Level: 2 Recommendation Grade: B
Recommendation 49. A clinical protocol for medication changes after MBS should account for altered pharmacokinetics and potential effects of nutritional deficiencies on drug metabolism and clinical outcomes. [42]	Evidence Level: 2 Recommendation Grade: B

although dose, duration, and prescribing practices vary [37, 38]. Adequate hydration, individualized postponement of pregnancy until weight and nutritional status stabilize [39], multidisciplinary psychological support [40], active management of recurrent

weight gain [41], and medication review for procedure-dependent pharmacokinetic changes [42] should be embedded in continuing care; national protocols remain policy proposals requiring local validation.

Education, Certification, Financing, and Registry

The recommendations for education, certification, financing, and registry are summarized in Table 8.

Table 8

Education, Certification, Financing, and Registry

Recommendation	Original evidence rating
Recommendation 50. MBS should be included in undergraduate, residency, and postgraduate medical curricula, and continuing education programs should be developed for primary-care physicians. [43]	Evidence Level: 3 Recommendation Grade: C
Recommendation 51. Continuing medical education should enable primary-care clinicians to monitor post-MBS nutritional status and recognize late surgical and malabsorptive complications. [44]	Evidence Level: 3 Recommendation Grade: C
Recommendation 52. Before getting privileges to perform MBS, surgeons must hold a general surgery degree and complete or have completed a dedicated fellowship training program. The learning curves for the various operative procedures are approximately 25-50 operations for the LSG, 50-75 for the OAGB, and 75-100 for the RYGB. [45]	Evidence Level: 3 Recommendation Grade: C
Recommendation 53. Kazakhstan should update its clinical protocol for surgical treatment of obesity and metabolic syndrome every five years and monitor compliance with Ministry of Health Order No. 8P/ACM-218/2020. [46]	Evidence Level: 3 Recommendation Grade: C
Recommendation 54. A Kazakhstan MBS accreditation and quality-improvement program should be established, modeled on MBSAQIP and adapted to national legal requirements. [47]	Evidence Level: 3 Recommendation Grade: C
Recommendation 55. Certified multidisciplinary MBS teams and centers should undergo accreditation because effective surgery requires comprehensive longitudinal bariatric care. [48]	Evidence Level: 2 Recommendation Grade: B
Recommendation 56. Allied health professionals in the MBS multidisciplinary team should receive specialized training, including bariatric anesthesia and nursing, to minimize risk and improve recovery. [10]	Evidence Level: 2 Recommendation Grade: B
Recommendation 57. Recommended MBS procedures should be integrated into Kazakhstan mandatory social health insurance or guaranteed benefits packages to reimburse treatment of obesity and metabolic syndrome. [49]	Evidence Level: 1 Recommendation Grade: A
Recommendation 58. The Ministries of Health and Science should support grant-funded and program-targeted research into surgical and multidisciplinary MBS approaches. [50]	Evidence Level: 3 Recommendation Grade: C
Recommendation 59. The Ministry of Health should support the creation of MBS Centers of Excellence that serve as exemplary care providers and participate in national and IFSO-related professional communities. [51]	Evidence Level: 3 Recommendation Grade: C
Recommendation 60. All Kazakhstani institutions performing MBS surgical or endoscopic interventions should submit data at least annually to the Kazakhstan MBS Registry to monitor long-term outcomes and patient safety. [52]	Evidence Level: 3 Recommendation Grade: C

Domain H recommendations frame metabolic and bariatric surgery (MBS) quality as a system-wide responsibility spanning education, credentialing, multidisciplinary care, financing, research, accreditation, and measurement. Competency-based

obesity and MBS education should extend across undergraduate, residency, postgraduate, and continuing professional programs, with primary-care clinicians prepared for nutritional surveillance and late complications [43, 44]. Structured fellowship training, mentorship, and objective laparoscopic assessment, including simulation where appropriate, provide defensible competency-assurance methods; role-specific training for nursing, anesthesia, and allied professionals supports coordinated perioperative care [10, 45]. Periodic protocol review and standardized outcomes reporting are literature-supported quality principles, whereas Kazakhstan's proposed five-year cycle and Ministry-order monitoring are national policy matters [46]. Accreditation and Centers of Excellence may support governance, longitudinal care, data collection, and collaboration, but domestic authorization is required [47] [48, 51]. Insurance inclusion, research funding, and mandatory annual registry reporting likewise require official national decisions and infrastructure [49, 50, 52].

Implementation Considerations

Kazakhstan has experience implementing new technologies based on recommended guidelines [53]. Overall health outcomes, measured by the BAROS scale, assess resolution of comorbidities and improvement in quality of life, and also reflect the risk of bile reflux, marginal ulcers, and dumping syndrome, the main problems of bariatric surgery [54]. Recommendations on other aspects of MBS, particularly nutritional support and physician education, can improve the long-term safety and effectiveness of metabolic bariatric surgery [11, 34].

Implementation should begin with a phased national pathway: establishment of multidisciplinary eligibility and perioperative protocols; procedure-specific nutritional and complication-management pathways; accredited-center standards; workforce competency requirements; and a national registry with standardized outcome definitions. Monitoring should include access and equity indicators, short-term safety, nutritional complications, patient-reported outcomes, recurrent weight gain, comorbidity trajectories, pregnancy-related outcomes, and reintervention rates.

The two technique-specific FundoRing recommendations are retained exactly as endorsed by the Working Group. On August 12, 2026, the FundoRing method for gastric bypass was officially approved for practical use in the country by the Joint Quality Commission (JQC) of the Ministry of Health of the Republic of Kazakhstan with approval of insurance compensation.

Several statements require action beyond the authority of individual clinicians, including insurance coverage, national accreditation, formal educational standards, Ministry oversight, and compulsory registry reporting. Such measures should be introduced with legal review, implementation milestones, audits, and periodic revision in partnership with patients, professional

bodies, payers, and health-system leaders.

Limitations

The recommendations were developed for a specific national setting and should not be interpreted as replacements for internationally recognized practice guidelines.

The original consensus record did not provide all elements recommended for guideline reporting, including the complete literature-search protocol, voting results, certainty-of-evidence methodology, and conflict-management process.

Recommendations should be evaluated within the MBS development framework and formally updated at least every five years.

Conclusion

These 60 national recommendations provide a structured route toward safer, more equitable, and more accountable MBS care in Kazakhstan. Their implementation requires multidisciplinary delivery, standardized lifelong follow-up, accredited centers, workforce development, sustainable financing, transparent registry reporting, and periodic evidence-based revision. Prospective national outcome monitoring is essential to determine effectiveness, safety, equity, and resource implications in the Kazakhstan's context.

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