TANDEM TALK
INQUADRAMENTO PSICOLOGICO E NUTRIZIONALE IN CASO DI WEIGHT REGAIN

BENEDETTA BELTRAME

DIETISTA

SOC CHIRURGIA GENERALE, BARIATRICA E METABOLICA

AZIENDA USL TOSCANA CENTRO

MARIA ROSARIA CERBONE

PSICOLOGO/PSICOTERAPEUTA

ASL NA 2 NORD

Obesity Surgery (2021) 31:1755–1766
https://doi.org/10.1007/s11695-020-05160-5

REVIEW

Weight Regain and Insufficient Weight Loss After Bariatric Surgery: Definitions, Prevalence, Mechanisms, Predictors, Prevention and Management Strategies, and Knowledge Gaps—a Scoping Review

Table 1 Selected examples of definitions and prevalence of WR and IWL after BS

Characteristic	Unit/component/s	Examples
Definition		
WR	Using EWL%	> 25% EWL from nadir [17–19]
	Using nadir weight %	≥ 10% [8, 20] or > 15% of nadir weight [8, 9, 21, 22]
	Using nadir weight kg	≥ 10 kg from nadir [8, 21–23]
	Using maximum WL	≥ 10% [8, 24], ≥ 20 [8, 25] or ≥ 25 [8, 26] of maximum WL
	Using pre-surgery weight	≥ 10% WR of pre-surgery weight [8, 27]
	Using any WR after remission	Any WR after T2DM remission [28]
	Using any WR	Any WR [29]
	Using BMI	≥ 5 BMI kg/m^2 points from nadir [30]
		Increase in BMI > 35 kg/m^2 after successful WL [31]
IWL	Using EWL%	EWL of < 50% at 18 months [16]
Prevalence[a]		
WR		Post-LAGB (38%) [32]; post-LSG (27.8%) [33]; post-RYGB (3.9%) [34]
IWL		After LSG (32–40%) [17, 35]; after RYGB, OAGB, and LSG combined (20%) [36]

Range of definitions and prevalence selected are examples for illustration purposes only and do not include all examples in the literature. *EWL* excess weight loss, *WR* weight regain, *IWL* insufficient weight loss, *WL* weight loss, *T2DM* type 2 diabetes, *BMI* body mass index, *LAGB* laparoscopic adjustable gastric banding, *LSG* laparoscopic sleeve gastrectomy, *OAGB* one anastomosis gastric bypass

[a] Prevalence of WR are different depending on choice of BS procedure, varied assessment methods (EWL, weight from Nadir), and various follow-up periods

DEFINIZIONE

Eating and Weight Disorders - Studies on Anorexia, Bulimia and Obesity (2023) 28:5
https://doi.org/10.1007/s40519-023-01537-4

ORIGINAL ARTICLE

SICOB-endorsed national Delphi consensus on obesity treatment optimization: focus on diagnosis, pre-operative management, and weight regain/insufficient weight loss approach

Marco Antonio Zappa[1] · Angelo Iossa[2] · Luca Busetto[3] · Sonja Chiappetta[4] · Francesco Greco[5] · Marcello Lucchese[6] · Fausta Micanti[7] · Geltrude Mingrone[8,9,10] · Giuseppe Navarra[11] · Marco Raffaelli[12] · Delphi Expert Panel · Maurizio De Luca[13]

Received: 10 October 2022 / Accepted: 5 January 2023

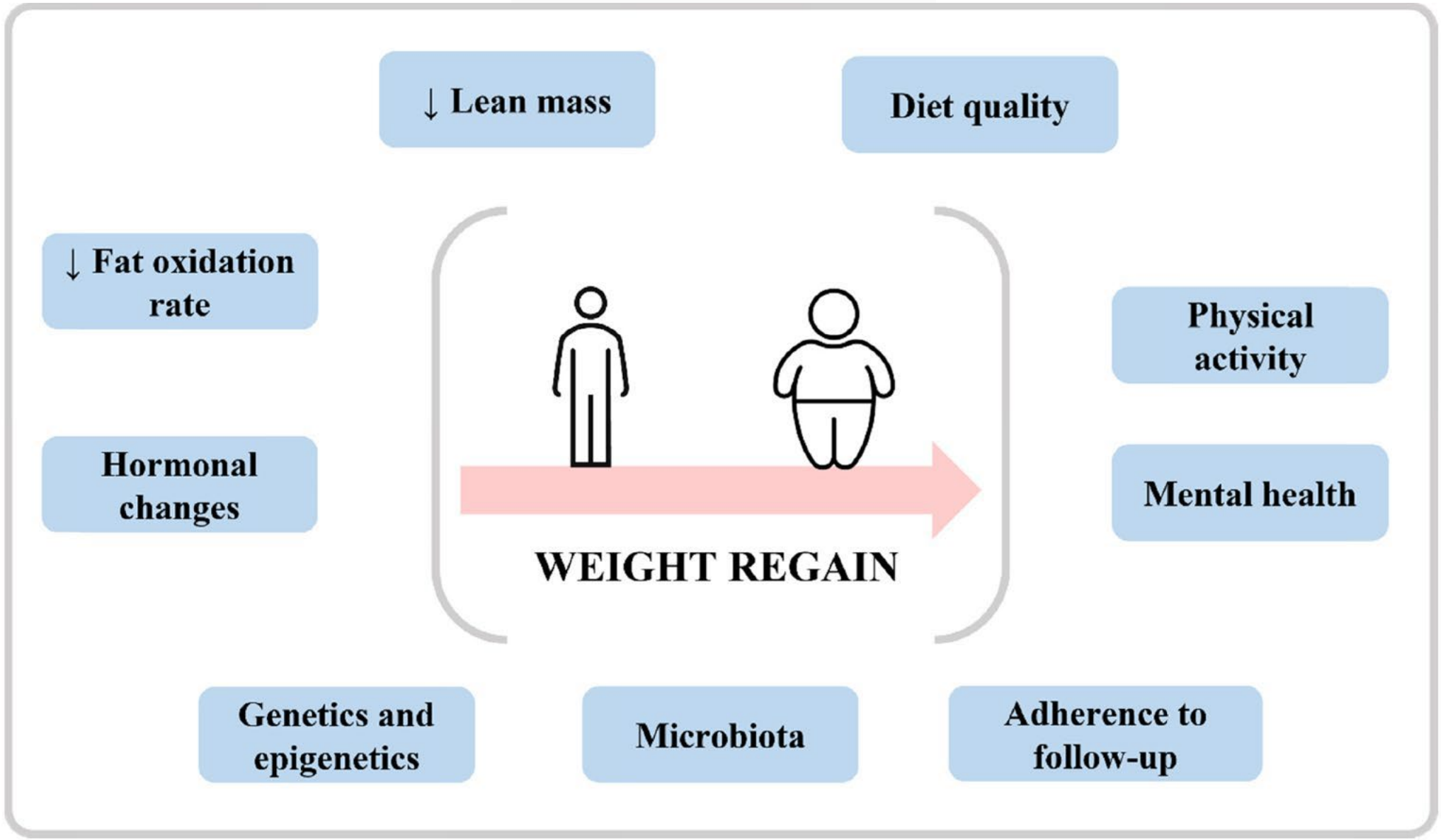
IWL:

- weight loss < 20% of the initial weight or that does not shift the patient to a class of obesity different from the initial one or that does not lead to control clinically significant metabolic complications.

Significant WR:

- any weight regained by the nadir that lends itself to the value or is very close to the initial value (first evaluation) with a detrimental effect on the quality of life or involving clinically inadequate control of metabolic complications.

POSSIBILI CAUSE



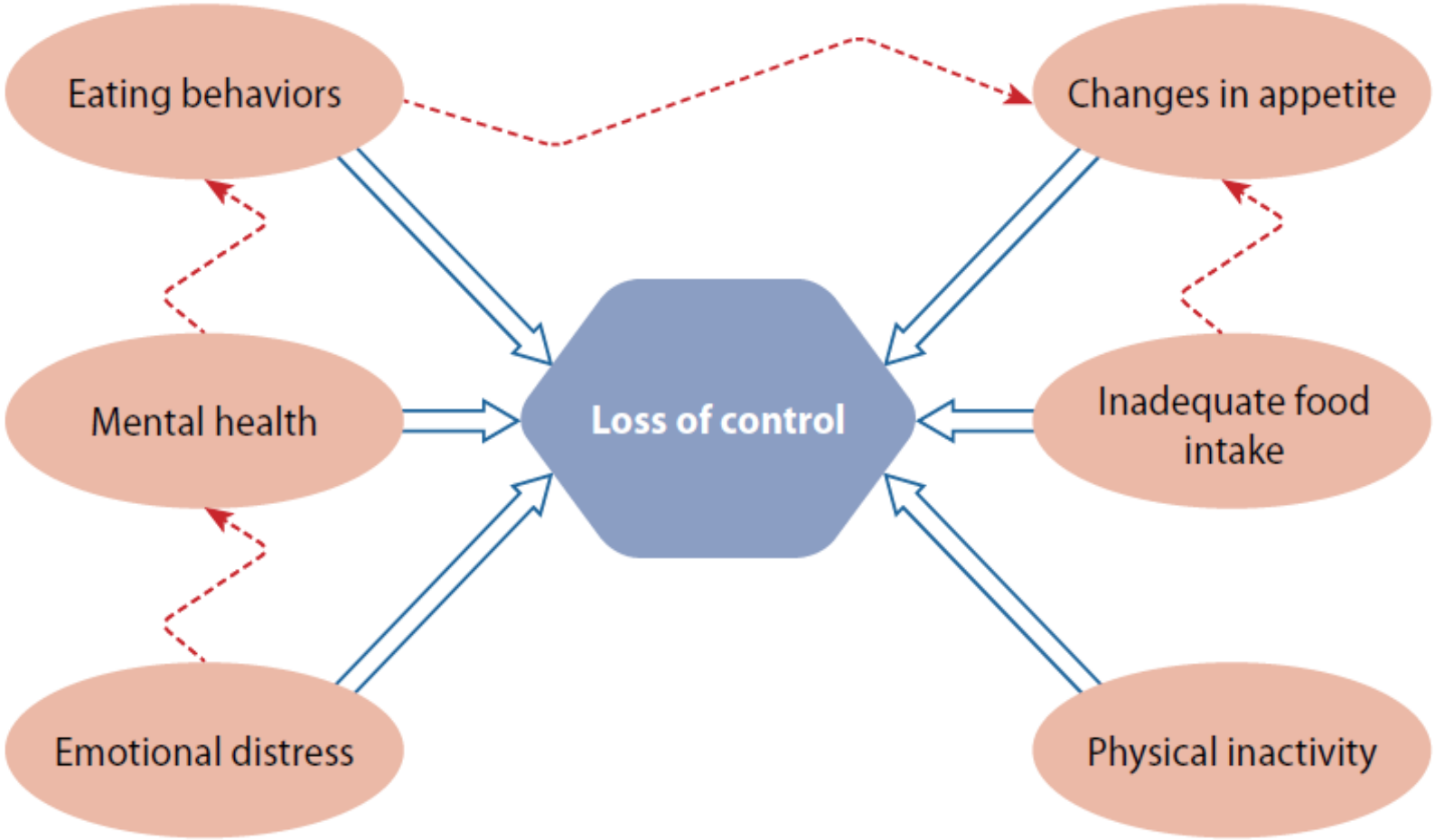


Figure 2. Schematic map of correlations between factors involved in loss of control in bariatric surgery patients in long-term follow-up period.

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REVIEW

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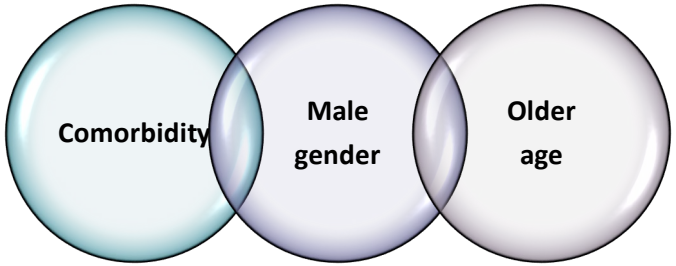
Characteristic	Summary
Causes	
Hormonal/metabolic	Increase in ghrelin, decrease in peptide YY and GLP-1, post-bariatric hypoglycemia, role of leptin is unclear [24, 40–49]
Dietary non-adherence	Increase caloric intake with time, dietary non-adherence/food indiscretion, grazing, lack of nutritional follow-up [13, 32, 50–56]
Physical inactivity	Non-compliance, sedentary behavior, presence of barriers to exercise [51, 57–61]
Mental health	Depression, multiple psychiatric conditions, binge eating disorder, loss of control over eating [54, 62–68]
Anatomic surgical failure	
LAGB	Pouch distension [69]
LSG	Dilatation of gastric pouch [70–77]
RYGB	Dilatation of gastric pouch, dilatation of gastrojejunostomy stoma outlet, gastrogastric fistula [73–75]
Predictors	Older age, male gender, higher preoperative BMI, mental health issues, presence of comorbidities (T2DM, hypertension, OSA) [34, 36, 76–86]
Prevention and management	
Behavioral	Cognitive behavioral therapy, remote acceptance-based behavioral intervention, lifestyle counseling [87–90]
Dietary	Counseling with dietitian, structured dietary intervention [91–94]
Pharmacological	FDA approved: phentermine, phentermine–topiramate extended release, liraglutide, bupropion/naltrexone Off label: metformin, topiramate, zonisamide, bupropion [95–98]
Surgical (management only)	
After failed LAGB	Conversion to LSG, RYGB, BPD/DS [99]
After failed LSG	Conversion to RYGB, BPD/DS [17]
After failed RYGB	Conversion to DRYGB or to BPD/DS; or revision of gastric pouch and anastomosis, revision with gastric band [100]

WR weight regain, *IWL* insufficient weight loss, *BS* bariatric surgery, *GLP-1* glucagon-like protein-1, *LAGB* laparoscopic adjustable gastric banding, *LSG* laparoscopic sleeve gastrectomy, *RYGB* Roux-en-Y gastric bypass, *BPD/DS* biliopancreatic diversion with duodenal switch, *FDA* Food and Drug Administration, *DRYGB* distal RYGB

PREDICTORS



- Preoperative Eating Patterns
- Preoperative Higher BMI

- Depression
- Multiple psychiatric conditions
- BED- LOC over eating

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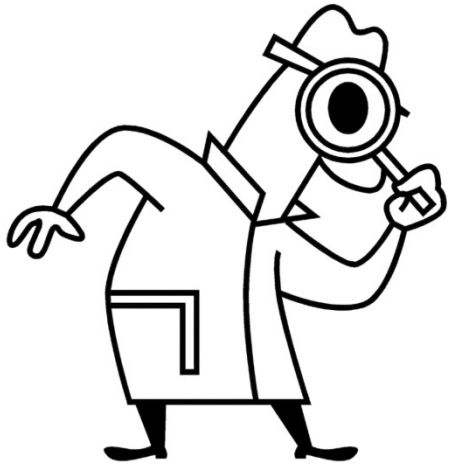

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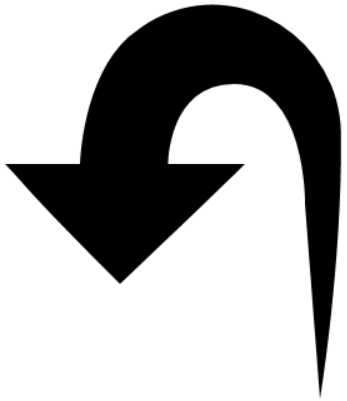
	Dietary Adherence	Physical activity	Weight loss (%)	Mean	SD	α
Age	.08	−.20**	−.26***	44.44	9.61	
Sex (1 female, 2 male)	−.11	−.01	−.14*	1.22	0.41	
BMI (kg/m^2)	.03	−.05	−.05	44.9	5.72	
Previous behavior - Weight loss/diet history						
Preoperative weight loss %	.06	.03	−.14*	3.87	5.71	
Years with dieting experience %	.24***	.05	.09	54.58	17.76	
Diet strategies used (less carbs, fats, sweets)	.03	.01	.16*	4.92	2.35	N/A
Number of times lost >10 kg	.13	.03	.03	4.26	3.35	
Magnitude of largest weight loss	.03	.15*	.22**	24.39	14.83	
Number of times participated in an organized diet program	.03	−.02	−.02	3.47	3.83	
Preoperative behavior						
Alcohol use	−.02	−.14*	.02	4.19	1.73	N/A
Frequency of snacking	−.08	−.09	.23**	2.93	0.51	.43‡
Night eating tendency	−.25***	−.09	−.14*	1.17	0.50	N/A
PA (MET-min/week)	.10	.39***	.14*	1881	2322	
Binge eating	.01	−.09	.03	1.69	0.83	N/A
Psychological factors - Motivation/expectations						
Weight loss goal (%)†	.05	−.06	−.01	37.71	7.65	N/A
Well-being expectations	.05	.09	−.01	8.34	1.34	.84
Social competence expectations	−.05	.01	.02	7.28	1.74	.73
Readiness to limit food intake	.29***	–	−.05	9.04	1.13	N/A
Readiness to increase PA	–	.25***	.05	8.43	1.60	N/A
Planning eating behavior	.08	–	−.02	3.01	0.53	.85
Planning PA	–	.34***	.00	2.72	0.59	.93
Self-efficacy	.09	.14*	.09	3.10	0.44	.87
Psychological factors - Self-evaluation/emotional distress /social factors						
Self-esteem	.15*	.15*	−.01	2.66	0.73	.82
Body Image	.15*	.16*	.01	2.44	0.55	.74
Emotion regulation - reappraisal	−.03	.05	.01	4.00	0.85	.80
Emotion regulation - suppression	−.08	.00	−.06	3.79	1.05	.78
Anxiety symptoms	−.10	.04	.03	7.04	4.29	.84
Depressive symptoms	−.19**	−.14*	−.04	5.41	3.78	.78
Resilience	.18**	.09	−.04	3.64	0.64	.93
Satisfaction with relationship‡	.09	.03	.04	5.52	1.15	.85

PREOPERATIVE EATING PATTERNS



PREDICTOR OF POSTOPERATIVE

- •DIETARY ADHERENCE
- •PHYSICAL ACTIVITY
- •%WEIGHT LOSS

Preoperative predictors of adherence to dietary and physical activity recommendations and weight loss one year after surgery, Bergh et al. SOARD (2016)

ELSEVIER

CrossMark

Surgery for Obesity and Related Diseases 13 (2017) 1063–1071

SURGERY FOR OBESITY AND RELATED DISEASES

Original article

Stability of problematic eating behaviors and weight loss trajectories after bariatric surgery: a longitudinal observational study

Eva M. Conceição, Ph.D.[a,*], James E. Mitchell[b,c], Ana Pinto-Bastos, M.Sc.[a], Filipa Arrojado, M.Sc.[a], Isabel Brandão, Ph.D.[d], Paulo P.P. Machado, Ph.D.[a]

1) How stable are LOC and picking and/or nibbling from the pre- to postoperative periods?
2) Do patients with preoperative LOC develop picking and/or nibbling postoperatively?
3) Are pre- or postoperative PEBs and associated psychological variables predictors of weight loss and weight regain?
4) Are pre- or postoperative PEBs predictors of different weight loss trajectories after surgery?

Table 2
Number and percentage of patients reporting LOC, picking and/or nibbling, or both, at least once in the previous month

Preoperative assessment	N = 61	Postoperative assessment			
		No PEB 33 (54.1%)	LOC only 6 (9.8%)	Picking and/or nibbling only 19 (31.1%)	LOC + picking and/or nibbling 3 (4.9%)
No PEB	38 (62.3%)	23 (60.5%)	5 (13.2%)	9 (23.7%)	1 (2.6%)
LOC only	4 (6.6%)	2 (50%)	0 (0%)	2 (50%)	0 (0%)
Picking and/or nibbling only	16 (26.2%)	7 (43.8%)	1 (6.3%)	7 (43.8%)	1 (6.3%)
LOC + picking and/or nibbling	3 (4.9%)	1 (33.3%)	0 (0%)	1 (33.3%)	1 (33.3%)

PEB = problematic eating behavior; LOC = loss of control eating; LOC + picking and/or nibbling LOC eating and picking and/or nibbling.

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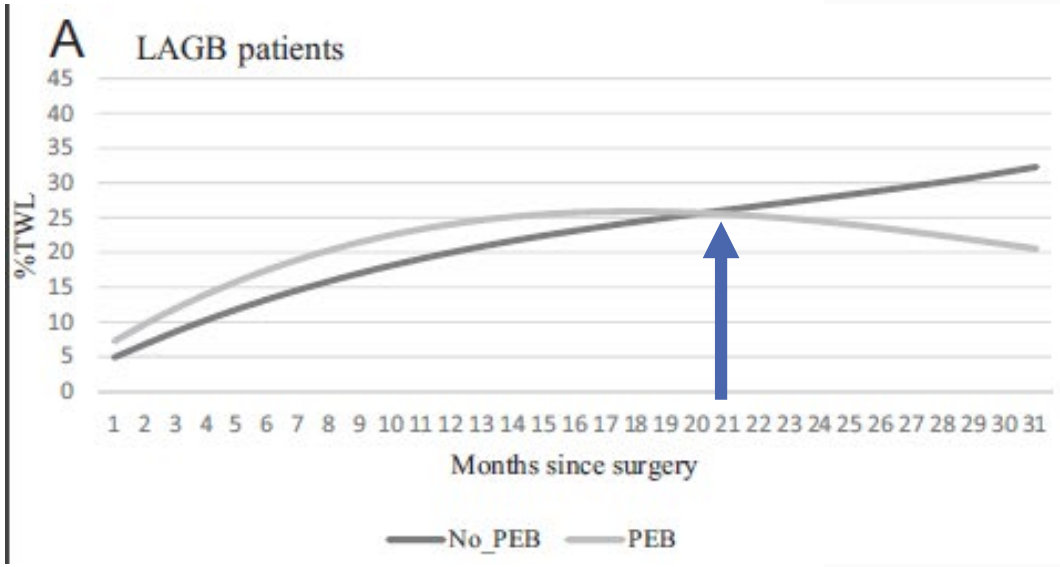
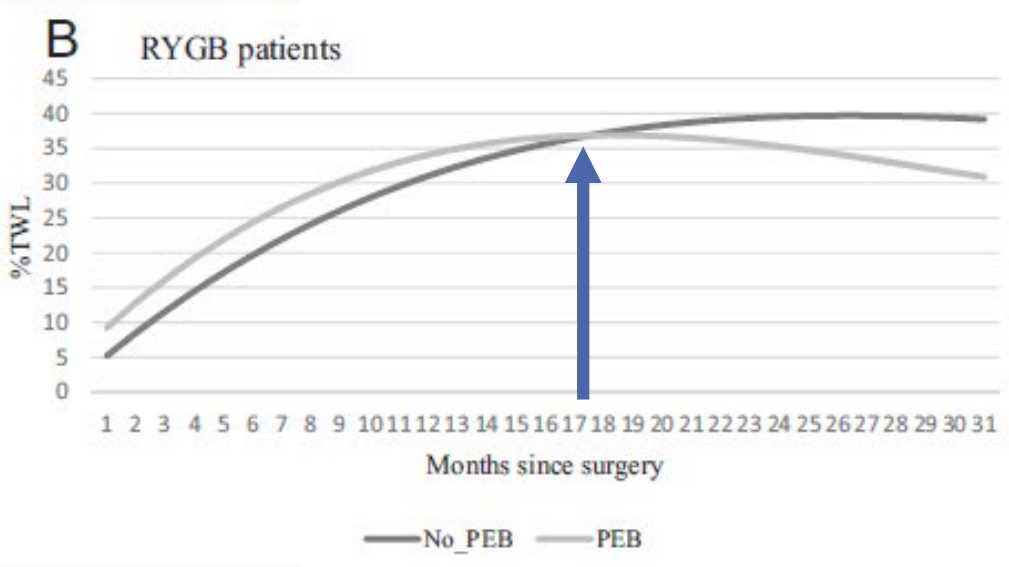




Research

JAMA Surg. doi:10.1001/jamasurg.2016.0395
Published online April 20, 2016.

Original Investigation

Postoperative Behavioral Variables and Weight Change 3 Years After Bariatric Surgery

Key Points

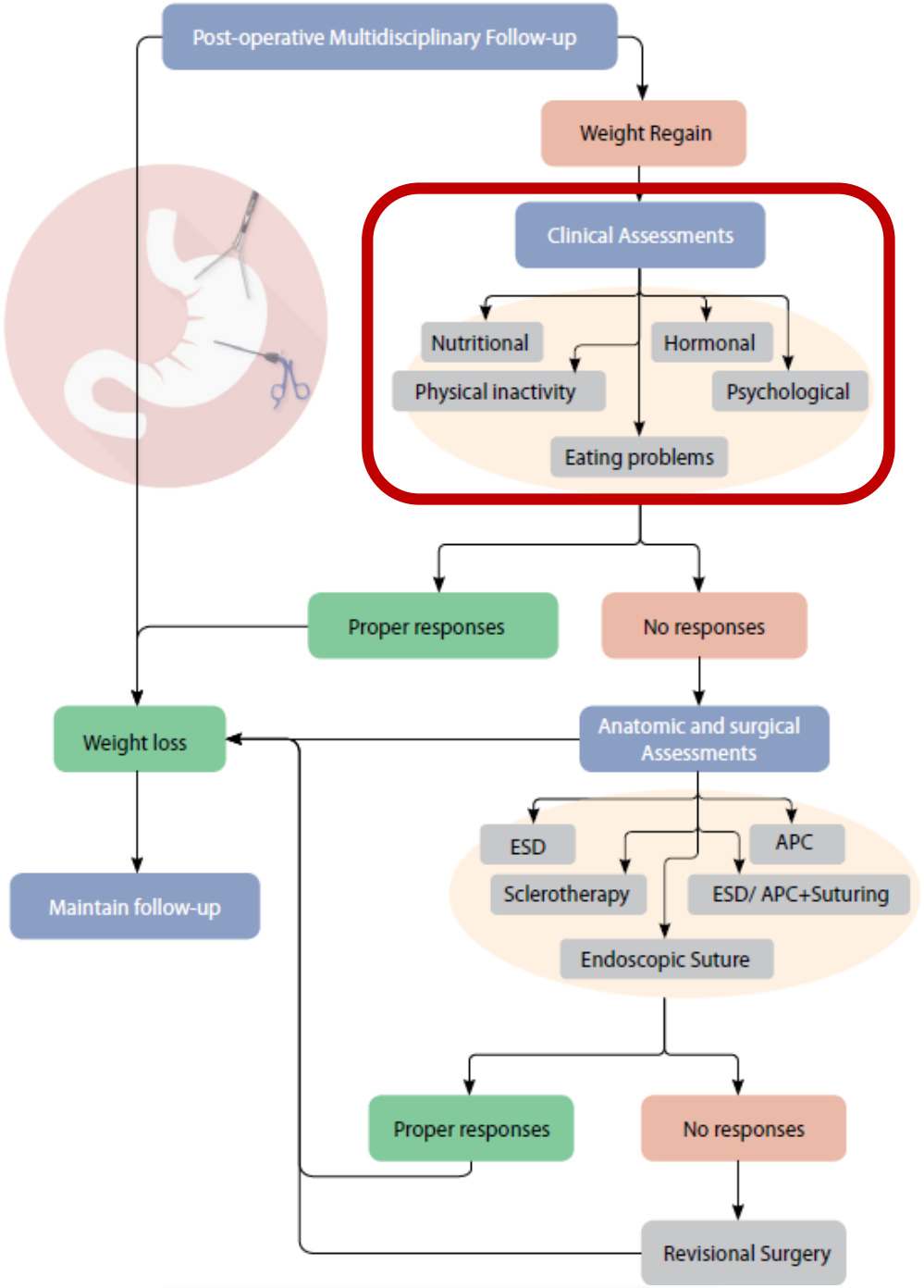
Question What are the postoperative predictors of the amount of subsequent weight loss following bariatric surgery in severely obese adults?

Findings In a cohort study of 2022 post–bariatric surgery patients from 10 US hospitals in the Longitudinal Assessment of Bariatric Surgery-2 (LABS-2) study, those patients who adopted healthier eating and weight control behaviors after surgery experienced significantly greater weight loss than other patients.

Meaning Addressing problematic eating and weight control behaviors, many of which are potentially modifiable, may improve weight loss substantially following bariatric surgery.

Table 1. Modifiable Practices and Behaviors

Category	Practice or Behavior
Weight loss practices	Self-weigh at least weekly
	See nutritionist or dietitian
	See personal trainer or exercise specialist
	Keep a food diary
	Count fat grams
	Decrease fat intake
	Reduce number of calories eaten
	Use a very low-calorie diet
	Cut out between-meal snacking
	Eat fewer high-carbohydrate foods
	Eat special low-calorie diet foods
	Eat or drink meal replacements
	Increase fruits and vegetables
	Cut out sugar-sweetened beverages
Alcohol, smoking, and illegal drugs	Alcohol use disorder
	Current smoker
	Illegal drug use
Eating behaviors and problems	Eat breakfast regularly
	Eat breakfast, lunch, and dinner regularly
	Eat when feeling full, more than once a week
	Eat when not hungry, more than once a week
	Eat continuously during the day or part of the day
	Binge-eating disorder
	Loss-of-control eating
	Night eating syndrome
	Evening hyperphagia
	Night eating


Post-operative Multidisciplinary Follow-up
Weight Regain
Clinical Assessments
Nutritional
Hormonal
Physical inactivity
Psychological
Eating problems
Proper responses
No responses
Weight loss
Anatomic and surgical Assessments
Maintain follow-up
ESD
APC
Sclerotherapy
ESD/ APC+Suturing
Endoscopic Suture
Proper responses
No responses
Revisional Surgery

FOLLOWUP

VALUTAZIONE NUTRIZIONALE

Anthropometry	**Biochemical and clinical tests**	**Food tolerance** (swallow, digest, intolerance, bowel movement)	**Fatigue**	**Fluids balance** (thirst)
Energy/protein intake	**Vitamin mineral/supplements**	**Meal and snack frequency**	**Level of hunger before meals**	**Level of fullness after meals**
Amount of food client is able to eat at one sitting	**Disordered eating patterns**	**Meals eaten away from home**	**Duration of meals**	**Consumption of liquids at the same time as solids**

Eating Behavior	Problem	Intervention
Erratic eating	Inconsistent/unplanned eating schedule	Preplan approximate timing and appropriate spacing of meals throughout the day based on daily schedule
Meal skipping	Not eating for an extended time period leading to subsequent hunger and overeating	Plan meals ahead of time; create a shopping list to ensure selected food and appropriate amounts are available to prepare these meals
Unhealthy food and beverage selections	Frequent intake of high-calorie/processed meals and snacks including fast food/take-out, fried food, concentrated sweets, and refined carbohydrates; calorie-rich beverages such as soda and juices	Education on balanced meal preparation containing protein and fiber-rich sources to help optimize satiety; encourage cooking classes and/or online cooking resources
Nibbling/Grazing	Continuous/repetitive and unplanned eating of modest portions of food throughout the day; often associated with previous binge-eating behaviors; leads to excessive cumulative energy intake	Avoidance of skipping meals; appropriate meal portion sizes (1/2-1 cup). Identify triggers including stress, boredom, and emotional factors or engaging in other activities such as watching television
Night eating	Consuming more calories before sleep favors positive energy balance and weight gain	Schedule time for meals during the day; self-monitor using food journal
Inappropriate portions	Portion sizes beyond the feeling of fullness resulting in discomfort	Weigh and measure foods, use smaller plates and utensils, and limit volume to 1 cup of food per meal
Alcohol use	Excess nonnutritive calories; promotes increased hunger, food cravings, and compromises judgment regarding proper food selection	Avoid or limit alcohol consumption; consider referral to treatment program if unable to control behavior
Insufficient protein and fiber intake	Protein and fiber promote optimal satiation; protein-rich foods optimize muscle integrity and energy metabolism	Education on quality sources of protein and fiber; assist with meal planning to achieve appropriate intake
Drinking fluids with meals	Potential enlargement of the gastric pouch and outlet with repeated behavior; leads to rapid emptying of the stomach	Delay fluid intake at least 30 minutes after consuming solid food

EDUCATIVE INTERVENTION

INTENSIVE MONITORING AND FOLLOW-UP

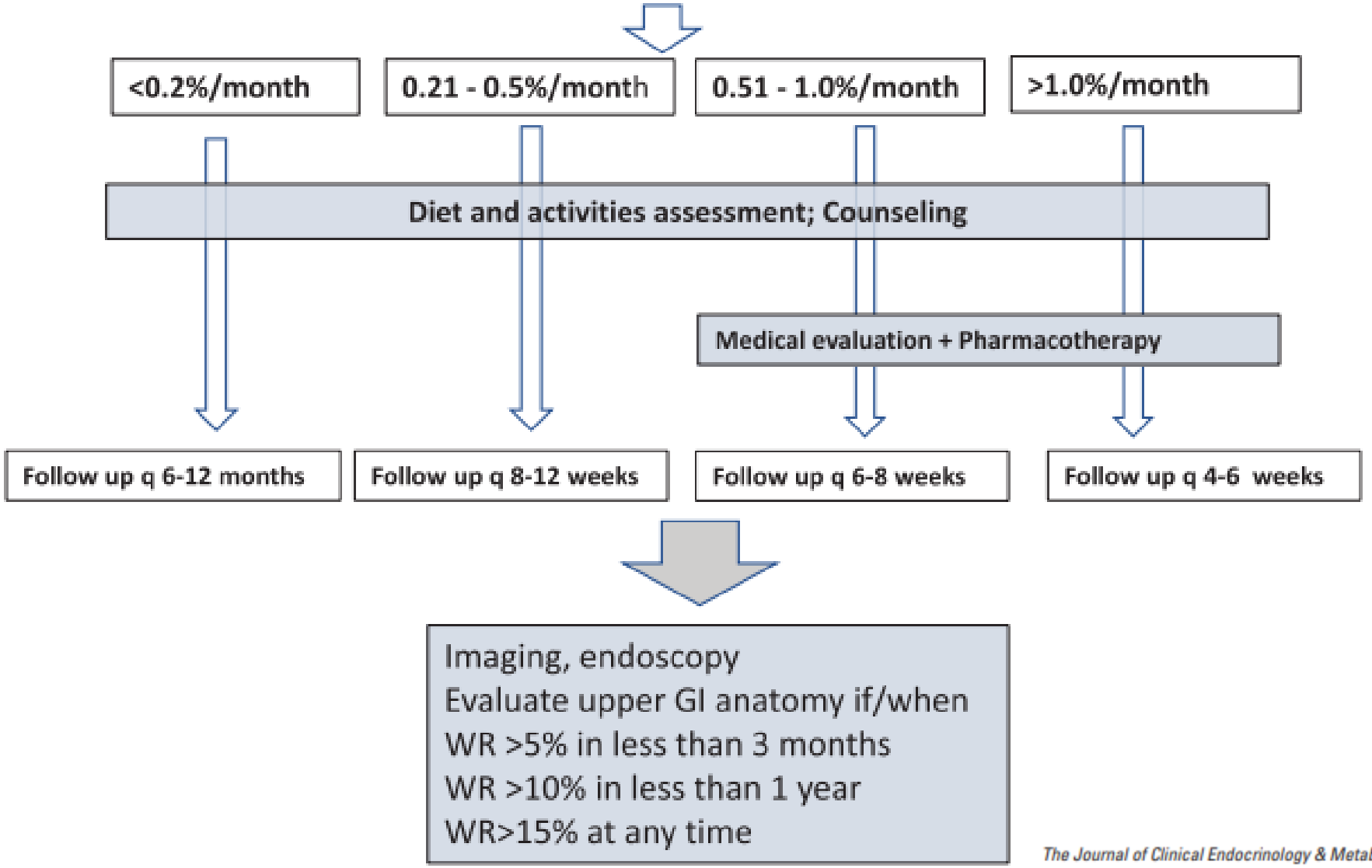
What is the effectiveness of various types/modes of delivery of behavioral therapies ?

(e.g., group vs individualized, face to face vs remote)

When should behavioral and intensive nutritional therapy be introduced to effectively prevent or treat WR/IWL ?

(e.g., preventive at weight plateau vs management after WR)

Evaluation of WR: Percent Over Nadir



The Journal of Clinical Endocrinology & Metabolism, 2021, Vol. 106, No. 1, 251–263
doi:10.1210/clinem/dgaa702
Approach to the Patient

FOLLOWUP

AACE/TOS/ASMBS/OMA/ASA 2019 Guidelines

CLINICAL PRACTICE GUIDELINES FOR THE PERIOPERATIVE NUTRITION, METABOLIC, AND NONSURGICAL SUPPORT OF PATIENTS UNDERGOING BARIATRIC PROCEDURES – 2019 UPDATE: COSPONSORED BY AMERICAN ASSOCIATION OF CLINICAL ENDOCRINOLOGISTS/AMERICAN COLLEGE OF ENDOCRINOLOGY, THE OBESITY SOCIETY, AMERICAN SOCIETY FOR METABOLIC & BARIATRIC SURGERY, OBESITY MEDICINE ASSOCIATION, AND AMERICAN SOCIETY OF ANESTHESIOLOGISTS*

Recommendations for nutritional care after bariatric surgery: Recommendations for best practice and SOFFCO-MM/AFERO/SFNCM/expert consensus☆

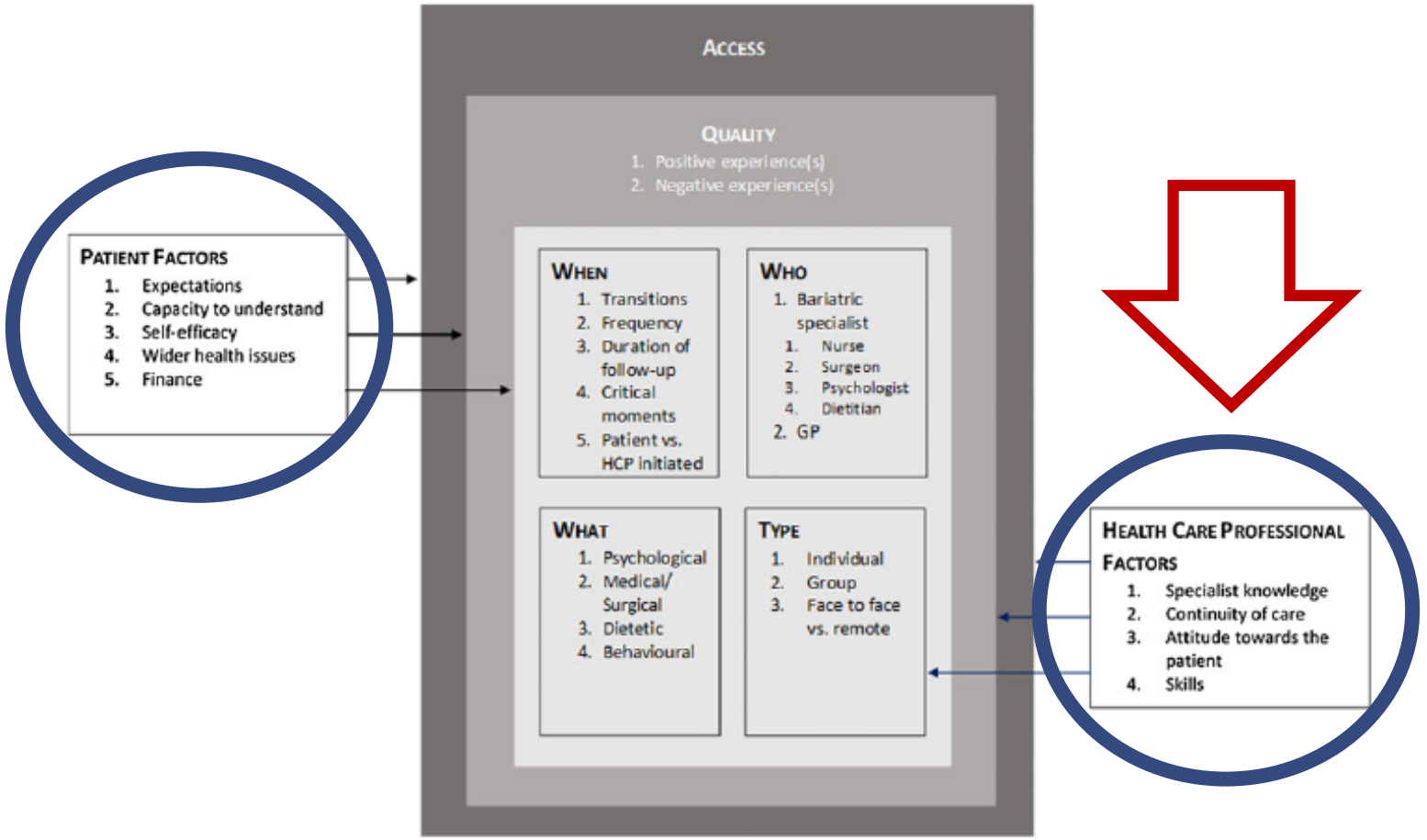
IL FOLLOW UP MULTIDISCIPLINARE È FONDAMENTALE PER OTTENERE IL MASSIMO RISULTATO DALLA CHIRURGIA BARIATRICA ED E' CORRELATO CON IL SUCCESSO DELLA PROCEDURA STESSA

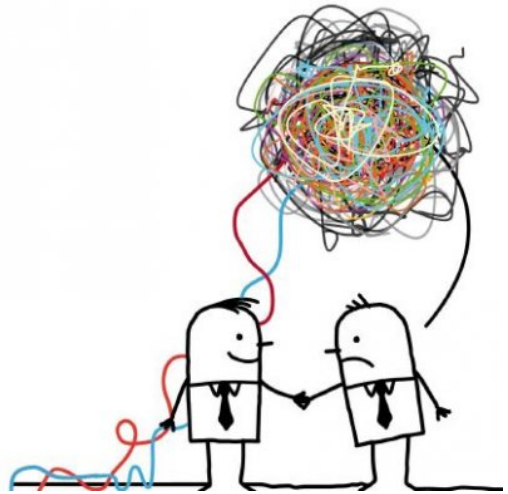
GUIDELINES

Clinical practice guidelines of the European Association for Endoscopic Surgery (EAES) on bariatric surgery: update 2020 endorsed by IFSO-EC, EASO and ESPCOP

FOLLOWUP

obesity reviews






S.I.C.OB.
Bari
SPRING MEETING
18 - 19 MAGGIO 2023
THE NICOLAUS HOTEL
CONDIVIDERE PER CRESCERE
Strategie di integrazione
in Chirurgia Bariatrica
Presidente del Congresso
ANTONIO BRAUN

Grazie