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2013 Presidential address

2013 ASMBS Presidential address 30 years of accomplishments: Where do we go from here?

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When I was brainstorming about a title for my presidential address, I thought about our Society's 30th anniversary that we are celebrating this year. So, I decided to entitle it "30 Years of Accomplishments: Where Do We Go from Here?"

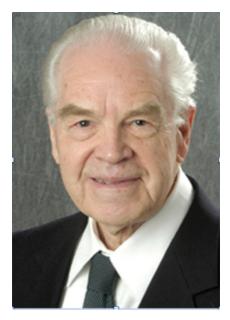


Fig. 1. Dr. Ed Mason "Father of Obesity Surgery".

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We all know that our organization started 30 years ago in 1983 with Dr. Ed Mason (Fig. 1), who is known to many of us as the "Father of Obesity Surgery". He had the clever idea to establish the American Society for Bariatric Surgery (ASBS) in 1983 (Fig. 2). Dr. Mason started his work in bariatric surgery long before 1983. Back in the late 60s, he decided to use an operation that was designed to treat ulcer disease and proposed it for the treatment of severely obese patients [1]. In the early 80s, he was also clever enough to come up with another very different procedure, a mainly restrictive one that we know as the vertical banded gastroplasty [2]. Dr. Mason decided to host meetings with the early bariatric surgeons, many of whom are past presidents of the American Society for Metabolic and Bariatric Surgery (ASMBS) and some who are here sitting with us. These meetings started in 1976, and were held at the University of Iowa where Dr. Mason was a Professor of Surgery. These meetings were the foundational building blocks of the ASBS 30 years ago. Dr. Mason was ahead of



Fig. 2. Original ASBS logo.

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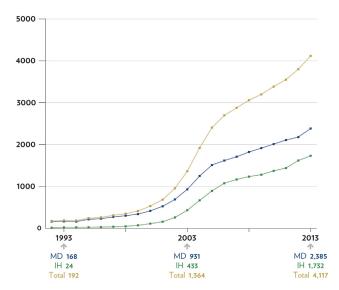


Fig. 3. ASMBS membership.

his time in many ways. He wanted to have a data registry of cases that could document outcomes. Everybody knows the difficulty we have faced in developing a national database. Way back in 1986, he developed a national database that was eventually converted into the International Bariatric Surgery Registry [3].

In addition, many of the surgeons who were the founding members of the ASBS are the ones who developed the techniques that we are now using. Dr. Lubomyr Kuzmak, one of the original members, invented the adjustable silicone gastric band [4] that was used in open surgery and was the predecessor of the laparoscopic adjustable gastric band. Dr. Doug Hess used a different technique to change the traditional Scopinaro biliopancreatic diversion procedure to the duodenal switch [5]. Dr. Allan Wittgrove, one of our past presidents, used the laparoscopic technique to perform the first laparoscopic Roux-en-Y gastric bypass (LRYGB) [6]. Dr. Michel Gagner, performed the first laparoscopic duodenal switch [7] and used the sleeve gastrectomy as a first-stage technique for a unique approach [8], which subsequently became accepted as a stand-alone procedure.

All of these innovations in the late 1980s and 90s led the field to a new era of laparoscopic bariatric procedures, which fostered growth in the number of cases performed. This is what we have seen since then: When you look at the growth of the membership of the ASBS, look at the number of members in the 90s; they were pretty flat, in the 300–400 member range. But in the 2000s, they started growing along with the volume of cases based on those techniques that were created (Fig. 3).

I want to thank the Membership Committee, Chair Dr. Samuel Szomstein, and the International Development Committee, current Chair Dr. Samer Mattar, and former Chair Dr. Raul Rosenthal for all the work that they have done to increase the membership of our Society. Right now,

we have over 4100 members. Over 2300 members are surgeons and about 1700 are integrated health members. We are also a global society, now represented in 52 countries.

Now where do I fit in this growth? I started doing bariatric surgery in the late 90s. I applied to join the Society in the year 2000 and in order for me to start growing and developing my techniques; I had to learn from all of these leaders. I would like to spend a few minutes to acknowledge my mentors who have helped me to understand the procedures. I learned the laparoscopic gastric banding technique from Dr. Rodolfo Sanchez and Dr. Roberto Rumbaut from Monterrey, Mexico. Later, Dr. George Fielding helped me to understand the use of the pars flaccida technique and a more aggressive approach to repair hiatal hernia defects during band placement, and Dr. Paul O'Brien, who really helped me to understand the management of the band patient. I want to thank Dr. Phil Schauer as well. He opened the doors of his clinic not only to me, but also to all of my staff, to learn about LRYGB. My dear friend, Dr. Natan Zundel, thank you for all the help during all the traveling that we did and started doing laparoscopic sleeve gastrectomies in different parts of the world, and then you helped me to start the program in my hospital. And thanks to Drs. Almino Ramos and Manoel Galvao, my international friends from Sao Paulo, Brazil, who also opened the doors to their clinic and allowed me to learn some investigational techniques and wild endoscopic bariatric approaches.

I also want to thank one of our past presidents, Dr. Walter Pories. He really was the one that opened the door for me to the ASMBS leadership. Like any other surgeon, I joined the ASMBS because it was the society in the field that I was attracted to practice. After I did a presentation in 2003 at a bariatric meeting, he approached me and told me, "Jaime, I really enjoyed your presentation. I really think that it is a good data summary, and I want you to come and present it to the first ASBS consensus meeting", which happened in 2004 [9]. Thanks to Walter, I became interested and involved in the leadership of the ASMBS. I was exposed to the leaders and to the work of our Society. After that, I was invited to participate in many of the committees of the ASMBS and that really opened the door for me to grow in the ASMBS leadership. So, thank you Walter.

Let us move on to what has happened during my term. Many of the past presidents call it a 1-year term, and I have just had the opportunity to make it 17 months. It has been interesting. There have been some issues. There have been some opportunities. I have heard so many comments from so many people, and I really want to thank everybody for their comments, calls, and communications. I would like to mention 3 quotes out of many that I have received, just to give you an idea of the things I was getting through e-mail that really motivated me to keep trying to solve issues and use them as opportunities.

Dr. Alan Wittgrove sent me an e-mail from which I am extracting a portion, "You must feel like one of those bears

at the shooting gallery, who gets hit, spins around, and then gets hit again." Next, is a quote from Georgeann Mallory, our Executive Director, "Just when things were almost starting to settle down a little, wham! Quite the Presidential year—make that a year and a half!" And the one that I enjoy a lot is from Dr. Walter Pories. He wrote in a long email of which I will extract a few words, "The word 'crisis' in Chinese also means 'opportunity'. So, in all the turmoil, just do what's best for the patient." And basically, that is what we were really trying to do. Trying to extract out of all of the issues what we thought would be best for the patient.

So, now the ASMBS in 2013, 30 years later, is presented to you with a new face. First, this meeting, ObesityWeek, is a major change in the structure of our annual meeting. It was a great event. It has been successful. We now have the opportunity to join with The Obesity Society and many other groups that allow us to establish a better connection and relationship with organizations with associated interests. We also have a new way to communicate with our members. We have a new magazine called "Connect". All of the hard work being done by the ASMBS Executive Council and committees needed to be better communicated. The communication now is more dynamic and in a better format.

We also have a new interaction with our state chapters. The state chapters were growing very independently. So during this year, we have tried to align all of the chapters to start working under the big umbrella of the ASMBS. The ASMBS will provide more support for the chapters with administrative assistance: Continuing Medical Education, dues collection and web support, and they will all have a similar ASMBS logo.

Also, the new standards for metabolic and bariatric program accreditation have been finalized and approved and will be implemented early this coming year. We also have a new website. The goal of the new website is to have a portal for the public in addition to better functionality, menus, and links. We want the public to come to us through the website and then learn from us the latest information on metabolic and bariatric surgery and be better informed to make better decisions. We are also going to have a new mobile app for this website. I want to announce to you that we have also been working this year—and I wanted to thank Dr. Ninh Nguyen for this—on a new textbook. This is going to be the first of its kind. It is going to be a major textbook, 2 volumes; 55 chapters; >80 authors, and this book is targeted to be available this coming year. So, we look forward to that.

Now, from all the work that we have been doing over this last year and a half, and from all the things that I have learned from the ASMBS, I do have some recommendations, suggestions, and statements that I would like to make to the Society for the future. I do think that the ASMBS needs to do all of the following.

1. The ASMBS needs to fully embrace training and education of metabolic and bariatric surgery at all levels. By

all levels, I mean that we are very focused on our surgeons and fellows, but we really need to develop curriculums for medical students, residents, and other specialties. We already have a presence on the American Board of Surgery (ABS); Dr. Ninh Nguyen represents us there. We already have a fellowship certification, and we already have the best educational offering for bariatric surgery (thank you to Dr. Scott Shikora, Chair of the Bariatric Training Committee and Dr. Ninh Nguyen, Chair of the Program Committee for all their hard work). But, we need to start taking it further, to start looking at all levels, so that all ranks and disciplines can understand what we are doing. We also need to start thinking about the future. Is our field ready for a board certification? Even though this is a very long-term plan, I do think that we have a field that deserves its own specialty certification. That is going to be tricky and controversial. I can tell you that we need to survey the members, need to explain a grandfathering process, and need endorsement from the ABS.

2. The ASMBS needs to continue to be in the leadership for accreditation standards. We have been doing that, because accreditation really has improved safety and outcomes, and has been the vehicle for data acquisition. We would never have had the amount of data that we have today without the accreditation program. It has increased access. It has increased hospital support for bariatric programs and, with the partnership with the American College of Surgeons, we have now shown a single accrediting body for all payors. The insurance companies have followed our standards over time. They agreed with the 125/center minimal volume number. Now we need to show them the new minimal volume numbers, based on the best evidence, and keep the insurance industry informed. It has helped to identify those practices that do a good a job in bariatric surgery. Mortality has decreased. We have seen the data showing the decrease in mortality after Medicare National Coverage Determination (NCD) was established in 2006 [10]. And, regarding the argument about access... there are more Medicare cases being done today than before the NCD [10].

We also know that high-volume centers have less morbidity, length of stay, cost, and mortality [11]. Even when the high-volume centers were divided between accredited and nonaccredited, the accredited centers—though they may have had similar morbidity—had 3 times less mortality [11]. The numbers are small, but are still significant, for the patient who dies, so 3 times the difference in mortality is huge. The key is the ability to rescue patients from a major complication that potentially could be better in an accredited center.

When I embarked on discussing this issue, as it relates to the CMS proposal to drop the accreditation requirement for Medicare patients, I did not want to support this. I believed in accreditation, so I asked all the ASMBS leadership, "Are

we going to support this?" I can tell you that almost the entire leadership fully supported accreditation. Then I said, "Well, let's ask the members." This is the response we received from the members: 75% of the surgeons supported accreditation, and 87% of integrated health members supported it as well. This was very important for me, because I really was going to take action, have a big fight against eliminating the accreditation requirement for Medicare patients, and I needed to know if there was support or not. There was! However, 25% of the surgeons did not support accreditation. We also looked at the CMS public comments. Out of those comments on the latest run of public comments, of 483 comments, 80% supported accreditation. We also asked the professional societies if they supported accreditation, and our position not to drop accreditation for Medicare patients was supported by the American College of Surgeons, The Obesity Society, the American Society for Bariatric Physicians, the Society of American Gastrointestinal and Endoscopic Surgeons (SAGES), the American Association of Clinical Endocrinology, and the Academy of Nutrition and Dietetics.

Accreditation is going to enable us to measure many things to improve the quality of care for our bariatric patients. The 3 big quality measures that we are looking at are structure, process, and outcomes. The first 2 have been measured fairly well so far. The outcomes are now what we are after, to get good data and to start measuring outcomes. Outcome measures really need good quality clinical data. This is very difficult to obtain, but we are getting there. We now have dedicated data collectors and better data points. We still have the issue of poor follow-up and the need for risk adjustment. So, all these factors are going to be important for us. But to me, program accreditation is a venue to improve quality, and it should not be seen as a restriction of access.

Now, I want to be fair. The arguments I have heard this year against accreditation are the following:

- a. Many complain that it is an administrative burden, and it is, but it could be worse if we allow the insurance companies to run the accreditation process. Right now, there are hospitals that are completing 4 different applications for all the private insurance companies. The goal is for all these applications to be combined universally into one process.
- b. The case volume is too difficult to achieve. I can tell you that now with the new volume standards, it will be easier to achieve.
- c. There is restriction of access. Actually, access has changed, especially with Medicare patients, but also by increasing the number of centers, we should be able to improve access.
- d. It is not proven and not needed. I just showed you that there is evidence demonstrating it is beneficial [10,11].

We also have support from private insurance companies, and, as you know, if we did not do anything about

accreditation, all of these companies would have developed their own standards and processes.

Just to give you an idea of the support we are getting, just 3 weeks ago, Blue Cross/Blue Shield told the leadership that after participating in a site inspection with us and seeing the details that we go through, they are going to only invite Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program (MBSAQIP) centers to participate in their Centers of Distinction program. So, we really think that the quality work that we are doing is being transmitted back to the insurance companies. I have also created an insurance communication task force that is going to continue to have conversations with all of the insurance companies to keep them informed and aligned with us. I do not think it is enough to talk with them one time and then walk away. We also have learned a lot from the Michigan Collaborative Group [12]. They have done quality improvement and great collaborative work, and I believe that we need to find a way to work with the Michigan programs and include them in the MBSAQIP.

I want to thank all the members of our leadership, who worked for the MBSAQIP committees. I know that it was a lot of work. I know that I probably created a lot of pressure on you to get this work done faster. I apologize for this, but I also want to thank you for responding as well as you have. I think for the future it is important for the ASMBS to also use our Patient Safety Committee, now Chaired by Dr. Daniel Jones, to develop and provide resources for hospitals and practices to maintain and improve patient safety.

- 3. The ASMBS needs to use the data for quality improvement. I think that with better data, we can get the right information and develop quality. We learned again—this is from Michigan—that if we intervene at the right time, we can decrease the rate of complications. I also want to thank Dr. John Morton for developing the quality initiatives that we are going to present tomorrow. We have the first national quality improvement program to decrease readmission rates that is going to be a rollout to many programs that are participating in the MBSAQIP and that can be used to validate one of the required quality programs in the future.
- 4. The ASMBS needs to continue to collaborate at all levels. Collaboration is going to allow us to improve and maintain quality. We can use it on the regional level, we can use it at the national level, and we can use it worldwide. The ASMBS State and Local Chapters Committee has done tremendous work to increase our number of state chapters. Today we are represented in 32 states and Canada with a total of 27 chapters. I want to thank Michael Nausbam, present Chair and Lloyd Stegemann, the past Chair of the State Chapters Committee, for their tremendous effort. The state chapters are the ones that are going to facilitate the organization of many of the local and regional collaboratives.

We also need to continue our political advocacy. This year the ASMBS sponsored the second collaborative advocacy meeting in Washington DC with >20 groups that advocate for obesity treatment and coverage. We sponsored and hosted the session. A lot of the work has been done through the Access of Care Committee, and I want to thank Dr. Wayne English and Dr. John Morton as well for their leadership. But, we need to continue to lead advocacy activities and collaboration.

We also are part of a small group of gastrointestinal surgical societies, which includes SAGES, the Society for Surgery of the Alimentary Tract, the Americas Hepato-Pancreato-Biliary Association, the American Society of Colon and Rectal Surgeons, and the International Pediatric Endosurgery Group. We are working together for common goals. This has allowed us easier endorsement for our credentialing guidelines, and easier support for our sleeve gastrectomy position paper, and coverage and accreditation efforts with Medicare. We also endorsed curriculums for endoscopic training during general surgery residency.

I also want to announce to you that the ASMBS, for the first time, is going to have a seat in the American Medical Association (AMA) House of Delegates next year. This is thanks to our communications with the AMA leadership, and we met the quota for our members who were also members of the AMA. It is important for ASMBS to have a voice within this organization.

5. The ASMBS needs to use technology to the fullest extent. We are learning that. Have you used your phone app for this meeting? I think it is great, and we need to continue to use these kinds of mobile applications. We need to use the web and social media better, because people ask for information this way. I think the public education portal is going to be a good venue to present that information to the public. I want to thank Dr. Kevin Reavis and Dr. Brian Smith, former and present Chair of the Communications Committee and Dr. Keith Kim and Dr. David Provost, former and present Chair of the Public Education Committee for contributing significantly to this effort. But, we also need to use this technology for distance learning, remote training, and virtual collaboration; those things, I think, are the next step for us to spread out our quality initiatives and our educational offerings.

6. The ASMBS needs to pursue universal access to care. It is really needed. This is the war we have been fighting for a long time. I think that the quality program that we have is going to be the venue to start the process for universal coverage. If the 4 major private payors align with us in a universal application, it will be the first step to get there. But, we need to show them that we have quality and that we cost less, and then we can improve the access. Also, you have seen insurance coverage maps. These maps in 2011 had no sleeve gastrectomy coverage for Medicare patients. But now, thanks to the effort from leadership, especially to Dr. John Morton who was leading the efforts via the Access

to Care Committee at that time, every single state has some kind of sleeve coverage for Medicare patients. These are the kinds of things that we need to continue doing. Thanks to Dr. Wayne English, Chair of the Access to Care Committee and Dr. Matthew Brengman, Chair of the Insurance Committee we have continued to improve the access.

An important thing to remember about universal coverage and universal acceptance is the public message the ASMBS sends. I get a little bit frustrated when, among us, the ASMBS members, who are in the public media and the public news, start fighting each other over the superiority of different techniques, stating that, "this technique is better than that one." The public needs to get one important message, which is, "Metabolic and bariatric surgery is safe and effective." And, I think it is very important for us to align with one single message and leave the fight over opinions on techniques for the scientific meetings, because that is the best forum for this debate.

7. The world is getting smaller, and ASMBS must reach every place. I was talking yesterday with Luigi Angrisani, President of the International Federation for the Surgery of Obesity and Metabolic Disorders (IFSO), and we really need to utilize this international organization to spread our knowledge. The world demands our educational programs. They believe that our educational programs are some of the best available in the world. They want to have access and not many foreign surgeons can travel to the United States for this education. So, we really need to find ways to export not only our educational programs, but also our quality initiative. Every single member of the ASMBS is a member of IFSO. We are one of the member societies of this organization.

8. The ASMBS needs to embrace research that explains the therapy, and I do think that we are trying to do that. The Research Committee, Chaired by Dr. Ranjan Sudan, is working really hard, through funding from the ASMBS Foundation, on selecting the best research to explain the mechanisms of action of metabolic and bariatric surgery. This will lead us to find answers on better patient selection for specific therapies.

9. The ASMBS needs to continue to work with the industry to complement the progress and innovation in bariatric surgery. We need to be very careful, of course, because working with industry needs to be for innovation to develop research platforms for new therapies. Research should be separated from sales and there has to be complete transparency. But the reason I am saying this is because the ASMBS can work with companies to let them know what we think is the best research platform that will help us to determine if a new technique or a new procedure can be validated or not. I want to thank Dr. Aurora Pryor, Chair of the Emerging Technologies Committee, for a great job analyzing every single innovative technique and device available.

10. The ASMBS needs to continue to be the leader in position statements and guidelines that are now based on

better data. Remember that we are collecting better and better quality data. I really do want to thank Dr. Stacy Brethauer for the tremendous job that he has done during his term as Chair of that Clinical Issues Committee in developing many important position statements. We need to continue with this great work. Also, thanks to the Pediatric Committee Chair, Dr. Kirk Reichard, for their leadership in developing guidelines for the adolescent patients. But, there is much more work to do. For example, one of the things that came up during my term as President is that we have really been struggling in coming up with guidelines for revisional surgery. The data is somewhat extensive, but it is difficult to create a high level of evidence when it comes to revisional procedures. The insurance companies have already developed their own guidelines and requirements, and I think that we really need to start setting the pace. To begin to tackle this issue, we developed a revisional surgery task force. The goal for this task force is to come up with 3 papers. One paper is already finalized. I can announce to you that it is going to be published very soon. It is the state-of-the-art review of the literature in reoperative bariatric surgery. Basically, it is a systematic analysis of the literature on revisional surgery and what the ASMBS believes is a good statement on the approaches that we utilize when we revise a case. The second paper will cover the status of access. You have heard about some insurance companies paying for only a one-time procedure for a lifetime. It is important to define the chronicity of the disease we are managing and the potential need for reoperation. And, the third paper is going to evaluate the databases and explain the growth in the number of revisional surgery cases. All of you are probably doing more of these cases.

11. We need to get much better in sending the right message to the public. This work has already started, and I think that our new President, Dr. Ninh Nguyen, is going to do a very good job implementing different innovative ways of vastly improving that message, so that we can grow the number of patients that proceed to surgery. We are still helping <1% of potential candidates for surgery.

Finally, I think that behind every surgeon there is a team. All of us have a team. I want to take 2 minutes to recognize my team. Without my team, I would not be able to do this. Certainly, there is not enough time in the day to do the work for the ASMBS and still have a practice. I have a private practice and work in 2 beautiful hospitals. One of the hospitals is Hamilton Medical Center in Dalton, Georgia, north of Atlanta. Some of my team that works with me are here. I also work in Memorial Hospital in Chattanooga, Tennessee, and also have a great staff there. Brooke Henson, R.N., C.B.N., my coordinator, has worked with me for >10 years. She has been essential in scheduling my daily work and has been critical in my research efforts and data collection.

This year and a half has been full of tremendously valuable work. All of the ASMBS Executive Council

members (Drs. Bruce Wolfe, Robin Blackstone, Ninh Nguyen, John Morton, Raul Rosenthal, Marc Bessler, Samer Mattar, Emma Patterson, Stacy Brethauer, and Alfons Pomp and Nurses Karen Schulz and Christine Bauer) have been very responsive; a great team of colleagues that have really helped getting the work done. Without the ASMBS staff, we could not function. I want to thank all of them. There are 2 people from the ASMBS staff that have worked very closely with me. I want to thank them personally, because I know that—and any past President can tell you—without Georgeann Mallory we could not do this work. And, Jennifer Wynn has done a tremendous job just keeping up with all the activities within the small executive leadership group.

I also want to specially thank 2 of my good friends, Dr. Ninh Nguyen, the next President and Dr. John Morton, the next President-elect. I have really gotten to know them well by working with them in the ASMBS. We have become a small group that has really worked hard on every issue and have tried to find the best approach to managing them. Everyone has worked as a team. This small group has made my job much easier. They have traveled with me. They have done a lot of work. I think that the ASMBS will have good continuity, because we have worked so closely together. Thank you very much. And, as you know, the most important thanks are to the people who have tolerated me not showing up for dinner and for being on the phone all of the time. I want to thank my 2 kids, Isabel and Alex, and my beautiful wife, Heather, who has really supported me.

Thank you very much for the opportunity and honor to serve as your President. It has been a pleasure. It has been a lot of work, but I have enjoyed it.

Thank you very much.

Disclosures

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

References

- [1] Mason EE, Ito C. Gastric bypass in obesity. Surg Clin North Am 1967;47:1345–51.
- [2] Mason EE. Development and future of gastroplasties for morbid obesity. Arch Surg 2003;138:361–6.
- [3] Samuel I, Mason EE, Renquist KE, et al. Bariatric surgery trends: An 18-year report from the International Bariatric Surgery Registry. Am J Surg 2006;192:657–62.
- [4] Kuzmak LI. A preliminary report on a silicone gastric banding for obesity. Clin Nutr 1986;5:73–7.
- [5] Hess DS, Hess DW. Biliopancreatic diversion with a duodenal switch. Obes Surg 1998;8:267–82.
- [6] Wittgrove AC, Clark GW, Tremblay LJ. Laparoscopic gastric bypass, Roux-en-Y: preliminary report of five cases. Obes Surg 1994;4: 353–7.

- [7] Ren CJ, Patterson E, Gagner M. Early results of laparoscopic biliopancreatic diversion with duodenal switch: a case series of 40 consecutive patients. Obes Surg 2000;10:514–23.
- [8] Regan JP, Inabnet WB, Gagner M, Pomp A. Early experience with two-stage laparoscopic Roux-en-Y gastric bypass as an alternative in the super-super obese patient. Obes Surg 2003;13:861–4.
- [9] Buchwald H. Bariatric surgery for morbid obesity: health implications for patients, health professionals, and third-party payers. J Am Coll Surg 2005;200:593–604.
- [10] Flum DR, Kwon S, MacLeod K, et al. Bariatric Obesity Outcome Modeling Collaborative. The use, safety, and cost of bariatric surgery before and after medicare's national coverage decision. Ann Surg 2011;254:860–5.
- [11] Jafari MD, Jafari F, Young MT, Smith BR, Phalen MJ, Nguyen NT. Volume and outcome relationship in bariatric surgery in the laparoscopic era. Surg Endosc 2013;27:4539–46.
- [12] Birkmeyer NJ, Dimick JB, Share D, et al. Hospital complication rates with bariatric surgery in Michigan. JAMA 2010;304:435–42.