

## Loyalty and informed patients contribute to a healthy bottom line: Can we talk?

### Ob/Gyns seek to enhance patient loyalty and receive the personal satisfaction of providing quality care

#### Loyalty and patient perceptions

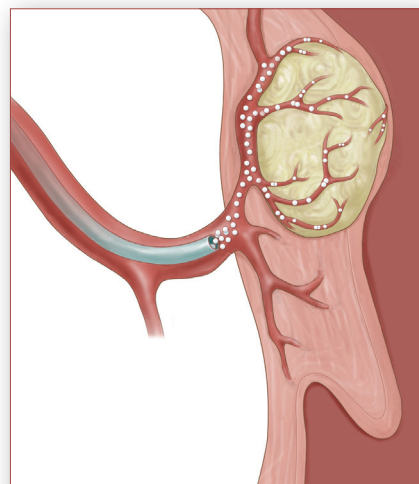
Loyalty is a feeling patients have, inspired by their physician, that causes patients to keep coming back and, in turn, inspires them to refer their friends and family. Patient loyalty is nurtured when the practice provides compassionate, honest, knowledgeable, and efficient service. It affects patient behavior and is measured from the patient's perspective by the value they feel they receive. Patient loyalty can reward an Ob/Gyn's practice with effective word-of-mouth advertising and contributes to a long-term revenue stream for the practice.

Sixty percent of *satisfied patients* switch providers! Conversely, *loyal patients* channel new patients to the Ob/Gyn's practice. Patient satisfaction is important, but patient retention is a better measure of the ability of the Ob/Gyn practice to add value as perceived by the patient and to aid the patient's long-term quality of life. Patient retention is directly tied to the long-term profitability of a practice.<sup>1</sup>

#### Loyalty and patient expectations

Fostering an atmosphere in which patient loyalty can thrive requires the Ob/Gyn to consider engaging in shared decision-making with the patient. The growth of consumerism in health care—coincident with greater access to health-related information and higher out-of-pocket payments—motivates women to make informed choices. Indeed, the Internet plays an increasingly greater role in women's health care decisions across all social strata.<sup>2</sup>

Patients may also identify or desire procedures that are attractive to them based on their expectations about the reported features and recovery. To enhance loyalty and optimize outcomes, it is useful to envision the patient's life



Fibroid embolization (above) features collaboration across specialties that builds patient loyalty

#### Linda D. Bradley, MD

Vice Chairman of Obstetrics, Gynecology and Women's Health Institute  
Director, Center for Menstrual Disorders, Fibroids & Hysteroscopic Services  
Cleveland Clinic  
Cleveland, Ohio

#### Leah Amir, MS, MHA

CEO and President  
VantageView and VantageLinks, LLC  
Executive Director  
Institute for Quality Resource Management  
St. Louis, Missouri

#### Disclosures

Dr Bradley reports that she has served as a consultant to Bayer HealthCare, BioSphere Medical, Ethicon, Inc, Medtrina Pharmaceuticals, Inc, and ACMI Gyru Medical Inc.; has received grants and research support from Conceptus, Microsulis Medical Limited, and The United States Army Medical Research; and has served on the speakers bureau of Bayer HealthCare, BioSphere Medical, Conceptus, Novo Nordisk, and Wyeth-Ayerst Pharmaceuticals.

Ms Amir is a consultant to BioSphere Medical.



Supported by a grant from BioSphere Medical.

and disease, as well as expectations for recovery, in a broader context, rather than isolating the medical intervention from the patient's overall life experience. Ideally, there is a place in this discussion for a thorough review of the potential consequences of each procedure as related to the patient's work demands, childcare considerations or other family obligations, or lifestyle choices. In this way, the Ob/Gyn can align patient expectations with the most appropriate medical intervention to achieve outcomes that are valued by the patient. This dynamic may be particularly appropriate when considering alternatives to hysterectomy for the treatment of fibroids, such as uterine fibroid embolization (UFE), also called uterine artery embolization (UAE).

### Loyalty and practice management

For an Ob/Gyn practice to be financially viable, 20 to 24 patients must be seen each day. Maintaining patient volume requires a solid referral base. Referrals from other physicians are based on their assessment of an Ob/Gyn's diagnostic and surgical skills—factors that may be evaluated differently by patients. Once a patient has selected an Ob/Gyn, there is an opportunity to expand the patient base to include that patient's family, friends, and coworkers.

Because patients do not have the same access to or understanding of their Ob/Gyn's knowledge, experience, and skill, they tend to make decisions based on more humanistic qualities, such as compassion and dedication to quality of care.<sup>3</sup> A study that measured attributes women sought when selecting an Ob/Gyn found that quality of care, compassion, and knowledge were the most influential factors in the selection of an Ob/Gyn.<sup>3</sup>

### Building a practice around abnormal uterine bleeding

About 40% of women who present with abnormal uterine bleeding will seek and rely on sources other than a physician's guidance to find a noninvasive, uterine-sparing intervention that offers symptomatic relief.<sup>3</sup> These women would be pleased to learn of an Ob/Gyn who is willing and able to discuss all surgical and nonsurgical treatment options. Women have been shown to switch from gynecologists who were opposed to discussing UFE as an option to treat their fibroids.<sup>4,5</sup>

As clinicians, Ob/Gyns look to measurable outcomes data for guidance when providing treatment options to their patients. Yet some questions remain, such as: "Is equal weight given to our patients' goals and desires?" "How should Ob/Gyns incorporate emerging recommendations regarding decision-making, ethics, and patient choices as they relate to traditional treatment options?" "Are we prepared to counsel our patients about procedures performed by specialists with whom we do not have

a historical physician-patient collaborative relationship?" An Ob/Gyn may wonder, "If I refer a patient to another specialty, what will be the impact on our patient's care and, in return, their loyalty?"<sup>6</sup>

These questions become prominent when we consider the approximately 2.9 million women who have symptomatic fibroids, a leading cause of the estimated 600,000 hysterectomies performed annually in the United States.<sup>7</sup> Of the women who receive an intervention for uterine fibroid symptoms, 83% will undergo a hysterectomy (55.9% by the abdominal approach) and 12.5% a myomectomy.<sup>8</sup> Despite the high number of hysterectomies, well-controlled studies rarely describe patient outcomes or quality of life beyond 6 weeks after surgery.<sup>9</sup> In January 2008, the ACOG Committee on Ethics advised Ob/Gyns to fully explain to patients all available treatment options and their potential risks and benefits. The Committee noted that decision-making "should be guided by ethical principles and respect for patient autonomy, beneficence, nonmaleficence, justice, and veracity."<sup>6</sup>

This supplement advocates that Ob/Gyns openly disclose UFE and highlights the importance and benefits of collaborative physician-patient decision-making to both the Ob/Gyn and the patient. In addition to discussing the physician-patient benefits, the intent of this supplement is to provide insight into the process of decision-making that nurtures patient loyalty, enhances the quality of patient care, and establishes alliances with other specialists. These goals can be achieved by providing patient-centered medical advice and care that addresses patient expectations. This physician-patient dynamic extends beyond satisfaction and requires shared physician-patient decision-making.<sup>10,11</sup> The Ob/Gyn care provider becomes a source of medical information as well as an advocate for the patient's unique perspective regarding her personal needs for a good quality of life.

### The changing physician-patient relationship

With its vast range of readily accessible information, the Internet allows many women to self-educate about fibroid treatments by researching options online. Many of these women have been pleased to learn about UFE as a treatment option for symptomatic fibroids. This uterine-sparing treatment is provided by an interventional radiologist (IR). UFE has been well described in *OBG Management*.<sup>12,13</sup> Still, it is offered infrequently as a treatment option.<sup>4,5</sup> What obligations do physicians have to women who seek their advice about UFE or other treatment options? They are obliged to disclose the paucity of long-term evidence supporting one intervention over another for current treatments for leiomyomata-related menorrhagia

and discomfort.<sup>9</sup> It is important to discuss the potential long-term complications of hysterectomy, such as bowel obstruction and loss of vaginal support, with the risks of more conservative approaches and the potential need for recurrent treatment.<sup>6</sup>

Over the past decade, many studies have been published that compare UFE to hysterectomy or myomectomy or both. Key areas of measurement have been symptom control, complications, and quality of life.<sup>9,14,15</sup> Overall, UFE outcomes show that this procedure should be well regarded by every gynecologic practice. As peer-reviewed literature shows, UFE is a treatment option that offers effective symptom relief when compared to surgery, without extensive recovery or the risk of surgical complications. According to the ACOG committee opinion on surgery and patient choice, for an Ob/Gyn to fulfill his or her role as an information resource, “the physician must have a good understanding of the scientific evidence for and against requested procedures.”<sup>6</sup>

Occasionally, a patient presenting to the Ob/Gyn’s office seeking treatment for uterine fibroids may not fully understand the total implications of a surgical intervention.<sup>11,16,17</sup> Potentially, patients with limited access to information—or those who do not search for options—risk being underinformed about less invasive interventions that are suitable for pathologies historically addressed by more invasive procedures.<sup>17,18</sup> In order to manage the spectrum of information patients bring to consultations, the Ob/Gyn must be informed about the current published literature describing alternatives for treating benign uterine conditions so they can fully counsel their patients. Accordingly, they can share this information with their patients to better manage patient care and expectations. Ultimately, patients who are better informed may make optimal choices about procedures that affect their lives and those of their family, spouse, or life partner.<sup>11</sup>

## Impact of patient loyalty

The economic ramifications of patient loyalty are the foundation of a successful practice. For example, the first-year potential revenue from a new patient with abnormal uterine bleeding may conservatively be \$1,558 (see **TABLE 1**). If this new patient was referred by an existing satisfied patient, the new revenue has minimal associated cost. **TABLE 1** shows that a patient with abnormal uterine bleeding contributes approximately \$10,987 over 7 years and \$16,235 at 10 years. Each loyal patient may refer 5 new patients, whereas a dissatisfied patient may influence 20 patients to switch to another Ob/Gyn.<sup>1</sup> The average cost to bring one additional qualified patient to a practice using print or radio advertising can range between \$229 and \$2,600.<sup>19</sup>

## New patient revenue

Practice revenue attributable to opening an Ob/Gyn practice to patients with abnormal uterine bleeding who seek a nonsurgical solution may be estimated using the following analysis. In a 2005 survey of 50 Ob/Gyns, it was found that, on average, each practice performed 52 hysterectomies for all causes.<sup>19,20</sup> The United States National Inpatient Sample indicates that approximately one-third of hysterectomies are performed to treat uterine fibroids.<sup>8</sup> Therefore, the typical Ob/Gyn performs an average of 17 hysterectomies for uterine fibroids per year.<sup>8</sup> Further, findings from a survey of 105 patients presenting for UFE showed that two-thirds of the patients were not told about UFE by their gynecologist but, rather, found the IR through other means.<sup>5</sup>

When we combine the average number of hysterectomies to treat uterine fibroids (17) with the finding that two-thirds of patients were not informed about UFE by their Ob/Gyn, 11 patients may not have received a comprehensive workup for uterine fibroids from an Ob/Gyn. The medical attention needed by these patients is estimated to be approximately \$1,558 annually. To an Ob/Gyn willing to discuss and refer patients for UFE, an average of 11 new patients may be added to their practice each year. When considering the impact over 7 years, the added incremental revenue for 11 new patients represents added practice revenue of approximately \$480,000. This estimate recognizes that new patients in years 2 through 7 will not contribute to the entire 7 years of incremental revenue. New patients in year 2 would represent 6 years of revenue and so on. Conversely, practice revenue from hysterectomy in this example is roughly based on adding new patients over 7 years, ie, \$77,000 inclusive of follow-up office visits (77 hysterectomies, each at approximately \$1,000 of practice revenue).

Patients have been reported to switch practices if their Ob/Gyn was reluctant or unwilling to discuss UFE.<sup>4,5</sup> By not discussing UFE with their patients, an Ob/Gyn risks losing patients and also puts \$480,000 of potential practice revenue at risk in exchange for \$77,000 of practice revenue generated by performing hysterectomies. The benefits of opening the Ob/Gyn practice to patients who desire UFE has been demonstrated by Fischer and Zurawin, who reported that close collaboration between Ob/Gyns and IRs provides both optimal patient care and practice success.<sup>21</sup> By engaging the patient in shared decision-making, the Ob/Gyn is able to be part of the patient’s continuum of medical care well beyond that patient’s postmenopausal years.

## UFE overview

### Workup contributes to an Ob/Gyn practice

A patient with abnormal uterine bleeding requires a review of symptoms and detailed medical history to assess the

**TABLE 1**

**Reimbursements and revenue projections for common procedures**

Patient Care Provided	CPT® Code	Payment (Example) <sup>a</sup>	No. Occurrences Over 7 y	7-y Revenue	No. Occurrences Over 10 y	10-y Revenue
New patient visit, comprehensive	99204	\$152	1	\$152	1	\$152
Follow-up, comprehensive exam	99212	\$40	6	\$242	9	\$363
Follow-up, comprehensive/detailed exam	99213	\$65	6	\$387	9	\$581
Hysteroscopy, diagnostic	58555	\$249	3	\$746	5	\$1,244
Hysteroscopy, surgical; with sampling (biopsy) of endometrium and/or polypectomy, with or without D & C	58558	\$221	2	\$441	3	\$662
With lysis of intrauterine adhesions	58559	\$375	1	\$375	2	\$749
With removal of leiomyomata	58561	\$602	1	\$602	1	\$602
Bone density study, dual photon	78351	\$264	2	\$528	3	\$792
Pap smear, annual	99213	\$45	7	\$315	10	\$450
Pap smear, follow-up for abnormal pap	88175/88141	\$83	10	\$825	10	\$825
Colposcopy of the entire vagina, with cervix if present	57420	\$123		\$0	1	\$123
Endometrial sampling (biopsy) performed in conjunction with colposcopy	58110	\$64	1	\$64	2	\$129
Colposcopy, cervix and vagina with biopsy	57454	\$166	1	\$166	1	\$166
Colposcopy	57452	\$116	1	\$116	2	\$233
Colposcopy with biopsy of cervix	57455	\$154	2	\$307	2	\$307
Colposcopy with loop conization of the cervix	57461	\$365	1	\$365	1	\$365
Endometrial biopsy with hysteroscopy	57500	\$142	1	\$142	2	\$284
Insertion of intrauterine device (IUD)	58300	\$138	1	\$138	2	\$275
Removal of intrauterine device (IUD)	58301	\$94	1	\$94	2	\$189
Catheterization and introduction of saline or contrast material for saline infusion sonohysterography (SIS) or hysterosalpingography	58340	\$142	2	\$285	2	\$285
Transcervical introduction of fallopian tube catheter for diagnosis and/or re-establishing patency (any method), with or without hysterosalpingography	58245	\$291	1	\$291	1	\$291
Supervision and interpretation	74742	\$33	1	\$33	1	\$33
TVUS, nonobstetric	76830	\$120	6	\$719	8	\$958
Saline infusion sonohysterography (SIS), including color flow Doppler, when performed	76831	\$124	2	\$247	2	\$247
Ultrasound, pelvic (nonobstetric), real time with image documentation; complete	76856	\$112	6	\$675	8	\$900
Limited or follow-up (eg, for follicles)	76857	\$84	6	\$506	8	\$675
Delivery, vaginal, pre- and post-care	59400	\$1,966	0	\$0	0	\$0
Delivery, cesarean	59510	\$2,227	1	\$2,227	1	\$2,227
Hysteroscopy with bilateral fallopian tube annulations to induce occlusion by placement of permanent implants	58565	\$2,130	0	\$0	1	\$2,130
<b>Revenue over time</b>				<b>\$10,987</b>		<b>\$16,235</b>

<sup>a</sup>Payment examples reflect 10% over the Medicare Allowable in Illinois. CPT® is a registered trademark of the American Medical Association. Patients presenting with symptoms of abnormal bleeding require a comprehensive assessment to include a review of systems, history, and diagnostic tests, after which shared decisions may be made to select the best course of treatment. A patient with abnormal uterine bleeding may require additional gynecologic or obstetric care. \$1,558 represents a conservative estimate of the typical workup of a patient with abnormal uterine bleeding.

risk of heart disease, ovarian cancer, and osteoporosis, as well as expectations of fertility. Patients presenting with abnormal uterine bleeding may be candidates for UFE and require a comprehensive gynecologic exam of the vagina, cervix, uterus, and adnexa to exclude pathology. Based on the exam, other testing may include CBC with platelets, BUN, and creatinine, and for select patients, serum glucose and screening for von Willebrand's disease. Diagnostic hysteroscopy and endometrial biopsy may be needed for select patients to exclude endometrial hyperplasia or to determine the presence of submucosal fibroids or cancer. Transvaginal ultrasound reveals the number, size, and position of the uterine fibroid(s). For uterine size greater than 12 to 14 gestational weeks, transabdominal ultrasound may be preferred. Magnetic resonance imaging (MRI) is useful to verify the location and size of the uterine fibroid(s) and to identify possible adenomyosis, adnexal pathology, or pedunculated fibroids. Also, it has been reported that MRI may exclude 18% of potential UFE candidates who require additional medical care from their Ob/Gyn.<sup>22</sup>

### Recovery

Current UFE protocols demonstrate that UFE is typically a hospital outpatient procedure requiring a 23-hour stay.<sup>13,14</sup> Postprocedure pain can be well managed.<sup>13,14,23</sup> Patients typically return to normal daily functions in 3 to 5 days.<sup>13-15</sup> UFE patients tend to experience fewer and less serious complications when compared with patients receiving hysterectomy or myomectomy.<sup>13,14,24,25</sup> Additional interventions are not commonly required after UFE. Three-year data on 1278 women from the FIBROID Registry, the largest multicenter, prospective voluntary registry on a procedure for benign uterine fibroids, showed that the rates of hysterectomy, myomectomy, or repeat uterine artery re-embolization were 9.79%, 2.82%, and 1.83%, respectively.<sup>14</sup>

The literature shows that UFE results in a durable improvement in quality of life and provides long-term symptom relief in 87% of patients.<sup>14</sup> Patients whose predominant complaint was heavy bleeding had improved outcomes, as did older patients and those with a lower body mass index (BMI) or submucosal fibroids.<sup>14</sup> These results were achieved when the procedure was performed in an experienced community or academic IR practice.<sup>14</sup>

### Potential pregnancy

Live births have been reported after UFE.<sup>24,26,27</sup> Walker et al reported on the outcomes of 56 pregnancies after UFE. Thirty-three pregnancies (58.9%) had successful outcomes and 17 (30.4%) miscarried. The remaining pregnancies resulted in 3 terminations, 2 stillbirths,

and 1 ectopic pregnancy. The authors commented that it is important to emphasize that this patient population is not representative of the general obstetric population, eg, the mean age for all pregnancies was very high, at 37.4 years. Furthermore, fibroids are known to affect fertility, pregnancy loss, and pregnancy complications. Many women in this segment of the population are only offered hysterectomy as a treatment option. Women desiring future fertility who have complex uterine fibroids, as evidenced by size, number, and location, should seek surgical management for myomectomy with physicians having such expertise until further prospective studies determine if UFE is truly an option for these patients.

Further evidence of pregnancy following UFE is provided by the Canadian UFE Trial, which enrolled 555 symptomatic women (average age, 43; range, 18-59 years). At follow-up, 21 women reported 24 pregnancies, rates comparable with those following myomectomy.<sup>24</sup> Evidence suggests that in cases where fibroids have prevented pregnancy, UFE may facilitate chances for a successful pregnancy; however, current recommendations indicate that these patients should deliver at tertiary care centers because of the potential risk of postpartum hemorrhage from placentation difficulties.<sup>24</sup>

### UFE: Referral patterns

Ob/Gyns demonstrate reluctance in recommending UFE as a treatment option for uterine fibroids. A UFE clinic recently surveyed 105 consecutive women regarding their source of referral to the clinic and their understanding of UFE as a treatment option. All had been offered surgery (hysterectomy or myomectomy) as an option. Ob/Gyns presented UFE as an option to only 35 patients (33%), 20 of whom were required by their insurance plan to be informed about UFE. Sixty-seven percent of patients were not presented with UFE as an option but found an IR through radio advertising and/or referral from friends. Twenty-nine percent (30/105) did not seek the guidance of an Ob/Gyn. In addition, the 38% who were not informed about UFE, but were self-educated and self-referred to an IR, indicated that they may not continue with the same Ob/Gyn due to their perception of not having been fully informed by that Ob/Gyn.<sup>5</sup> For some patients, it is evident that lack of full disclosure—or the perception of lack of full disclosure—of options is sufficient motivation to abandon their current Ob/Gyn practice. These data suggest that Ob/Gyns can improve the quality of care delivered to their patients by working collaboratively with their IR colleagues who have demonstrated a similar patient-oriented philosophy.<sup>5,21</sup>

### **Referring and identifying appropriate UFE patients**

Approximately one-third of patients who self-refer to an IR may then be referred to an Ob/Gyn for a gynecologic examination.<sup>28</sup> Not all patients qualify for UFE.<sup>14</sup> These patients may require additional gynecologic procedures, including office hysteroscopy and saline infusion sonography, leading to additional hysteroscopic procedures. Patients who are referred for UFE and decide against it, or those who may not qualify or who opt out of UFE, may be further evaluated for hysterectomy or myomectomy. Ob/Gyns who develop a collaborative relationship or partnership with an IR add value to their practice. Moreover, patients' expectations are exceeded when all treatments options are discussed and made available.

### **Expanding treatment dialogue with patients**

Patients referred to an Ob/Gyn by an IR will appreciate open, informed discussion that results in shared decision-making. The Ethnicity, Needs, Decisions of Women (ENDOW) study reported on a series of 17 focus groups comprised of 82 women between the ages of 30 and 65.<sup>11</sup> The study design included 52 African Americans, 26 Caucasians, 1 Native American, and 3 women classified as other. Fifty-four of the participants (63.0% African American and 31.5% Caucasian) were facing the decision of having a hysterectomy, and 28 had previously had a hysterectomy (64.3% African American and 32.1% Caucasian). The participants reported less than satisfactory Ob/Gyn-patient communication. They desired that an Ob/Gyn take time to communicate with them in a manner conducive to shared decision-making. The women viewed the role of the physician as that of information-provider and expressed distinct distrust with the medical community—and physicians in particular. Ultimately, the women in these focus groups preferred that the physician enter into a trusting, compassionate partnership to aid them in the decision-making process.<sup>11</sup>

Patients receiving a hysterectomy within the previous 2 years were surveyed, using an open-ended questionnaire, to identify their fears and concerns, and to determine their met as well as unmet health care needs.<sup>16</sup> The results further indicated that women want treatment choices; a part in the decision-making; accurate, appropriate, and timely information; and compassionate, attentive provider support. The factors regarding a hysterectomy were either not sufficiently explained or alternatives were not offered. Possible surgical consequences, such as changes in sexual function, urinary incontinence, or psychological changes, were not discussed. This lack of information at the time the decision was being made left some women to second-guess their decision as well as the

professionals who helped them make that decision. The majority of women who decided to have a hysterectomy welcomed the relief of symptoms but indicated that they would have appreciated the opportunity to completely weigh the postoperative, 6-month, 2-year, and longer-term effects on their quality of life.<sup>14,16,17</sup> Patients tend to have a better attitude toward an intervention if all the risks and potential complications are openly discussed to enable them to make an informed decision.

### **The medical literature**

#### **UFE vs hysterectomy and myomectomy**

Numerous peer-reviewed clinical studies comparing UFE with hysterectomy and myomectomy present a compelling case for the efficacy of UFE as a good option for women who desire a uterine-sparing procedure, want a quick return to normal daily function, or possibly seek to preserve fertility. UFE may also be appropriate for women who have a family history of cardiovascular disease (CVD), or have or are at risk of having osteoporosis, especially when ovarian conservation is not planned at the time of hysterectomy. The current medical literature shows that UFE is a mainstream treatment option for symptomatic fibroids.<sup>9,13-15</sup> As with all medical treatments, an Ob/Gyn should remain current on reported outcomes of UFE to ensure that patients fully understand the impact it may have on short- and long-term symptoms, recovery time, complications, and fertility compared to surgical options.

#### **Hysterectomy-associated risks**

Women facing the prospect of a hysterectomy may want to fully understand its longer-term effects. Ob/Gyns must be prepared to discuss these consequences, which can include potentially increased risks from other diseases. The highly publicized Women's Health Initiative (WHI) study of 89,914 women reported on hysterectomy-associated risks. For example, hysterectomy (with or without oophorectomy) was associated with a higher proportion of patient hypertension, diabetes, high cholesterol, obesity, and physical inactivity compared with intact women. Over a 5.1-year observational period, total mortality, as well as fatal and nonfatal CVD, were higher among hysterectomized women.<sup>29</sup> Regardless of oophorectomy status, hysterectomy was a significant predictor of CVD. Although the effect was reduced when risk profiles were adjusted for CVD risk factors, women who had undergone hysterectomy generally had more CVD risk factors than at initial baseline screening.<sup>29</sup> Protective hormonal effects on bone and cardiovascular tissue disappear.<sup>30</sup> Additionally, oophorectomy at the time of hysterectomy produces surgically induced menopause, increasing rates of CVD and osteoporosis.<sup>31,32</sup>

Each patient's anatomy; fibroid size, number, and location; medical history; surgical history; BMI; presence of adhesions; and reaction to general anesthesia are commonly part of the decision-making process. Because prospective, randomized, controlled studies of the surgical approaches to hysterectomy are rare,<sup>9</sup> Ob/Gyns may be impeded from having a more thorough review of the consequences of hysterectomy with their patients. Efforts to reduce the morbidity of abdominal hysterectomy have resulted in more innovative, minimally invasive techniques, each associated with risks and benefits.<sup>33,34</sup> Despite the reduction in surgical insult that minimally invasive procedures and technology offer, the long-term consequences of hysterectomy remain. Further studies about the long-term consequences of hysterectomy are required.

## Hysterectomy and quality-of-life measures

### Body image and sexuality

In a randomized controlled trial of fibroid treatment at 28 Dutch hospitals, data concerning sexuality and body image were obtained. Evaluated patients were assigned to hysterectomy (89) or UFE (88). Two validated questionnaires—the Sexual Activity Questionnaire (SAQ) and the Body Image Scale (BIS)—were administered at baseline, 6 weeks, and 6, 12, 18, and 24 months after treatment. At 24 months, the BIS score had improved in both groups compared to baseline but was statistically significant only in the UFE group. After both treatments, the dimensions pleasure and habit improved, whereas the dimension discomfort decreased at 24 months compared to baseline. Only the UFE group showed significant improvement in discomfort and frequency of intercourse. Twenty-seven percent of UFE patients were sexually active at 6 weeks compared with 14% of the hysterectomy patients. UFE is a suitable option for women who desire a high BIS score and for whom sexual functioning is an important aspect of their quality of life.<sup>35</sup>

Sexual function after hysterectomy was evaluated in a study of 204 women 3 to 12 months postprocedure (TABLE 2).<sup>36</sup> The Female Sexual Function Index (FSFI) determined satisfaction with the procedure and sexual function. Domains of sexual function were evaluated—desire, arousal, lubrication, orgasm, satisfaction, and pain—and a total sexual function score was obtained. Data suggest negative sexual changes associated with substantially lower scores on a validated measure of sexual function and lower ratings of satisfaction following hysterectomy.

Presurgery education and counseling about possible negative sexual consequences may mitigate the effect of

TABLE 2

### Sexual changes reported within 6 months of hysterectomy

Sexual Function Measure	N = 204 (%)
<b>Sexual desire or interest</b>	
Improvement	49 (24.0)
Deterioration	75 (36.8)
<b>Sexual pleasure or sensitivity</b>	
Improvement	39 (19.1)
Deterioration	55 (27.0)
<b>Orgasm</b>	
Improvement	27 (13.2)
Deterioration	46 (22.5)
<b>Pain associated with sexual activity</b>	
Improvement (reduced pain)	65 (31.9)
Deterioration (increased pain)	54 (26.5)
<b>Vaginal dryness</b>	
	77 (33.7)

Reprinted from Bradford A, Meston C. Sexual outcomes and satisfaction with hysterectomy: influence of patient education. *J Sex Med.* 2007;4:106-114, with permission from Blackwell Publishing.

negative sexual side effects and overall satisfaction with hysterectomy outcomes. Only about half of the women in the study recalled a discussion with their Ob/Gyn regarding sexual function after hysterectomy.<sup>33</sup>

## Conclusion

The Ob/Gyn who seizes the opportunity to adopt behaviors that will garner patient loyalty will grow his or her practice and provide needed medical care to the more than 2.9 million women with uterine leiomyomata. Embracing the option of treating these patients and discussing all of the treatment options from the patient's perspective will foster patient loyalty. This evidence-based and patient-centered approach is invaluable. Not only will it improve outcomes, but it will also likely result in referral of additional patients, adding to the organic growth of the Ob/Gyn practice. Providing a balanced approach to uterine fibroid treatment options will foster patient loyalty and is likely to result in a long-term relationship with your patient.

Ultimately, it is the patient's choice when deciding how to manage her health. For women with uterine leiomyomata who need medical care and are not seeking help, this represents an opportunity for Ob/Gyns to reach out and provide this medical care, while respecting the patient's right to make an informed decision. The ACOG

code of ethics requires the physician to respect the right of individual patients to make their own choices about their health care, realizing that autonomy is fundamental. The Ob/Gyn is expected to deal honestly with patients and colleagues and to avoid potential conflicts of interest that may be inherent in the practice of medicine. The Ob/Gyn must respect and cooperate with other physicians, nurses, and health care professionals to facilitate the best treatment for the patient, being mindful of the patient's desire to preserve her quality of life. The Ob/Gyn's role in decision-making helps the patient process the information, leading to the informed choice that your patient and her family can live with and that enables her to continue her life's plan.

The loyal patient is willing, without asking, to refer her friends and family of similar socioeconomic status. This is the least expensive form of advertising. During your encounter with the patient, you have the opportunity—while receiving payment—to exceed her expectations. Listen to her concerns, answer her questions, and offer her options when she is faced with the decision to choose a medically necessary intervention. Bring yourself into her description of the problem and allow her to share with you her most intimate needs and wishes so that she can achieve the quality of life she desires. Loyal patients that tend to stay with you from their childbearing years through menopause create a practice that derives a positive revenue flow. ■

**References**

1. Reichheld FF, Thomas T. The loyalty effect: The hidden force behind growth, profits and lasting value. Boston, MA: Harvard Business School Press; 2001.
2. Fox S. Online Health Search 2006. Pew Internet and American Life Project. October 29, 2006. [http://www.pewinternet.org/pdfs/PIP\\_Online\\_Health\\_2006.pdf](http://www.pewinternet.org/pdfs/PIP_Online_Health_2006.pdf). Accessed April 14, 2008.
3. Schnatz PF, Murphy JL, O'Sullivan DM, et al. Patient choice: comparing criteria for selecting an obstetrician-gynecologist based on image, gender, and professional attributes. *Am J Obstet Gynecol.* 2007;197:e1-e7.
4. Arleo EK, Pollak J, Tal MG. Changing trends in gynecologists' opinions of uterine artery embolization for fibroids: the patient's perspective. *J Vasc Interv Radiol.* 2003;14:1559-1561.
5. Lipman JC. Community awareness of UAE as a treatment option for women suffering with symptomatic fibroids. Poster presented at: The Society of Interventional Radiology Foundation 2008 Annual Meeting; March 15-20, 2008. Washington, DC.
6. American College of Obstetricians and Gynecologists. ACOG committee opinion. Surgery and patient choice. No. 395, Jan 2008. *Obstet Gynecol.* 2008;111:243-247.
7. Keshavarz H, Hillis S, Kieke B, et al. Hysterectomy Surveillance—United States, 1994-1999. *CDC MMWR Surveill Summ.* 2002;51:1-8.
8. HCUP NIS Related Reports. 2005 National Inpatient Sample. Agency for Healthcare Research and Quality, Rockville, MD.
9. Viswanathan M, Hartmann, K, McKoy, et al. Management of Uterine Fibroids: An Update of the Evidence. AHRQ Publication No. 07-E011. Rockville, MD: Agency for Healthcare Research and Quality. July 2007.
10. Bendapudi NM, Berry LL, Frey KA, et al. Patients' perspectives on ideal physician behaviors. *Mayo Clin Proc.* 2006;81:338-344.
11. Richter DL, Kenzig MJ, Greaney ML, et al. Physician-patient interaction and hysterectomy decision making: The ENDOW study. Ethnicity, Needs, and Decisions of Women. *Am J Health Behav.* 2002;26:431-441.
12. Bradley LD. Abnormal uterine bleeding: A quick guide to evaluation and treatment. *OBG Management.* 2002;14:26-58.
13. Goldberg J, Pereira L, Mude-Nochumson H. Uterine artery embolization for symptomatic fibroids: Pros and cons. *OBG Management.* 2003;15:69-76.
14. Goodwin SC, Spies JB, Worthington-Kirsch R, et al, for the Fibroid Registry for Outcomes Data (FIBROID) Registry Steering Committee and Core Site Investigators. Uterine artery embolization for treatment of leiomyomata: long-term outcomes from the FIBROID registry. *Obstet Gynecol.* 2008;111:22-33.
15. Spies JB, Coyne K, Guaou G, et al. The UFS-QOL, a new disease-specific symptom and health-related quality of life questionnaire for leiomyomata. *Obstet Gynecol.* 2002;99:290-300.
16. Uskul AK, Ahmad F, Leyland NA, et al. Women's hysterectomy experiences and decision-making. *Women Health.* 2003;38:53-67.
17. Wade J, Pletsch PK, Morgan SW, et al. Hysterectomy: what do women need and want to know? *J Obstet Gynecol Neonatal Nurs.* 2000;29:33-42.
18. Bhavnani V, Clarke A. Women awaiting hysterectomy: a qualitative study of issues involved in decisions about oophorectomy. *BJOG.* 2003;110:168-174.
19. Data on file. Rockland, MA. BioSphere Medical, Inc.
20. KaplanWest Qualitative Research 2005 Market Research. Data on file. Rockland, MA. BioSphere Medical, Inc.
21. Fischer JH, Zurawin RK. Expert exchange. How to formulate the relationship between the ob/gyn and the interventional radiologist for the treatment of uterine fibroids. *Contemp OB GYN.* April 2008.
22. Omary RA, Vasireddy S, Chrisman HB, et al. The effect of pelvic MR imaging on the diagnosis and treatment of women with presumed symptomatic uterine fibroids. *J Vasc Interv Radiol.* 2002;13:1149-1153.
23. Siskin G, Stainken BF, Dowling K, et al. Outpatient uterine artery embolization for symptomatic uterine fibroids: experience in 49 patients. *J Vasc Interv Radiol.* 2000;11:305-311.
24. Pron G, Mocarski E, Bennett J, et al, for the Ontario UFE Collaborative Group. Pregnancy after uterine artery embolization for leiomyomata: the Ontario multicenter trial. *Obstet Gynecol.* 2005;105:67-76.
25. Edwards RD, Moss JG, Lumsden MA, et al for The REST Investigators. Uterine-artery embolization versus surgery for symptomatic uterine fibroids. *N Engl J Med.* 2007;356:360-370.
26. Pinto I, Chimento P, Romo A, et al. Uterine fibroids: uterine artery embolization versus abdominal hysterectomy for treatment—a prospective, randomized, and controlled clinical trial. *Radiology.* 2003;226:425-431.
27. Walker WJ, McDowell SJ. Pregnancy after uterine artery embolization for leiomyomata: a series of 56 completed pregnancies. *Am J Obstet Gynecol.* 2006;195:1266-1271.
28. Chrisman HB, Basu PA, Omary RA. The positive effect of targeted marketing on an existing uterine fibroid embolization practice. *J Vasc Interv Radiol.* 2006;17:577-581.
29. Howard BV, Kuller L, Langer R, et al, for the Women's Health Initiative. Risk of cardiovascular disease by hysterectomy status, with and without oophorectomy: the Women's Health Initiative Observational Study. *Circulation.* 2005;111:1462-1470; Epub 2005 Mar 21.
30. Nahás E, Pontes A, Traiman P, et al. Inhibin B and ovarian function after total abdominal hysterectomy in women of reproductive age. *Gynecol Endocrinol.* 2003;17:125-131.
31. Parker WH, Broder MS, Liu Z, et al. Ovarian conservation at the time of hysterectomy for benign disease. *Clin Obstet Gynecol.* 2007;50:354-361.
32. Salpeter SR, Walsh JM, Greyber E, et al. Mortality associated with hormone replacement therapy in younger and older women: a meta-analysis. *J Gen Intern Med.* 2004;19:791-804.
33. Mehra S, Bhat V, Mehra G. Laparoscopic vs abdominal vs vaginal hysterectomy. *Gynaecol Endoscopy.* 1999;8:29-34.
34. Soriano D, Goldstein A, Lecuru F, et al. Recovery from vaginal hysterectomy compared with laparoscopy-assisted vaginal hysterectomy: a prospective, randomized, multicenter study. *Acta Obstet Gynecol Scand.* 2001;80:337-341.
35. Hehenkamp WJ, Volkers NA, Bartholomeus W, et al. Sexuality and body image after uterine artery embolization and hysterectomy in the treatment of uterine fibroids: a randomized comparison. *Cardiovasc Intervent Radiol.* 2007;30:866-875.
36. Bradford A, Meston C. Sexual outcomes and satisfaction with hysterectomy: influence of patient education. *J Sex Med.* 2007;4:106-114.