

# Patient Experience and Clinical Outcomes after Same-day Outpatient Mastectomy and Immediate Breast Reconstruction Protocol during the Global Pandemic

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**Background:** The coronavirus disease 2019 (COVID-19) pandemic provoked rapid changes in clinical practice to accommodate mandated restrictions within health-care delivery. This study reviewed patient-reported experiences and clinical outcomes after implementation of a same-day discharge protocol after mastectomy with immediate alloplastic breast reconstruction compared with our historical overnight stay protocol.

**Methods:** This is a retrospective single-institution study of consecutive patients who underwent mastectomy and immediate alloplastic reconstruction between July 2019 and November 2020. A postoperative survey was completed by patients to evaluate satisfaction with perioperative communications, recovery, and their overall experience.

**Results:** A total of 302 patients (100% women) underwent mastectomy and immediate alloplastic reconstruction (174 pre-COVID-19, 128 during COVID-19). During COVID-19, 71% of patients were scheduled for a same-day discharge, among which 89% were successfully discharged the same day. Compared with pre-COVID-19, there were no differences in type of surgery, operative times, pain scores, 30-day readmission, or unplanned visits (all  $P > 0.05$ ) during the COVID-19 pandemic. Compared with pre-COVID-19, patients during the pandemic reported comparable satisfaction with their care experience and postoperative recovery (56% survey response rate). Patient satisfaction was also similar between those discharged the same day ( $n = 81$ ) versus the next day ( $n = 47$ ) during COVID-19.

**Conclusions:** Same-day discharge is feasible, safe, and can provide similar patient-reported satisfaction and outcomes compared with traditional overnight stay. These data highlight the ability to deliver adaptable, high-quality breast cancer care, within the constraints of a global pandemic. (*Plast Reconstr Surg Glob Open* 2023; 11:e5183; doi: 10.1097/GOX.0000000000005183; Published online 24 July 2023.)

## INTRODUCTION

In response to the COVID-19 pandemic, institutions across the world rapidly adjusted practice patterns to

maintain safety and reappropriate resources.<sup>1</sup> In some cases, practice changes contributed to delays in care and postponed surgeries.<sup>2-4</sup> The issue of whether alloplastic breast reconstruction should be performed at the time of mastectomy was raised early during the pandemic, given the constraints on hospital resources as well as the potential risk of viral exposure to any hospitalized patient.<sup>5,6</sup> One solution was the development of protocols for same-day discharge following mastectomy with reconstruction.<sup>7-9</sup>

Increasingly, mastectomies have been performed on an outpatient basis, though this has been far less common for

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mastectomy with reconstruction.<sup>10–12</sup> Retrospective studies have shown that same-day mastectomy with reconstruction is feasible, safe, and has similar complication rates to inpatient procedures.<sup>13–15</sup> Particularly with the implementation of Enhanced Recovery After Surgery (ERAS) protocols, same-day discharge for mastectomy with reconstruction has become a routine practice at some centers.<sup>16,17</sup> In response to the COVID-19 pandemic, options in the management of breast cancer patients were proposed, including delaying alloplastic reconstruction after mastectomy, to conserve hospital bed space and limit patient exposure to the virus.<sup>18–22</sup> Furthermore, women undergoing breast cancer treatment during the COVID-19 pandemic faced the additional challenges of social distancing and psychosocial well-being during their treatment.<sup>23</sup>

Although data exist on the safety and feasibility of same-day discharge for outpatient mastectomy with reconstruction, there is limited published data on patient satisfaction with this practice.<sup>19,20</sup> In response to the COVID-19 pandemic, our institution initiated a practice change in March 2020 to aim for same-day discharge of patients undergoing mastectomy with immediate alloplastic breast reconstruction. This was a modification to our existing practice, which consisted of an outpatient overnight hospital stay (23-hour admission) and incorporated an ERAS protocol. The aim of this study was to assess clinical outcomes and patient-reported experiences after outpatient with same-day discharge for mastectomy with immediate breast reconstruction in response to our institution's practice change during the pandemic.

## METHODS

This was a retrospective review of patients who underwent mastectomy and immediate alloplastic breast reconstruction at a tertiary academic institution between July 2019 and November 2020. This study received institutional review board approval, and written informed consent was obtained from all participants. The cohort was divided into two principal groups: patients who underwent surgery during the COVID-19 pandemic (March 18, 2020–November 30, 2020) and a pre-COVID-19 group of consecutive patients (July 1, 2019–March 14, 2020).

The standard of care for patients undergoing mastectomy and immediate implant or tissue expander (alloplastic) reconstruction at our institution before COVID-19 included a 23-hour postoperative stay and an established ERAS protocol that included use of intraoperative field blocks by the surgical team with liposomal bupivacaine. All patients underwent a preoperative visit that included counseling about the procedure, drain management, and postoperative expectations. Beginning March 18, 2020, our center implemented a same-day discharge protocol for patients undergoing mastectomy with immediate reconstruction. All patients also received written discharge instructions (including standardized drain care instructions) as well as a standard phone call on postoperative day 1 from a member of the surgery team to check in and screen for any concerns. After discharge from the hospital, patients were able to communicate with the team

## Takeaways

**Question:** This study aimed to assess whether patient satisfaction after mastectomy with reconstruction done as a same-day discharge procedure is equivalent to a traditional overnight hospital stay.

**Findings:** This retrospective single-institution study found that same-day discharge after mastectomy with alloplastic reconstruction is feasible, safe, and has patient satisfaction comparable to an overnight hospital stay.

**Meaning:** Same-day discharge is a safe and feasible option in select patients after mastectomy with alloplastic reconstruction and is associated with high levels of patient satisfaction.

members by phone, use of the mobile or online portal, and telemedicine video follow-up as necessary. The first in-person postoperative visit was performed at approximately 2 weeks.

Inclusion criteria were patients 18 years or older who underwent skin sparing, nipple sparing, unilateral or bilateral mastectomy with immediate alloplastic reconstruction (tissue expander or direct to implant reconstruction, all prepectoral implants). Patients who underwent simple mastectomy, oncoplastic reconstruction, or autologous reconstruction were excluded. Demographic and clinical details for all patients were abstracted from the electronic medical record. The rate of 30-day postoperative outcomes, including complications, unplanned admission, and clinic visits, were assessed.

A survey was sent by mail to all patients who met the inclusion criteria to collect data on patient-reported satisfaction and experience in all phases of their mastectomy care. (See **table, Supplemental Digital Content 1**, which displays patient-reported outcomes and experience among patients who underwent mastectomy and immediate alloplastic reconstruction during COVID-19 and pre-COVID-19. <http://links.lww.com/PRSGO/C709>.)

If no survey response was received at 3–4 weeks, a standardized follow-up telephone call was made to assist in recruitment. Responses were collated and analyzed in a de-identified manner. The survey was developed in collaboration with experts at our institution's survey center to minimize any potential bias or leading questions.

## Statistical Analysis

Descriptive statistics are reported as categorical counts (n %, percentage) for discrete variables and as mean with standard deviation for continuous variables. Comparison of variables between the pre- and post-COVID-19 periods was made using a chi-square or Fisher exact test as appropriate for discrete variables and using a Wilcoxon rank sum test for continuous variables. The subset of patients who were planned for same-day discharge after mastectomy with reconstruction during the COVID-19 period was similarly compared with those who had a planned overnight stay. Multivariable logistic regression models were performed to assess risk factors in the development of 30-day complications and readmission. The covariates

included in these models (included based on perceived clinical relevance) along with the COVID-19 era variables included age, body mass index (BMI), history of smoking, and diabetes. The alpha-level was set at 0.05 for statistical significance. Analysis was completed using SAS version 9.4 (Cary, NC).

## RESULTS

A total of 302 patients were included in the study: 174 patients underwent surgery during the pre-COVID-19 period, and 128 during the post-COVID-19 period. Post COVID-19, 91 of 128 patients (71%) were scheduled for a same-day discharge, among whom 81 patients (89%) were successfully discharged the same day.

### Pre- versus Post-COVID-19 Cohorts

Table 1 summarizes the demographics and clinical characteristics of the two groups. There was a greater proportion of patients under the age of 50 in the COVID-19 group than in the pre-COVID-19 group (62.5% versus 50%,  $P = 0.03$ ). There was a greater proportion of patients who had a smoking history in the pre-COVID-19 compared with the COVID-19 group (Table 1). There were no differences in BMI and comorbidities between the pre- and post-COVID-19 groups (Table 1). As described in Table 2, there were no differences in operative time, mastectomy weight, mastectomy type, and axillary surgery between the pre- and post-COVID-19 groups. A total of 229 patients (75.8%) underwent bilateral mastectomy with reconstruction,

including 101 patients (79%) in the COVID-19 group and 128 patients (74%) in the pre-COVID-19 group, which was comparable ( $P = 0.32$ ).

Postoperative course and complications for the pre- and post-COVID-19 groups are described in Table 3. Patients in the COVID-19 group had a shorter mean hospital length of stay compared with the pre-COVID-19 group [20 (15) hours versus 31 (16.2) hours,  $P < 0.001$ ]. There were no differences in 30-day complications, 30-day readmissions, or unplanned clinic visits between the pre- and post-COVID-19 groups (Table 3). Thirty-day complications in the pre-COVID-19 group included flap necrosis requiring readmission ( $n = 5$ ), upgrade on final pathology requiring readmission and return to the operating room ( $n = 1$ ), wound infection or dehiscence requiring hospital readmission ( $n = 3$ ), superficial wound infection or dehiscence requiring local wound cares, managed outpatient ( $n = 4$ ). Thirty-day complications in the post-COVID-19 group included flap necrosis requiring readmission ( $n = 3$ ), flap necrosis requiring local wound cares managed outpatient ( $n = 2$ ), superficial wound infection managed outpatient ( $n = 2$ ), upgrade on final pathology requiring return to operating room and readmission ( $n = 1$ ), hematoma requiring readmission ( $n = 1$ ), and wound infection requiring readmission ( $n = 2$ ).

Multivariate logistic regression modeling was performed controlling for age, BMI, history of smoking, and diabetes, which showed no differences in odds of developing 30-day complications between patients who underwent surgery during the pre- and post-COVID-19 periods (OR 1.4 (95% CI 0.71–2.86),  $P = 0.68$ ). Similarly, there was no difference in odds of unplanned return visits, controlling

**Table 1. Patient Demographics and Clinical Characteristics of Patients Undergoing Mastectomy and Immediate Alloplastic Reconstruction in the Pre- and Post-COVID-19 groups**

	COVID-19 (N = 128)	Pre-COVID-19 (N = 174)	P
<b>Age (y)</b>			0.005*
Mean (SD)	46.7 (9.9)	50.5 (12.5)	
<b>Age grouped, N (%)</b>			0.03†
<50 years	80 (62.5%)	87 (50.0%)	
≥50 years	48 (37.5%)	87 (50.0%)	
<b>BMI</b>			0.56*
Mean (SD)	26.9 (5.8)	27.0 (5.1)	
<b>Hypertension</b>			0.13†
No	112 (87.5%)	141 (81.0%)	
Yes	16 (12.5%)	33 (19.0%)	
<b>Diabetes mellitus</b>			1.00‡
No	124 (96.9%)	169 (97.1%)	
Yes	4 (3.1%)	5 (2.9%)	
<b>Coronary artery disease</b>			1.00‡
No	127 (99.2%)	173 (99.4%)	
Yes	1 (0.8%)	1 (0.6%)	
<b>Pulmonary disease</b>			0.41†
No	117 (91.4%)	154 (88.5%)	
Yes	11 (8.6%)	20 (11.5%)	
<b>BRCA carrier status</b>			0.69†
No	106 (82.8%)	141 (81.0%)	
Yes	22 (17.2%)	33 (19.0%)	

\*Wilcoxon rank sum test.

†Chi-square test.

‡Fisher exact.

**Table 2. Operative Details: Patients Who Underwent Mastectomy and Immediate Breast Alloplastic Reconstruction in the Pre- and Post-COVID-19 Groups**

	COVID-19 (N = 128)	Pre-COVID-19 (N = 174)	P
Laterality			0.33
Unilateral	29 (22.7%)	48 (27.6%)	
Bilateral	99 (77.3%)	126 (72.4%)	
Operative time (h)			0.30*
Mean (SD)	5.7 (1.2)	5.6 (1.2)	
Mastectomy weight (g)			0.98*
Mean (SD)	435.9 (265.9)	433.6 (255.4)	
Mastectomy type (N, %)			0.96†
Skin sparing	62 (48.4%)	82 (47.1%)	
Nipple sparing	65 (50.8%)	90 (51.7%)	
Skin and nipple sparing	1 (0.8%)	2 (1.1%)	
Axillary surgery group			0.99‡
None	20 (15.6%)	27 (15.5%)	
SLNB	89 (69.5%)	120 (69.0%)	
ALND	19 (14.8%)	27 (15.5%)	

\*Wilcoxon rank sum test.

†Chi-square test.

‡Fisher exact.

**Table 3. Comparison of Postoperative Course and Complications among Women Who Underwent Mastectomy and Immediate Alloplastic Reconstruction during COVID-19 Compared with a Pre-COVID-19 Cohort**

	COVID-19 (N = 128)	Pre-COVID-19 (N = 174)	P
Pain score on discharge (0–10)			0.52*
Mean (SD)	3.1 (1.9)	3.3 (2.0)	
Hospital stay (h)			<0.0001*
Mean (SD)	20.0 (15.1)	31.4 (16.2)	
Discharged as intended			0.03†
No	13 (10.2%)	7 (4.0%)	
Yes	115 (89.8%)	167 (96.0%)	
30-day readmission			0.91†
No	121 (94.5%)	165 (94.8%)	
Yes	7 (5.5%)	9 (5.2%)	
30-day complications			0.72†
No	117 (91.4%)	161 (92.5%)	
Yes	11 (8.6%)	13 (7.5%)	
Any unplanned visit			0.46†
No	114 (89.1%)	150 (86.2%)	
Yes	14 (10.9%)	24 (13.8%)	

\*Wilcoxon rank sum test.

†Chi-square test.

‡Fisher exact.

for pulmonary disease, hypertension, and smoking history, between groups (OR 0.85 (95% CI 0.41–1.76),  $P = 0.66$ ).

**COVID-19 Period: Same-day Discharge versus Next-day Discharge Patients**

Subgroup analysis was performed among 128 patients who underwent surgery during the COVID-19 lockdown (Table 4). Eighty-one of 91 (89%) patients were successfully discharged on the same day after mastectomy and immediate reconstruction as planned. Patients who were

**Table 4. Demographics and Clinical Characteristics of Patients during the COVID-19 Period Who Underwent Same Day Discharge after Mastectomy with Immediate Reconstruction versus Traditional Overnight Stay**

	Overnight Stay (N = 47)	Same-day Discharge (N = 81)	P
Age			0.12*
Mean (SD)	45.1 (9.5)	47.5 (10.1)	
BMI			0.32*
Mean (SD)	26.5 (6.4)	27.1 (5.4)	
Smoking history			0.40†
No	38 (80.9%)	70 (86.4%)	
Yes	9 (19.1%)	11 (13.6%)	
Hypertension			0.03†
No	45 (95.7%)	67 (82.7%)	
Yes	2 (4.3%)	14 (17.3%)	
Diabetes mellitus			1.00‡
No	46 (97.9%)	78 (96.3%)	
Yes	1 (2.1%)	3 (3.7%)	
Coronary artery disease			1.00‡
No	47 (100.0%)	80 (98.8%)	
Yes	0 (0.0%)	1 (1.2%)	
Pulmonary disease			0.53†
No	42 (89.4%)	75 (92.6%)	
Yes	5 (10.6%)	6 (7.4%)	
BRCA carrier status			0.06†
No	35 (74.5%)	71 (87.7%)	
Yes	12 (25.5%)	10 (12.3%)	

\*Wilcoxon rank sum test.

†Chi-square test.

‡Fisher exact.

discharged on the same day (n = 81) were compared with 47 patients who had an overnight stay (37 planned and 10 converted from the same-day group). As described in Table 4, there were no differences between the two groups in age, BMI, smoking status, diabetes, coronary artery disease, pulmonary disease, or BRCA status. As described in Table 5, there were no significant differences between the same and next-day discharge groups in operative time, mastectomy weight, mastectomy type, or type of axillary surgery.

As described in Table 5, during COVID-19, there were no differences in average pain scores on discharge between patients who discharged on the same day versus those who did not. The mean hospital stay was 12.5 (3.4) hours for same-day discharge patients versus 33 (18.4) hours in those who stayed overnight. Additionally, as described in Table 5, there was no difference in rates of 30-day complications, readmissions, or unplanned return clinic visits in the same-day discharge versus overnight stay groups. Thirty-day complications in the overnight stay group included flap ischemia requiring readmission for operative debridement (n = 3), tissue necrosis requiring local wound cares managed outpatient (n = 1), local wound infection requiring oral antibiotics (n = 2). Thirty-day complications in the same-day discharge group included readmission due to upgrade on final pathology requiring return to the operating room (n = 1), hematoma requiring readmission and return to the operating room (n = 1), wound infection requiring readmission for



**Table 5. Operative and Postoperative Clinical Course of Patients Who Underwent Mastectomy and Immediate Alloplastic Breast Reconstruction with Same-day Discharge versus 23-hour Stay during the COVID-19 Pandemic**

	Overnight Stay (N = 47)	Same-day Discharge (N = 81)	P
Operative time (h)			0.34*
Mean (SD)	5.8 (1.3)	5.6 (1.1)	
Mastectomy weight (g)			0.38*
Mean (SD)	470.9 (300.9)	415.5 (242.9)	
Mastectomy type			0.54†
Skin sparing	23 (48.9%)	39 (48.1%)	
Nipple sparing	23 (48.9%)	42 (51.9%)	
Skin and nipple sparing	1 (2.1%)	0 (0.0%)	
Axillary surgery group			0.35‡
None	5 (10.6%)	15 (18.5%)	
SLNB	33 (70.2%)	56 (69.1%)	
ALND	9 (19.1%)	10 (12.3%)	
Pain score on discharge			0.07*
Mean (SD)	3.5 (2.0)	2.8 (1.8)	
Hospital stay (h)			<0.0001*
Mean (SD)	33.0 (18.4)	12.5 (3.4)	
30-day complication			0.19‡
No	41 (87.2%)	76 (93.8%)	
Yes	6 (12.7%)	5 (6.2%)	
30-day readmission			0.73‡
No	44 (93.6%)	77 (95.1%)	
Yes	3 (6.4%)	4 (4.9%)	
Unplanned clinic visit			0.27‡
No	40 (85.1%)	74 (91.4%)	
Yes	7 (14.9%)	7 (8.6%)	

\*Wilcoxon rank sum test.

†Chi-square test.

‡Fisher exact test.

intravenous antibiotics (n = 2), and flap necrosis requiring local wound care (n = 1).

#### Patient-reported Experience Pre-COVID-19 versus COVID-19

A total of 174 completed the survey (56% response rate), including 84 women in the COVID-19 group and 86 women in the pre-COVID-19 group. **Supplemental Digital Content 1** provides a summary of the survey data (<http://links.lww.com/PRSGO/C709>). For simplifying the data from the five-point Likert scale for presentation, a comparison was made for patients reporting “very good,” which was the highest standard we aimed to achieve, versus anything below this level. In the COVID-19 group, 80% of women reported “very good” preoperative information provided compared with 69% of the pre-COVID-19 group, but this was not statistically significant ( $P = 0.09$ ). Similarly, 85% of women reported “very good” clear preoperative instructions in the COVID-19 group compared with 76% in the pre-COVID-19 group, ( $P = 0.15$ ). Pain control during their hospital stay, at home, and side effects from medications were comparable in both groups. (See **table 1, Supplemental Digital Content 1**, <http://links.lww.com/PRSGO/C709>.) Eighty percent

of patients reported that the discharge information was “very good” in the entire cohort (**Supplemental Digital Content 1**). The overall quality of care was reported as “very good” in 79% in the pre-COVID-19 group and 80% in the COVID-19 group (**Supplemental Digital Content 1**). Most patients were “very satisfied” with their experience in the COVID-19 group (89%) and pre-COVID-19 (81%) group (**Supplemental Digital Content 1**, <http://links.lww.com/PRSGO/C709>).

As described in **Supplemental Digital Content 1** (<http://links.lww.com/PRSGO/C709>), 30% of patients who underwent surgery during COVID-19 felt that they needed to stay in the hospital longer compared with 22% in the pre-COVID-19 group ( $P = 0.25$ ). In both groups, more than 67% of patients strongly agreed or agreed that they were ready for discharge at the time of leaving the hospital ( $P = 0.82$ ). Pain at night was comparable in both groups ( $P = 0.12$ , **Supplemental Digital Content 1**, <http://links.lww.com/PRSGO/C709>). Unplanned postoperative appointments were needed in 12% of the COVID-19 group compared with 16% of the pre-COVID-19 group ( $P = 0.41$ ). Narcotic requirements beyond 1 week trended higher in the pre-COVID-19 group (25%) compared with during COVID-19 (13%), but this was not statistically significant ( $P = 0.06$ ).

#### Patient-reported Experience after Same-day versus Next-day Discharge during COVID-19

In a subgroup analysis of survey responders who underwent surgery during COVID-19 (n = 84), a comparison was made between patients who were discharged the same day (n = 54) with those who stayed overnight (n = 30). As described in **Supplemental Digital Content 2**, there were no significant differences in patient-reported hospital pain control, home pain control, answering of postoperative questions, discharge information provided, overall quality of care, or overall experience. (See **table, Supplemental Digital Content 2**, which displays patient-reported outcomes and experience among patients who were discharged same day compared with an overnight stay following mastectomy and immediate alloplastic reconstruction during COVID-19. <http://links.lww.com/PRSGO/C710>.) Among patients who were discharged the same day, 32% reported that they felt they would have preferred to stay in hospital longer compared with 27% of women who stayed overnight ( $P = 0.64$ ). Sixty-three percent of patients who were discharged the same day felt that they were ready for discharge (agree/strongly agree) compared with 80% of patients who stayed overnight,  $P = 0.11$ . Pain control at night, need for additional postoperative appointments, and ongoing narcotics past 1 week were comparable in both groups (**Supplemental Digital Content 2**, <http://links.lww.com/PRSGO/C710>).

## DISCUSSION

There has been increasing evidence since the start of the pandemic to support same-day discharge following mastectomy with or without immediate implant or tissue expander reconstruction.<sup>24–29</sup> This study sought to evaluate

the patient perspective on this practice change at our institution, to ensure that we were still providing excellent care from a patient satisfaction standpoint despite a shorter postoperative stay following mastectomy with immediate alloplastic reconstruction.

Benefits of same-day discharge include reduction in healthcare costs and potential decrease in hospital acquired infections, including reduced exposure to viral infections such as COVID-19.<sup>29</sup> Cordeiro et al (2016) reported an average estimated saving of \$4000 per patient with the transition from an overnight stay to same-day discharge after major breast cancer surgery.<sup>20,25</sup> Factors that may be considered potential barriers to same-day discharge in major breast cancer surgery included bilateral procedures,<sup>30</sup> obesity, and age.<sup>25</sup> Failed same-day discharge may be attributed to postoperative nausea, vomiting, and inadequate pain control.<sup>26</sup> Our findings complement previously published data on the safety and feasibility of same-day discharge after mastectomy and immediate alloplastic reconstruction. During COVID-19, 91 of 128 women were scheduled for a same-day discharge, and 81 women (89%) were successfully discharged the same day. Reasons leading to the 10 patients intended for same-day discharge staying overnight included flap ischemia, postoperative nausea and vomiting, and pain control issues. There were no significant differences in 30-day complications, readmissions, or unplanned clinic/return visits between patients who were discharged the same day compared with those who were discharged the next day.

Although demonstrating a shorter hospital stay is safe and saving cost is important, we cannot lose sight of understanding the patient-reported experience. This is the first study to our knowledge that examined patient satisfaction after same-day discharge for mastectomy with immediate reconstruction compared with an overnight stay. This study had a 56% patient response rate and demonstrated comparable patient experiences, satisfaction, and postoperative recovery during COVID-19 and pre-COVID-19. Similarly, data were comparable between patients who were discharged the same day versus the traditional overnight stay during COVID-19. Patients reported their overall experience as 89%–90% favorable in both same-day and overnight-stay groups. These results highlight the ability of a multidisciplinary team to successfully provide continued high-quality breast cancer care and rapidly adapt to challenging circumstances and practice changes.

To optimize the chance of success for same-day discharge, having all members of the team provide a consistent message and setting preoperative recovery expectations is critical. This necessitates a thorough preoperative counseling appointment to help patients understand the recovery timeline, expectation that they will dismiss from the hospital the same day as surgery, and to learn about drain care pre-operatively. Additionally, we have developed standardized dismissal instructions at our institution including for drain care that can easily be put together by surgical residents who are often doing the dismissal instructions, but frequently rotating between services, to ensure consistency. Standardization and clear communication both between the patient and care team, and across the care team is imperative for success in these cases. Additionally, one potential

unintended consequence with early discharge is shifting the workload from the hospital to the clinic staff. We did not see increased postoperative visits in the first 30 days with our practice change, nor did we see an increase in request for prescription refills. Patients did receive a postoperative day one phone call from our office staff, but we did not track the number of additional nonvisit touchpoints such as postoperative phone calls and electronic portal messages.

Limitations of the study include the retrospective study design and potential recall and responder bias, as patients did not receive their surveys immediately postoperatively; this is inherent to the study design. There was variability and factors that could not be controlled for in terms of patient selection during COVID-19 who were scheduled for same-day surgery versus the standard traditional protocol (ie, patients during the COVID-19 period tended to be younger due to prioritization of more high risk aggressive tumors often seen in younger women early in the pandemic). Additionally, there are other potential confounding variables that might influence whether a patient is able to be discharged home the same day, such as degree of social support at home, which we were not able to collect in this data set, but acknowledge that this may bias our data set and influence generalizability. Therefore, the data were not sufficient to identify specific risk factors that may have predicted the need for a hospital admission outside of surgical complications. The current study is limited to groups evaluated before and during the COVID-19 pandemic. We do not have longitudinal follow-up further out in the COVID-19 pandemic or an additional group later in the pandemic; so we are unable to comment on how patient perceptions and operative patterns may have changed or evolved throughout the pandemic. We additionally do not have a cost analysis included in this study; however, we acknowledge that this will be an important area of further study.

## CONCLUSIONS

This study demonstrated that same-day discharge after mastectomy with alloplastic reconstruction is feasible, safe, and can provide similar patient-reported outcomes compared with an outpatient overnight stay. Patient-reported satisfaction, postoperative course, and overall experience were similar during the COVID-19 pandemic compared with the pre-COVID-19 cohort, and among patients who were discharged same day compared with an overnight stay.

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## DISCLOSURE

*The authors have no financial interest to declare in relation to the content of this article.*

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