

# Cost-Effectiveness of Pharmacist Postdischarge Follow-Up to Prevent Medication-Related Admissions

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BRENNAN SPIEGEL, MD, MSHS; RITA SHANE, PHARM.D; KATHERINE PALMER, PHARM.D;  
AND DUONG DONNA LUONG, PHARM.D

## ABSTRACT

**OBJECTIVES:** To measure the cost-effectiveness and direct budget impact of a pharmacist follow-up program in high-risk patients versus usual care.

**STUDY DESIGN:** Cost-effectiveness analysis of a quality improvement initiative comparing a postdischarge pharmacist program versus usual care.

**METHODS:** Pharmacists at Cedars-Sinai Medical Center, a large, community-based, academic medical center, contacted patients within 72 hours of discharge. Patient and prescriber drug-related problems (DRPs) were identified and resolved. Eligible patients met 1 or more of the following criteria: (1) receiving more than 10 medications, (2) having a diagnosis of pneumonia or congestive heart failure, and (3) receiving anticoagulants. The study measured annualized incremental direct hospital cost per 30-day readmission prevented.

**RESULTS:** Of 185 patients identified, 90% were contacted within 72 hours of discharge; of this group, 86.4% had 1 or more DRPs. The 30-day intention-to-treat readmission rates for the program versus usual care were 16.2% and 21.6%, respectively, and the average costs per patient were \$3433 and \$4015, respectively (difference, \$582; Monte Carlo 95% CI, \$528-\$635). In multivariable sensitivity analysis across 1000 hypothetical hospitals of varying size and staffing, the intervention remained cost-saving in 98.3% of head-to-head trials.

**CONCLUSIONS:** The previously documented efficacy of pharmacist postdischarge care remains effective in a real-world application. The program is cost-saving to hospitals operating in a population health model or capitated model.

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There are more than 3 million hospital readmissions per year in the United States, costing over \$41 billion in direct healthcare expenditures.<sup>1</sup> One in 5 acute hospitalizations results from complications of treatment itself, of which half are medication related; it is possible that many of these hospitalizations can be prevented.<sup>2</sup> The rising incidence of medication-related hospitalizations is a consequence of polypharmacy among patients with multiple comorbidities, poor health literacy, and decreased medication adherence.<sup>3-5</sup> Further, patients with chronic conditions often receive uncoordinated care from disconnected physicians, leading to complex regimens and difficulty in ensuring that medication lists are accurate during vulnerable care transitions.

Up to 86% of patients have errors in their medication list upon admission, with an average of 3.3 errors per patient overall<sup>6,7</sup> and 7.4 errors per high-risk patient.<sup>8</sup> Nearly 40% of these drug-related problems (DRPs) have the potential to cause harm.<sup>6</sup> Half of DRPs occur from unintentional prescribing errors because of incomplete or inaccurate information about what is prescribed.<sup>9,10</sup> Furthermore, medication errors occur in up to 75% of patients during hospitalization, with many of these mistakes propagated after discharge<sup>11</sup>; between 14% and 80% of patients have at least 1 medication list discrepancy

upon leaving the hospital. Postdischarge adverse drug events occur in up to 19% of patients, and one-third of these events are preventable.<sup>12-16</sup> In short, DRPs are pervasive and expensive before, during, and after acute hospitalization.

Findings of previous efficacy trials reveal that when pharmacists perform intensive medication reconciliation and patient education during and after discharge, there are fewer adverse drug events, emergency department visits, and readmissions, particularly in patients at high risk for DRPs.<sup>14,17-20</sup> However, despite clear evidence that integrated pharmacist postdischarge programs are highly efficacious, it is unclear whether they are cost-effective when subjected to everyday care within a population health model. Given the large expense of hospital readmissions, we hypothesized that cost savings from a pharmacist-led postdischarge program would offset the costs of establishing and maintaining the program.

In this study, we measured the real-world budget impact of instituting a pharmacist follow-up program. We then performed sensitivity analysis to create a return on investment (ROI) lookup table for hospitals of varying size and staffing costs that are considering implementation of a similar pharmacist postdischarge follow-up program.

## METHODS

### Study Overview

We conducted this study at Cedars-Sinai Medical Center (CSMC), a large, urban, academic hospital in Los Angeles, California. We instituted a quality improvement project in which postgraduate residency-trained pharmacists conducted telephone postdischarge follow-up for high-risk patients. We compared 30-day readmission rates between consecutive patients managed in the pilot program and a control population that did not receive the pharmacist intervention. We then calculated the incremental cost per readmission avoided and the budget impact of the pharmacist program on direct hospital outlays. Finally, we performed sensitivity analyses to estimate the program's health economic performance in other healthcare systems, recognizing that our local results may not generalize to other settings. In the sections below, we describe the health economic analyses, competing management strategies, cost accounting, clinical probability estimates, and sensitivity analyses.

### Health Economic Model

We used decision analysis software (TreeAge Pro, version 2014; TreeAge Software, Inc; Williamstown, Massachusetts) to compare directly measured costs of 2 patient cohorts hospitalized at CSMC. The **Figure** displays the truncated decision model. We populated the model with data obtained from a quality improvement project at CSMC comparing a standardized pharmacist postdischarge follow-up program versus usual care, described below. We then followed the cohort over the course of a 30-day time horizon and compared 30-day readmissions between strategies.

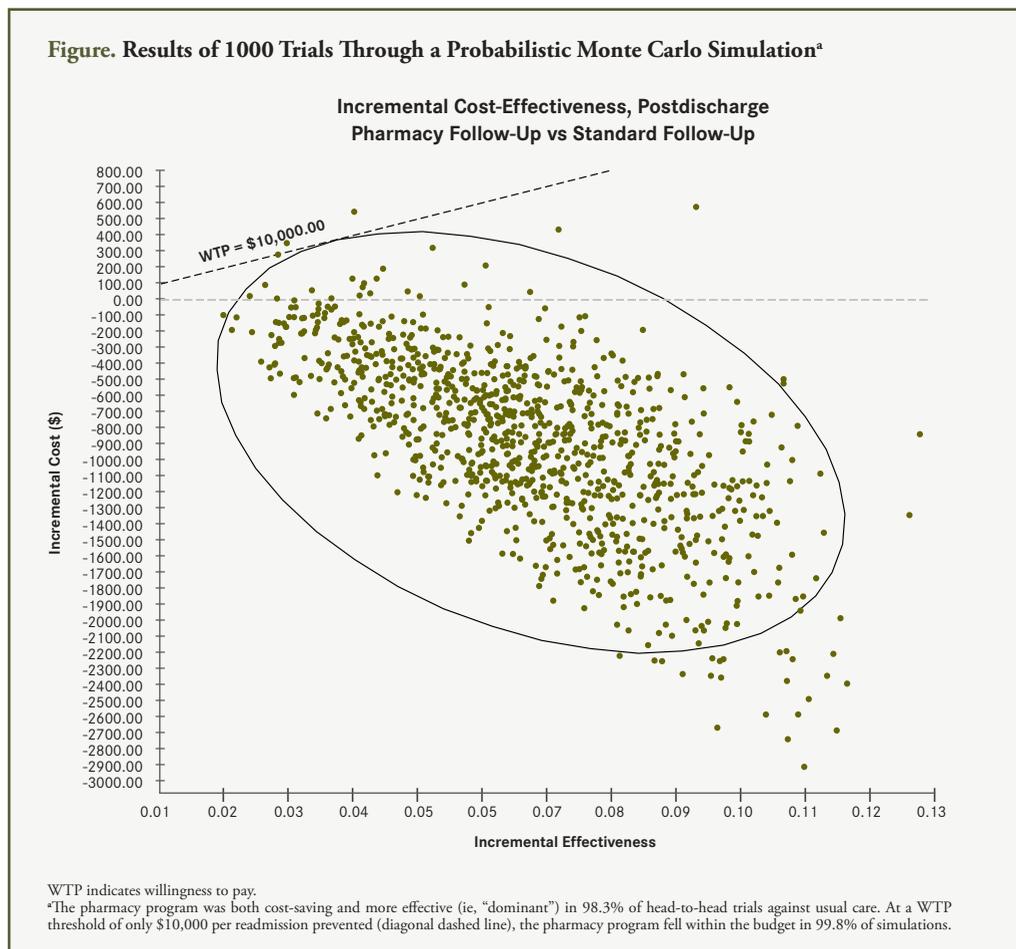
### Competing Strategies

**Pharmacist postdischarge follow-up program.** Between December 2014 and June 2015, we conducted a quality improvement project in partnership with our medical hospitalist services to screen high-risk patients at risk of readmission. Upon admission, high-risk patients were identified as meeting 1 or more of the following 3 criteria: (1) receiving 10 or more chronic medications, (2) having a diagnosis of pneumonia or congestive heart failure, and (3) receiving anticoagulants, as well as having low scores on an organizational medication literacy and adherence algorithm. These criteria were selected based on their association with hospital readmissions and expert opinion from our medical staff. Pharmacy staff were trained to use the algorithm when performing admission medication reconciliation.

Predischarge medication reconciliation was performed as part of usual care, primarily by physicians and allied health professionals, for an average of 90% of patients during the study period.

High-risk patients were selected for postdischarge follow-up by a transition of care (TOC) pharmacist. The TOC pharmacist compared the prior-to-admission medication list of each eligible patient with the after-visit summary discharge medication list. The TOC pharmacist contacted the discharging physician prior to and/or after patient contact to discuss and resolve any DRPs identified and to ensure that the physician's intent was carried out during the telephone follow-up call.

The objectives of each call were to ensure the patient had an accurate medication list, had obtained new medications initiated during hospitalization, understood how to take new and existing medications, and was taking them correctly. The TOC pharmacist conducted phone calls within 72 hours of discharge using a standardized procedure called "G.O. P.A.T.I.E.N.T." to ensure that these objectives were met (**eAppendix** [available at [ajmc.com](http://ajmc.com)]). Pharmacists were trained on the standardized procedure, which included how to manage barriers to adherence, such as access to medications, literacy, and cultural beliefs. DRPs attributable to the patient and physician were captured during the call. Patient DRPs included nonadherence, misunderstanding medication directions for use, and taking extraneous medications. Prescriber DRPs included incorrect medications, doses, frequencies, or duration; doses not adjusted for organ dysfunction, drug-drug or drug-disease interactions; extraneous, duplicate, or omitted medications; and/or incomplete or inconsistent medications prescribed versus intent of medication use based on the information documented in the electronic health record. The TOC pharmacist contacted the treating physician after the patient interview to resolve DRPs and recontacted the patient as needed. The hospital discharge medication list was updated to ensure that errors were not propagated in future patient encounters and hospitalizations. Two call attempts were made, and if the TOC pharmacist was unable to contact the patient or the patient refused to return the call, then the patient was considered lost to follow-up.



**Usual Care.** During the study period, we monitored a control group of high-risk patients who received usual care and therefore did not receive pharmacist postdischarge follow-up.

#### Clinical Probability Estimates

Our base-case model incorporated a range of probability estimates governing the relative effectiveness of the intervention versus usual care (Table 1). First, because the pharmacist intervention can only be effective in patients who are successfully contacted, we accounted for the probability of reaching patients by telephone within the 72-hour postdischarge period. Next, among the subgroup of patients successfully contacted, we assessed the relative effectiveness of the intervention versus control, as measured by 30-day readmissions. Because the base-case data were derived from our local experience, we conducted sensitivity analyses to simulate alternative results and environments, as described in the Sensitivity Analyses section below. Finally, because the relative budget impact of the pharmacist program will depend on the number of high-risk patients eligible to benefit from the intervention, we modeled varying numbers of high-risk patients across a range of hospital sizes.

#### Cost Estimates

We performed direct cost accounting to compare the pharmacist postdischarge program versus usual care. Because the pharmacist intervention is principally designed to drive value of care—meaning to improve outcomes while reducing costs—we employed a population health–based managed care perspective in which the health system is financially responsible for the index hospitalization as well as any readmissions. Specifically, we measured the direct outlay by the hospital for the total care of the patient. We included up-front costs of the program pharmacists, comprising salary and benefits for 1 pharmacist, 1 pharmacy resident, and 3 technicians hired by the hospital for the pilot program. To project cost-effectiveness in hospitals of different size and patient burden, we also modeled a broad range of team sizes, salaries, and benefit plans. Finally, we included downstream readmission costs based on direct cost accounting for resources consumed in the care of the readmitted patient, including staff time and supplies. All estimates used 2015 US\$. Because our study cohort was followed within a 1-year period, discounting was not performed.

**Table 1. Base-Case Probability and Cost Estimates and Ranges Used in Sensitivity Analysis**

Variable Type	Variable	Base-Case Estimate	Range in Sensitivity Analysis
Probabilities	Probability of 30-day readmission for usual care <sup>a</sup>	21.6%	10%-30%
	Probability of 30-day readmission for pharmacist program <sup>a</sup>	16.2%	10%-30%
	Probability of pharmacist successfully reaching patient by phone post discharge <sup>a</sup>	90.0%	60%-100%
Costs	Annual staffing cost of pharmacist program <sup>b</sup>	\$448,783	\$100,000-\$500,000
	Cost of 30-day readmission <sup>c</sup>	\$16,500	\$5000-\$30,000

CSMC indicates Cedars-Sinai Medical Center.

<sup>a</sup>Base-case estimates generated from results of local quality improvement project at CSMC. Because results may not generalize to other healthcare systems, the estimates were widely ranged in sensitivity analysis.

<sup>b</sup>Salary plus benefits of staff for pharmacist postdischarge follow-up program. At CSMC, the program consisted of 1 pharmacist, 1 pharmacy resident, and 3 pharmacy technicians.

<sup>c</sup>Readmission costs based on direct cost accounting for resources utilized by CSMC in the care of the readmitted patient, including staff time and supplies.

### Sensitivity Analyses

Because our base-case cost and probabilities will not apply to all hospitals, we conducted 1-way sensitivity analyses for all estimates. We also conducted a Monte Carlo simulation, assuming that all variables followed a triangular distribution, which is widely accepted and standard practice,<sup>21</sup> with base-case, minimum, and maximum values listed in Table 1 and the Figure. We also used results from the Monte Carlo simulation to generate a cost-effectiveness scatterplot and tested willingness-to-pay thresholds. One thousand trials were simulated and a 95% confidence ellipse was graphed around all trials in the scatterplot. We present both the confidence ellipse and 95% CIs around the base-case result. Finally, we created an ROI lookup table that accounts for the size of the hospital and staffing resources to implement the program.

### Ethics

The Cedars-Sinai Institutional Review Board approved this study (IRB Pro00038038).

## RESULTS

### Base-Case Results

**Table 2** lists the characteristics of the study participants in the pharmacist program (n = 185) and usual care (n = 51). The usual care group represented patients who had no pharmacist postdischarge follow-up due to limited resources; they served as a control group. There were no significant differences in patients enrolled between the 2 groups. The average age across groups was 70.4 years, 58% were male, and participants used 13.2 medications on average. Of the 185 patients in the pharmacist quality improvement program, 90% could be successfully contacted within 72 hours of discharge; of this group, 86.4% were found to have 1 or more medication discrepancies. The mean and median numbers of discrepancies were 2.8 and 2.0, respectively, which includes both physician-related (ie, errors of medication reconciliation) and patient-related (ie, due to patient misunderstanding) DRPs. The most commonly found

DRPs were patient-related nonadherence (39.0%), prescriber-related omission of order (15.3%), wrong dose or frequency (12.5%), and duplicate therapy (10.9%). The overall 30-day readmission rates for the program and usual care were 16.2% and 21.6%, respectively (relative risk reduction, 0.248; 95% CI, -39.4 to 59.5).

The average costs per patient for the program and for usual care were \$3433 and \$4015, respectively (difference, \$582 per patient; Monte Carlo 95% CI, \$528-\$635). In multivariable sensitivity analysis across 1000 hypothetical hospitals of varying size and staffing, and assuming a willingness-to-pay threshold of only \$10,000 per readmission prevented, the intervention remained cost-saving in 98.3% of head-to-head trials. In a projected 1-year analysis, and assuming the pharmacy team could successfully contact and manage 150 high-risk patients per month, the net annual savings to the hospital was \$1,047,600.

### Base-Case Sensitivity Analyses

Because the base-case assumptions of the model may not be reproducible across hospitals, we performed sensitivity analysis to test the model using other probability and cost estimates. One-way sensitivity analysis revealed that the pharmacy program would remain cost-saving so long as the following are true: (1) at least 34 patients are contacted by a pharmacist per month, (2) at least 21% of patients can be contacted by the pharmacist and/or do not refuse to speak, (3) the average direct hospital cost of a readmission is at least \$3660, and (4) the intervention reduces readmissions by at least 9% relative to usual care.

The model was highly sensitive to the number of patients served by the pharmacy team and the size and cost of the team (**Table 3**). For example, if 200 patients are served per month at an annual staffing cost of \$300,000 in salary and benefits, then the cost savings to the hospital is \$1,696,800; if 300 are served at a team cost of \$250,000, then \$2,242,800 is saved. Table 3 provides an ROI lookup table to assist hospitals of different sizes and staffing levels in projecting the potential cost savings of implementing the pharmacist program.

**Table 2. Characteristics of Patients in Quality Improvement Study**

Variable	Intervention (n = 185)	Control (n = 51)
Gender, % male	58.4	60.8
Average age, years	70.4	71.9
Average length of stay, days	5.2 (range, 1-17)	7.9 (range, 1-27)
Average number of scheduled medications on the prior-to-admission medication list	10.8	9.6
Average total number of medications on the prior-to-admission medication list, including as-needed medications	13.2	13.0
Primary high-risk criteria, n (%)		
>10 chronic medications	105 (56.7%)	27 (52.9%)
On anticoagulant	24 (13.0%)	10 (19.6%)
Congestive heart failure	33 (17.8%)	7 (13.7%)
Pneumonia	11 (5.9%)	2 (3.9%)
Other (MD referral)	12 (6.4%)	5 (9.8%)
Reason for admission, n (%)		
Cardiovascular	74 (40.0%)	19 (37.2%)
Infectious disease	39 (21.1%)	10 (19.6%)
Neurologic	19 (10.3%)	3 (5.9%)
Respiratory	16 (8.7%)	4 (7.8%)
Gastrointestinal	13 (7.0%)	2 (3.9%)
Hematologic	11 (6.0%)	7 (13.7%)
Oncologic	3 (1.6%)	1 (2.0%)
Renal	10 (5.4%)	5 (9.8%)

## DISCUSSION

This quality improvement study focused on high-risk patients being followed by hospitalist services. Approximately 50% of these patients were determined to be high risk based on our study criteria. During the study period, although predischARGE medication reconciliation was documented as part of usual care in an average of 90% of patients, prescriber-related DRPs were identified during the postdischarge calls. The findings of prescriber-related DRPs post discharge are consistent with published observations that documentation of discharge medication reconciliation does not necessarily mean that the process was performed completely and accurately.<sup>22-24</sup> Comprehensive predischARGE medication reconciliation would ensure timely resolution of DRPs and prevent potentially harmful errors from occurring post discharge.

Extensive research indicates that when pharmacists perform postdischarge medication reconciliation and education, there

are fewer readmissions and better outcomes.<sup>14,17-19</sup> In addition to these benefits, we also evaluated whether pharmacists could save costs in a real-world application. Using data directly obtained from a quality improvement initiative in a large community-based academic medical center, we found that the pharmacist postdischarge follow-up program was cost-saving, using a population health model in which the organization is responsible for hospitalization and readmissions. Depending on how many people are eligible for the program and the reach of the pharmacy team, hospitals can expect to save between hundreds of thousands to millions of dollars in direct costs per year, according to our ROI lookup table (Table 3). Furthermore, because high-risk patients in the study were older than 65 years and some had conditions for admission that are included in the CMS readmission penalty program (ie, congestive heart failure and pneumonia), this model could help organizations reduce readmission penalties.

The pharmacist program appears cost-effective under a wide range of scenarios; it was not highly sensitive to the precise estimates in the model or to our local base-case results. As long as at least 34 patients are served per month, and assuming the pharmacists can contact at least 21% of eligible patients (90% were contacted in our experience), the program is likely to pay for itself. These are low thresholds that should be exceeded in most implementations; we found that 98.3% of hospitals will realize cost savings if the program is equally effective as achieved in our pilot program. The program does not need to be over-

whelmingly effective to pay for itself; it must only reduce readmissions by a relative 9%. In pilot testing at CSMC, the program reduced readmissions by 25% relative to usual care (21.5% vs 16.2% absolute readmission rates). Previous research in other hospitals has shown similar results, with effect sizes ranging from a relative 14.2% to 56.2% in published studies.<sup>14,23-26</sup>

The base-case estimates used in the model were based on our local experience implementing the pharmacy program at CSMC in a quality improvement project focused on high-risk patients who were followed by hospitalist physicians. Other hospitals may bear different costs and realize different benefits. To address this, we tested a wide range of values for both cost and effectiveness in 1-way sensitivity and Monte Carlo analyses. We found that the cost-effectiveness ranking was robust to sensitivity analyses and that the intervention is likely to be cost-saving in just about every hospital that can successfully implement the program, even if it is only modestly effective.

Table 3. ROI Lookup Table<sup>a</sup>

		Eligible High-Risk Patients Per Month <sup>b</sup>					
		50	100	150	200	250	300
Annual Staffing Costs <sup>c</sup>	\$100,000	\$399,000	\$897,000	\$1,396,800	\$1,896,000	\$2,394,000	\$2,692,800
	\$150,000	\$348,600	\$847,200	\$1,346,400	\$1,845,600	\$2,346,000	\$2,545,200
	\$200,000	\$298,800	\$798,000	\$1,296,000	\$1,795,200	\$2,295,000	\$2,793,600
	\$250,000	\$249,000	\$747,600	\$1,247,400	\$1,744,800	\$2,244,000	\$2,743,200
	\$300,000	\$199,200	\$698,400	\$1,197,000	\$1,696,800	\$2,196,000	\$2,692,800
	\$350,000	\$148,800	\$648,000	\$1,146,600	\$1,646,400	\$2,145,000	\$2,642,400
	\$400,000	\$99,000	\$597,600	\$1,096,200	\$1,596,000	\$2,094,000	\$2,592,000
	\$450,000	\$49,200	\$548,400	\$1,047,600	\$1,545,600	\$2,046,000	\$2,541,600
	\$500,000	-\$1200	\$498,000	\$997,200	\$1,495,200	\$1,995,000	\$2,491,200

ROI indicates return on investment.

<sup>a</sup>Hospitals of varying size and patient burden can look up the number of high-risk eligible patients per month and the combined annual salary plus benefits of staffing the pharmacy intervention. The value in each cell is the projected annual ROI; the negative value indicates a net loss. As an example, for a hospital with 200 high-risk eligible patients per month served by a pharmacy team costing \$400,000 per year in salary plus benefits, there is a \$1,596,000 projected annual ROI. This table assumes the base-case result from our quality improvement data that the intervention reduces readmissions by a relative 25% versus usual care and the mean readmission costs is \$16,500 in direct outlay. Contact the authors to obtain model results under alternative assumptions.

<sup>b</sup>Eligible high-risk patients met 1 or more of the following criteria: (1) receiving more than 10 chronic medications, (2) having a diagnosis of pneumonia or congestive heart failure, and (3) receiving anticoagulants.

<sup>c</sup>Salary plus benefits of staff for pharmacist postdischarge follow-up program.

### Limitations

This quality improvement project did not demonstrate a statistically significant reduction in readmissions, likely due to the small size of the usual care group that did not receive postdischarge follow up by a pharmacist due to staffing limitations. However, extensive literature already indicates that these programs result in statistically significant reductions in 7-, 14-, and 30-day readmission rates<sup>14,19</sup> and in preventable adverse drug events,<sup>18</sup> and that they are cost-effective.<sup>20</sup> Here, we focused on direct real-world costs and benefits in an applied implementation of existing science. The assumption is that the hospital is responsible for the cost in this model, which is based on capitated reimbursements. Nonetheless, by conducting a Monte Carlo analysis over 1000 simulated trials using our base-case results as the base-case estimate, we found that the resulting 95% CIs did not cross unity; this is consistent with the existing literature.

In addition, our findings may not be generalizable to all high-risk patients. We studied inpatients receiving more than 10 chronic medications, having a diagnosis of pneumonia or congestive heart failure, and/or receiving anticoagulants. We cannot be sure whether these results are repeatable in other populations, although this cohort includes a prevalent and high-risk group reflective of many inpatient medical services. By using common conditions in the base-case model, we attempted to generate results that are relevant to most settings in which the program might be implemented, with particular focus on the highest-risk individuals.

### CONCLUSIONS

This analysis revealed that a pharmacist postdischarge program is likely cost-saving to hospitals in a population health model. Hospitals may use these thresholds and lookup tables to project cost savings and help determine whether to fund and implement similar programs.

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**Author Affiliations:** Department of Medicine, Division of Health Services Research (BS), and Department of Pharmacy Services (RS, DDL, KP), Cedars-Sinai Health System, Los Angeles, CA; Department of Health Policy and Management, UCLA Fielding School of Public Health (BS), Los Angeles, CA; Cedars-Sinai Center for Outcomes Research and Education (CS-CORE) (BS), Los Angeles, CA.

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**Send Correspondence to:** Brennan Spiegel, MD, MSHS, Cedars-Sinai Health System, Cedars-Sinai Health System Pacific Theaters Building, 116 North Robertson Blvd, 4th Fl, Los Angeles, CA 90048. Email: Brennan.Spiegel@cshs.org.

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## eAppendix. Pharmacist Post Discharge Consultation (G.O. P.A.T.I.E.N.T.)

## Post Discharge Consultation

## G.O. P.A.T.I.E.N.T.

## Checklist

Pt Name: \_\_\_\_\_ DOB: \_\_\_\_\_

MRN: \_\_\_\_\_ Phone #: \_\_\_\_\_ Caregiver: Yes \_\_\_\_\_ No \_\_\_\_\_

**Goal:** Ensure the patient understands the post-discharge medication regimen and how it differs from the preadmission medication regimen.

**Objective:** Review the After Visit Summary (AVS) with the patient. Highlight and explain discontinued, changes or new medications compared with the prior-to-admission (PTA) list and the reasons for those changes.

**1. Phone the patient for post-discharge follow-up. Set the stage.**

- Introduce yourself
- Identify to whom you are speaking (the “learner”)
- Ask if patient has time to discuss about his/her medicines
- Explain the purpose of the session

**2. Assess medication adherence and literacy. Gather relevant information.**

- Have you picked up all the medications listed on the discharge summary?
- Review and verify each medication with the patient:
- Tell me what medications you are currently taking:
- Name/ dose/ route/ frequency/ time of day
- Do you know what you take this medication for?
- How often do you normally take this medication?
- Ask if he/she has problems taking the medications as prescribed?
- Ask if the patient has any concerns.
- Listen carefully and respond with empathy.

**3. Teach.**

- Highlight important changes.
- Explain exactly how the discharge medication regimen differs from the preadmission regimen. Why these changes were made.
- New medications: The doctor has started you on \_\_\_\_\_.
- Do you know what this new medication is for?
- Discontinued: The doctor has stopped \_\_\_\_\_.
- Dose changes: The doctor has changed your \_\_\_\_\_.
- Counseling/ Patient Education:
- Indications, directions and potential effects of all new medications.
- How long before the medication takes effect.
- Duration of therapy
- And any dietary restrictions associated with particular medication

**4. Instruct.**

- What to watch out for and who to contact if problems arise.
- Common/ major side effects and how to manage
- What to do if a dose is missed
- Confirmation of ability to pick up prescriptions.
- If patient still did not pick up his/her medication, instruct patient to pick-up new medications as soon as possible, take all medications as instructed at discharge
- Instruct patient to not self-start or self-discontinue, or self-dose adjust any medications without speaking to physician first
- If possible, review and address barriers to adherence.

**5. Evaluate. Close the encounter.**

- Check for understanding by asking patient to repeat back key information.
- Use the “Teach Back” method.
- Be specific about what you want the patient to repeat back:
  - “What were the changes we talked about making to your medicines?”
  - Check for additional questions or concerns.
  - “What questions do you have?”
- Advise patient to always keep an up-to-date medication list with them at all times. Always bring this list with you to your doctor visits.
- Also, evaluate if patient needs further follow up to ensure adherence and understanding of medications. If additional follow up is indicated, flag patient for additional phone call follow-up up to 30 days post discharge.

**6. Notify physician and provide treatment plan.**

- Record discrepancies in patient chart and evaluate relative to the patient’s active medical problems.
- Perform a comprehensive evaluation of a patient’s medication regimen to prevent medication errors due to inappropriate dosing, frequency, omissions, duplications, drug-drug or drug-disease interactions.
- Provide an itemized list of discrepancies along with pharmacist recommendations to the physician.

**7. Touch base with patient for additional follow-up.**

If needed, call patient back with any additional instructions or clarifications after speaking to physician.