

ASSESSING INTERVENTIONS TO IMPROVE PATIENT CARE CONDUCTED BY PHARMACISTS AT AN OUTPATIENT RENAL TRANSPLANT CLINIC WITHIN A COLLABORATIVE PHARMACY PRACTICE AGREEMENT

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BACKGROUND

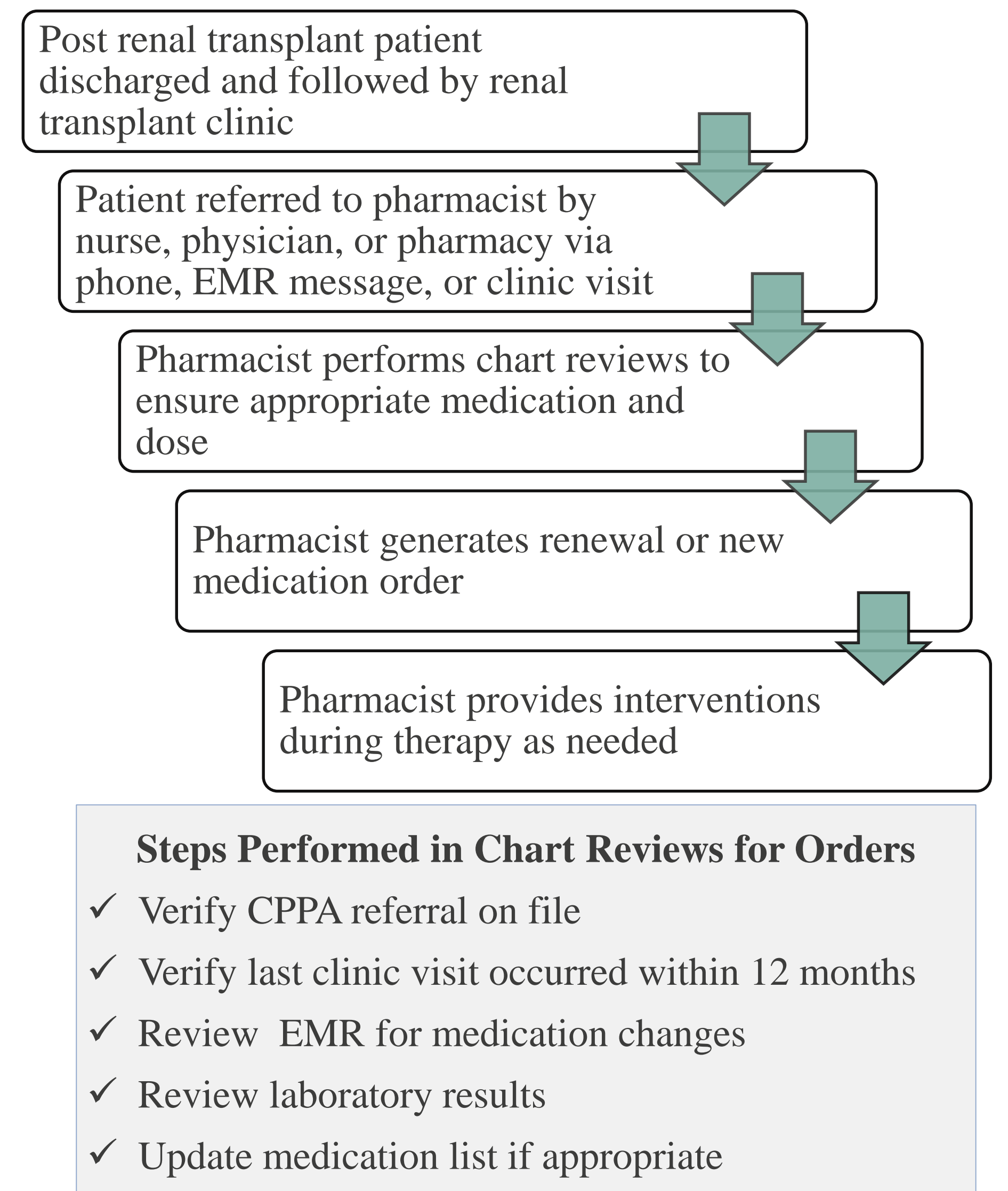
- Collaborative pharmacy practice agreements (CPPA) permit pharmacists to perform clinical services under a supervising physicians without direct intervention.
- The Vanderbilt Renal Transplant Clinic implemented a CPPA in March 2017.

Figure 1. Pharmacist Responsibilities

- Medication changes***
 - Taper and discontinue medications per protocols
 - Renew and generate orders for non-controlled medications
- Patient education**
 - Medication counseling for post-transplant patients
- Drug information resource**
 - Provide medication and dosing information to providers and nursing staff
- Treatment access**
 - Complete insurance prior authorizations and appeals for medication approval
 - Obtain financial assistance as needed

* Actions supported by CPPA

Figure 2. Clinic Workflow



METHODS

Study Design

Sample	Adult patients prescribed medication from the renal transplant clinic from 1/01/2019 to 6/30/2019
Data Source	Retrospective review of clinic notes in patient electronic medical records (EMR)
Objective	Evaluate interventions performed by pharmacists in a CPPA at a renal transplant clinic

Interventions

Medical record assessment	Evaluate patient-specific information to facilitate medication prescribing, adjustment, continuation, or coordination of care
Medication counseling	Educate patients in clinic or by phone on drug-specific information based on need
Resolving barriers to medication continuation	Identify and address potential issues that may impact medication persistence

RESULTS

Table 1. Pharmacist Interventions by Category

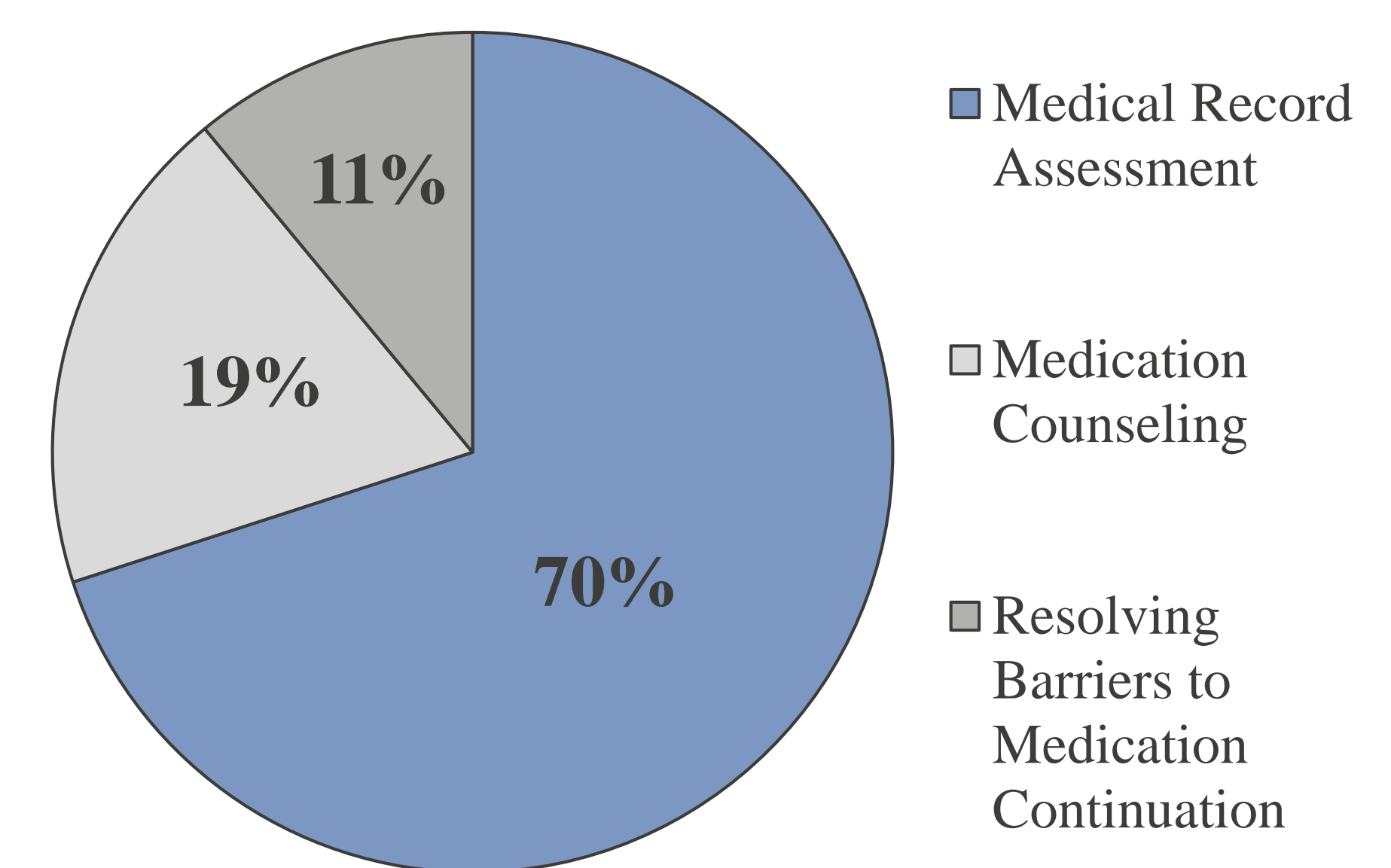
Intervention Category	Subcategory	n	%
Medical Record Assessment (n= 2,695)	Coordination of care	1580	41%
	Dose clarification	600	16%
	Appropriateness of therapy	284	7%
	Labs and medication monitoring	156	4%
	Medication reconciliation	61	2%
	Allergy review	10	<1%
Medication Counseling (n= 734)	Disease related event or symptom	4	<1%
	Drug/administration information	635	16%
	Side effect management	53	1%
	Drug interaction	38	1%
Resolving Barriers to Medication Continuation (n= 423)	Storage and stability	8	<1%
	Facilitating medication access	378	10%
	Adherence	45	1%

1,233 Patients
 5,793 Pharmacist-generated prescriptions

5% Patients' orders audited by physician → 0 Errors identified

1,821 Chart reviews performed → 3,852 Pharmacist interventions preformed

Figure 3. Types of Pharmacist Interventions



CONCLUSIONS

- Prescription management by pharmacists prescribing under a CPPA is safe.
- Pharmacist interventions were common, emphasizing the vital role pharmacists can have on a post-transplant healthcare team.
- CPPAs are a prudent method of providing quality patient care, particularly in clinics with high patient volume and frequent medications changes such as transplant.

RECOMMENDATIONS FOR ESTABLISHING A CPPA

