Pharmacist Role in a Complex Pediatric Lupus Clinic

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Background

- Pediatric systemic lupus erythatous (pSLE) is an autoimmune disease often requiring children to have complex regimens of immunosuppressive medications to control the disease and prevent flares.
- Although there is some literature on pharmacist interactions and interventions with rheumatology patients, this is confined primarily to inpatient or specialty pharmacy settings.
- Pharmacists have been shown to improve patient and physician satisfaction, improve patients' medication understanding and adherence, and decrease medication related errors.
- The University of Chicago Medicine (UCM) Comer Children's Hospital established a complex lupus clinic in January 2019 with a multidisciplinary care team which includes a clinical pharmacist.

Objective

- The purpose of this project is to describe the pharmacist role in a multidisciplinary pediatric lupus clinic and the impact it has on patient care.

Methods

- UCM Comer Children's Hospital established a complex lupus clinic in January 2019 with a multidisciplinary care team which includes a clinical pharmacist.
- Patients were scheduled for 15-30 minutes with a pharmacist as part of their appointment.
- Pharmacist assessments were performed at initial and follow-up visits, and included medication reconciliation, adherence review, and medication management tasks review.
- Patients and caregivers were given the opportunity to ask questions and were provided a pill box. If appropriate, medication management task "homework" was assigned.
- All patients were offered the option of transferring their prescriptions to the on-site outpatient pharmacy
- Eligible patients enrolled in financial assistance programs.

Results

Table 1: Patient Demographics and Characteristics at time of initial visit (n=34)

Age (years), median (range)	16 (5-20)
Sex (female), n (%)	30 (88.2)
Race, n (%)	
Black / African American	16 (47.1)
Hispanic or Latino	10 (29.4)
White	5 (14.7)
Asian / Mideast Indian	1 (2.9)
More than one race	2 (5.9)
Insurance coverage at time of first visit, n (%)	
Medicaid HFS	5 (14.7)
Medicaid MCO	14 (41.2)
Commercial / Private	15 (44.1)
Pharmacy at time of first visit, n (%)	
Independent pharmacy	2 (5.9)
Retail chain neighborhood location	23 (67.7)
University of Chicago pharmacy	2 (5.9)
Combination	7 (20.6)
Patients with a non-zero dollar monthly copay at time of first visit, n (%), *n = 32	19 (59.4)
Monthly copay for all medications at time of first visit (US dollars), mean (range), *n = 32	47.79 (0 – 680.12)
Monthly copay for all medications at time of first visit for patients with a non-zero dollar monthly copay (US dollars), mean (range), *n = 19	80.5 (8.45-680.12)

Table 2: Pharmacist adherence assessment

	Initial visit (n = 32)	1st follow-up (n = 19)	4th follow-up (n = 5)
Barriers identified related to access / affordability (yes), n (%)	14 (43.8)	7 (36.8)	2 (40)
Patient or family/caregiver expressed concerns about the medication regimen (yes), n (%)	6 (18.8)	1 (5.3)	1 (20)
Medication supplied in the last 90 days (days), mean (range)	75.8 (15-90)	83.6 (30-90)	90 (90)

Table 3: Pharmacist medication task management assessment

	Initial visit (n = 31)	1st follow-up (n = 18)	4th follow-up (n = 4)
Patient understands the role of the pharmacist and can name that member on the team (yes), n (%)	21 (67.7)	16 (89.9)	4 (100)
Patient can swallow medications (yes), n (%)	29 (93.6)	18 (100)	4 (100)
Patient can identify all medications by names, n (%)			
All	22 (71)	10 (55.6)	2 (50)
Some	4 (12.9)	4 (22.2)	0
None	5 (16.1)	4 (22.2)	2 (50)
Patient can articulate the indication for medications, n (%)			
All	16 (51.6)	10 (55.6)	2 (50)
Some	4 (12.9)	1 (5.6)	0
None	11 (35.5)	7 (38.9)	2 (50)
Patient knows when to take doses of medication, n (%)			
All	26 (83.9)	15 (83.3)	4 (100)
Some	2 (6.5)	1 (5.6)	0 (0)
None	3 (9.7)	2 (11.1)	0 (0)
Patient can set up medications with supervision (yes), n (%)	21 (67.8)	12 (66.7)	3 (75)
Patient can competently set up their own medications without supervisor (yes), n (%)	18 (56.1)	12 (66.7)	3 (75)
Patient manages own supply of medication, parent or caregiver manages refills (yes), n (%)	12 (38.7)	8 (44.4)	2 (50)
Patient orders refills of all medications on monthly basis (yes), n (%)	7 (22.6)	4 (22.2)	0 (0)
Patient can articulate how to proceed when encountering pharmacy problems (yes), n (%)	9 (29)	5 (27.8)	2 (50)

Conclusions

- Pharmacist involvement in a multidisciplinary pSLE clinic can improve patient understanding of non-pharmacologic and pharmacological therapies, improve patient adherence, optimize weight-based dosing. and support patients as they take on additional medication management tasks.

Limitations

- Overall small sample size of patients seen in clinic
- Not all patients who completed four quarterly visits within the 12-month study period
- Incomplete data on monthly prescription copay amount for patients who filled at outside pharmacy prior to initial visit
- Lack of a registered dietitian in clinic may have influenced both number and type of questions directed at the pharmacist, such as questions about vitamins, calcium supplements, and diet.
- Variability in the number of pharmacy staff participating in a visit due to presence of pharmacy learners rotating through the practice setting.

References

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Disclosures