

Development and Implementation of Collaborative Practice Agreements in an Integrated Health-System Specialty Pharmacy: A Quantitative Analysis

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Purpose

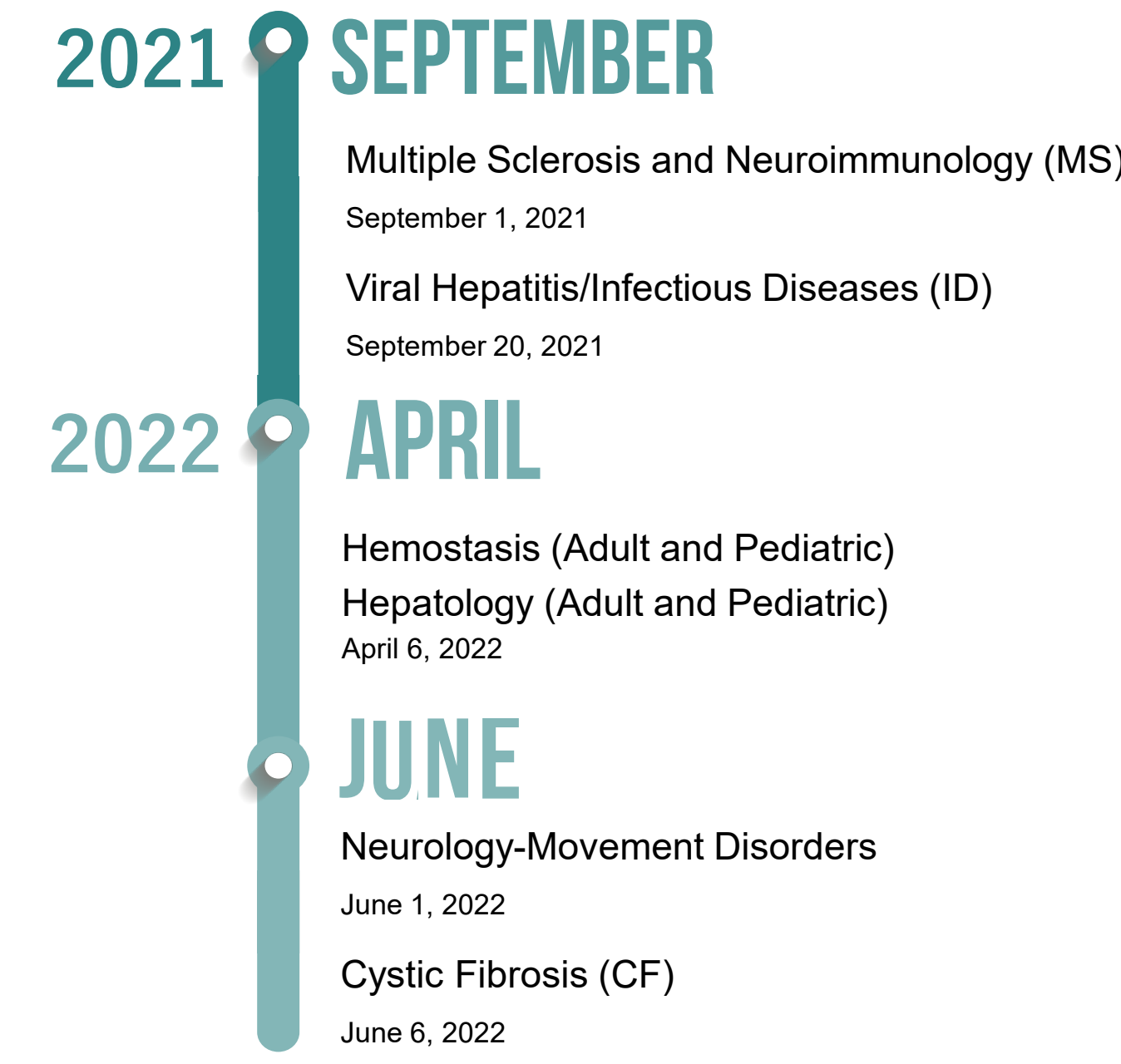
CPAs within IHSSPs may improve specialty medication management and decrease administrative burden for clinic staff. The purpose of this study was to evaluate the impact of CPA implementation on rate of represcriptions to determine if CPAs decreased the administrative burden in an IHSSP setting.

Study Design, Setting, and Population

Single-center, retrospective cohort analysis of data collected from an electronic medical record.

Patients were included in the analysis if they had a specialty medication generated in a VSP clinic where a CPA was implemented (Figure 1).

Figure 1. CPA Implementation Timeline



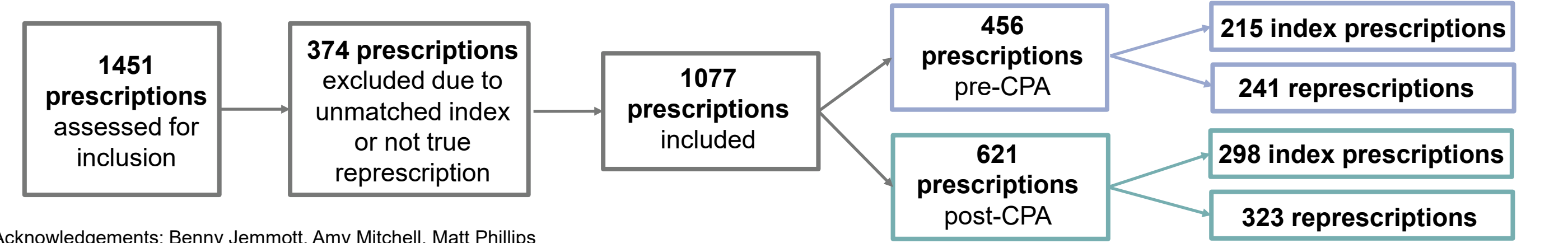
Study Methods

Primary Outcome
 Rate of represcriptions (defined as another prescription generated from the same clinic for the same patient for any specialty medication within 14 days following the index specialty medication) by any health care provider.

Secondary Outcomes
 1) Number and type of prescriptions generated by clinical pharmacists
 2) Reasons for represcribing

Data Analysis
 Data were collected 6 months before and after the index date (defined as the date the CPA went live in each clinic). The Pearson's Chi-squared test was used for comparison of re prescription rates pre- and post-CPA implementation.

Figure 2. Prescription Sample Attrition



Conclusion

- A reduction in the number of represcriptions was not observed in the first 6 months post-CPA implementation.
- Directly after implementation, clinic staff and pharmacists are identifying workflow processes that work best for their clinics, evidenced by the second highest reason for represcriptions post-CPA being internal miscommunication.
- Additional data is needed to assess the long-term impact of CPAs on the rate represcriptions in IHSSP clinics.

Results

Table 1. Patient Demographics (n=457)

Characteristics	Pre-CPA n=178; n (%)	Post-CPA n=253; n (%)	Both n=26; n (%)
Age (at re prescription), median (IQR)	47 (34 – 59)	48 (34 – 59)	45 (37 – 58)
Gender, Female	94 (53)	129 (51)	9 (35)
Race, White	133 (75)	197 (78)	23 (89)
Clinic			
Cystic Fibrosis	32 (18)	31 (12)	3 (12)
Hemostasis – Adult and Pediatric	15 (8)	25 (10)	2 (8)
Hepatology – Adult	16 (9)	31 (12)	1 (4)
Hepatology – Pediatric	0 (0)	2 (1)	0 (0)
Infectious Diseases	19 (11)	14 (6)	4 (15)
Movement Disorders	36 (20)	49 (19)	2 (8)
Multiple Sclerosis	60 (34)	101 (40)	14 (54)

Patients listed have at least 1 index medication with a re prescription. Pre-CPA = 204 patients with 215 index prescriptions and post-CPA = 279 patients with 298 index prescriptions

Fig 5. Total Prescriptions Generated by Pharmacist Post-CPA

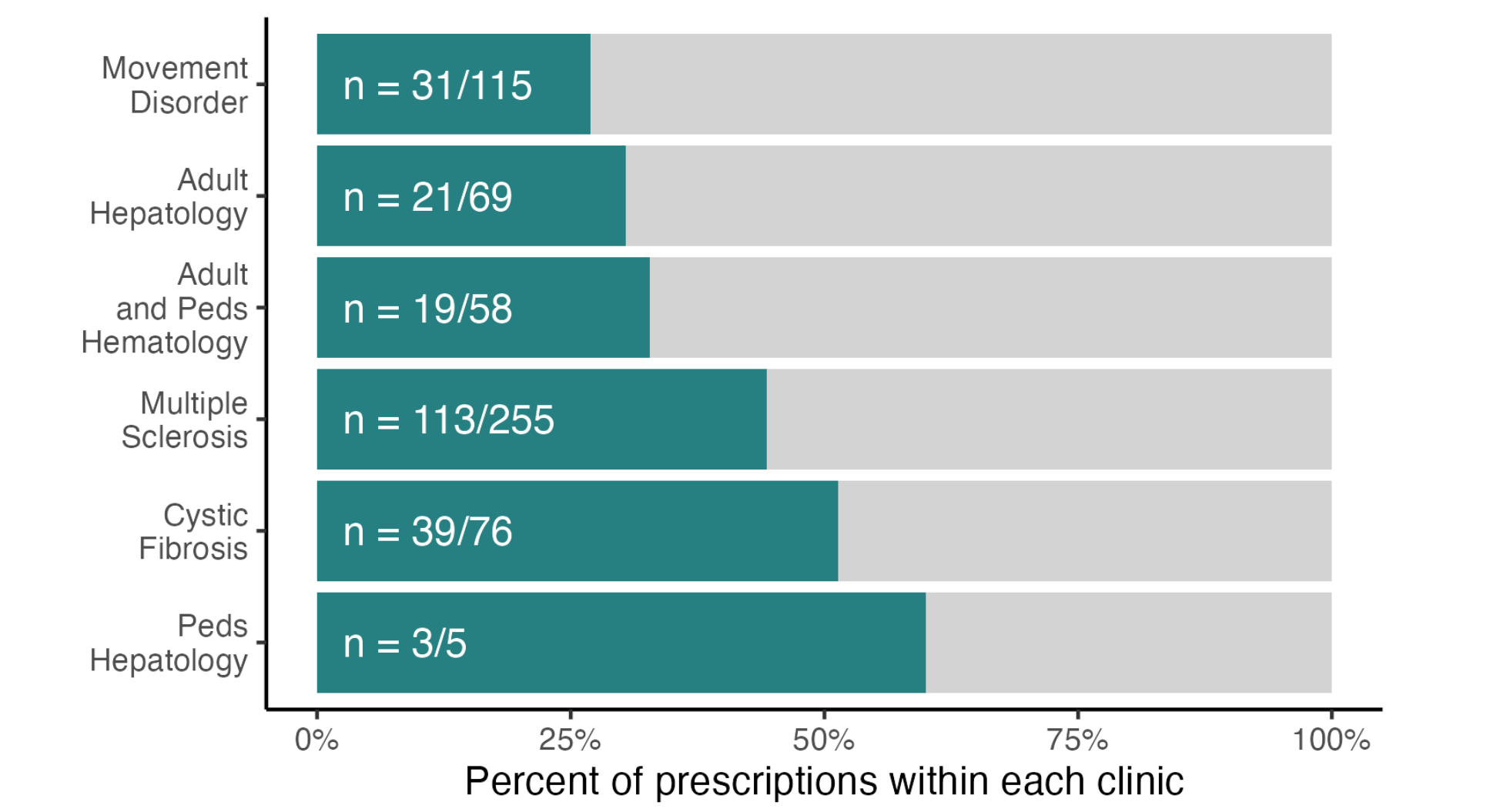


Fig 3. Represcription Rate

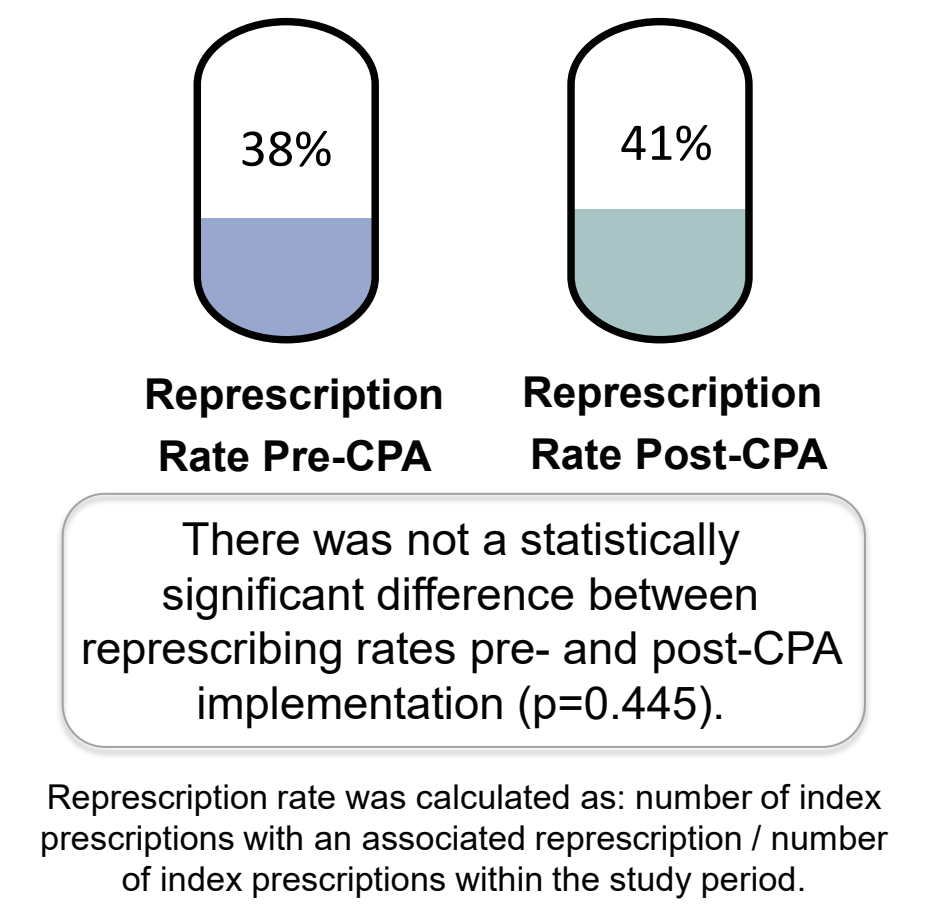


Fig 4. Pharmacist Prescriptions



Fig 6. Most Common Reasons for Represcribing

Represcribing Reason	Pre-CPA (n=241)	Post-CPA (n=323)
Modification of destination pharmacy	44%	42%
Other	6%	10%
Small supply followed by full supply after appointment/lab	5%	10%
Duplicate refill request sent by external pharmacy	7%	7%
Clarification for quantity written and refills authorized	5%	6%
Clarification for unclear or incorrect directions	6%	5%
Drug restrictions (payor)	7%	3%
Prior approval process	3%	5%
Patient assistance program	3%	3%
Clarification for dosing	2%	4%

Other reasons for re prescribing:
 • Use of samples
 • Internal miscommunication
 • Duplicate order sent

Multiple reasons could be identified for each re prescription