

Background

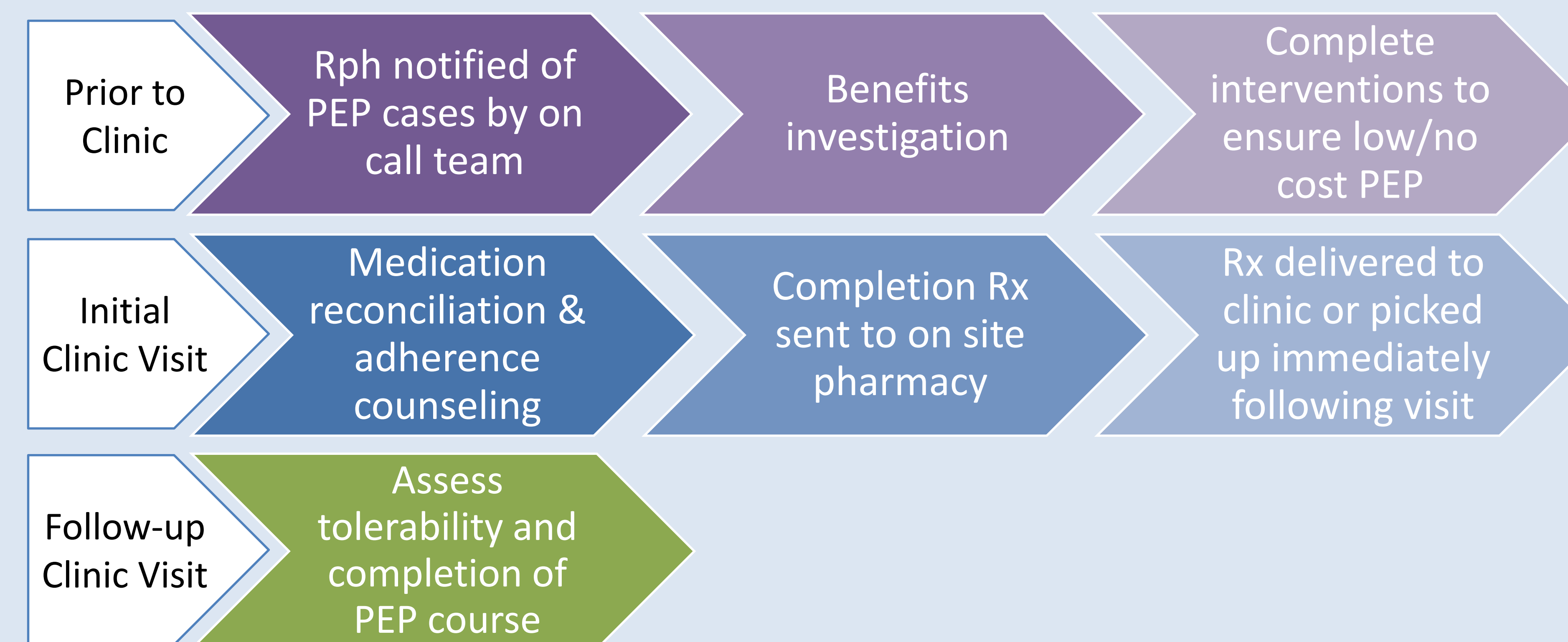
- Adherence to full non-occupational post-exposure prophylaxis (nPEP) regimen and follow up visits is poor in published literature
 - A review of individuals experiencing sexual assault reported only 40.3% completing 28 day course.
 - Attrition between ED and clinic for individuals in Boston seeking nPEP was 45.6% with only 23.9% of individuals having documented completion of 28 day course
- One important barrier to medication adherence is timely access to medications.
 - 4 week course of nPEP costs near \$4,000 without insurance and can remain unaffordable with insurance due to out of pocket costs
 - Many retail pharmacies do not keep antiretrovirals readily stocked
 - Some insurances require prior authorizations and/or restrict medications to be filled at mail-order pharmacies
- Previous PEP practice at this academic medical center includes:
 - ED consulting on-call ID pager for all potential PEP cases
 - 5 day starter kit provided to patient in ED
 - Patient scheduled for ID clinic follow up within 1-2 business days
 - If PEP is continued, script for remaining 23 days sent to pharmacy of patients choice
 - Follow up appointment and testing with ID clinic at 6 weeks and 3 months from exposure
- The aim of this pilot program was to determine the impact of pharmacist involvement on nPEP medication access and adherence.

Methods

- Single-center, retrospective review of 6 month period of pharmacist involvement with standardized intervention (4/1/2019-9/30/2019)
 - Compared to 6 month period where there was no pharmacist presence in ID clinic (2/1/2018-7/31/2019)
 - Occupational PEP (oPEP) cases were excluded
- Outcomes
 - Cost of nPEP regimen to patient
 - Documented completion of nPEP course
 - Attendance at initial ID clinic appointment
 - Medication access related interventions completed by pharmacist
- Descriptive statistics were used for analysis

Methods

Pharmacist Intervention Workflow



Results

Table 1: Baseline Demographics

	Pre Rph (n=16)	Post Rph (n= 27)
Mean Age – yr (+/- SD)	29.5 +/- 11.0	29.7 +/- 9.6
Exposure risk		
Consensual sex – no. (%)	7 (44)	12 (44)
Needle stick – no. (%)	3 (19)	3 (11)
Sexual assault – no. (%)	6 (38)	11 (41)
Other* – no. (%)	0 (0)	1 (4)
Male – no. (%)	9 (56)	16 (59)
Ethnicity		
Black – no. (%)	4 (25)	7 (26)
White – no. (%)	10 (63)	12 (44)
Latino/Hispanic – no. (%)	1 (6)	5 (19)
Asian/pacific islander – no. (%)	1 (6)	2 (7)
Native American – no. (%)	0 (0)	1 (4)
Regimen		
TDF/FTC + DTG – no. (%)	16 (100)	27 (100)
TDF/FTC + RAL – no. (%)	1** (6)	0

*human bite
 **1 patient switched from DTG to RAL during treatment

Figure 1: Pre Rph PEP Flow Chart

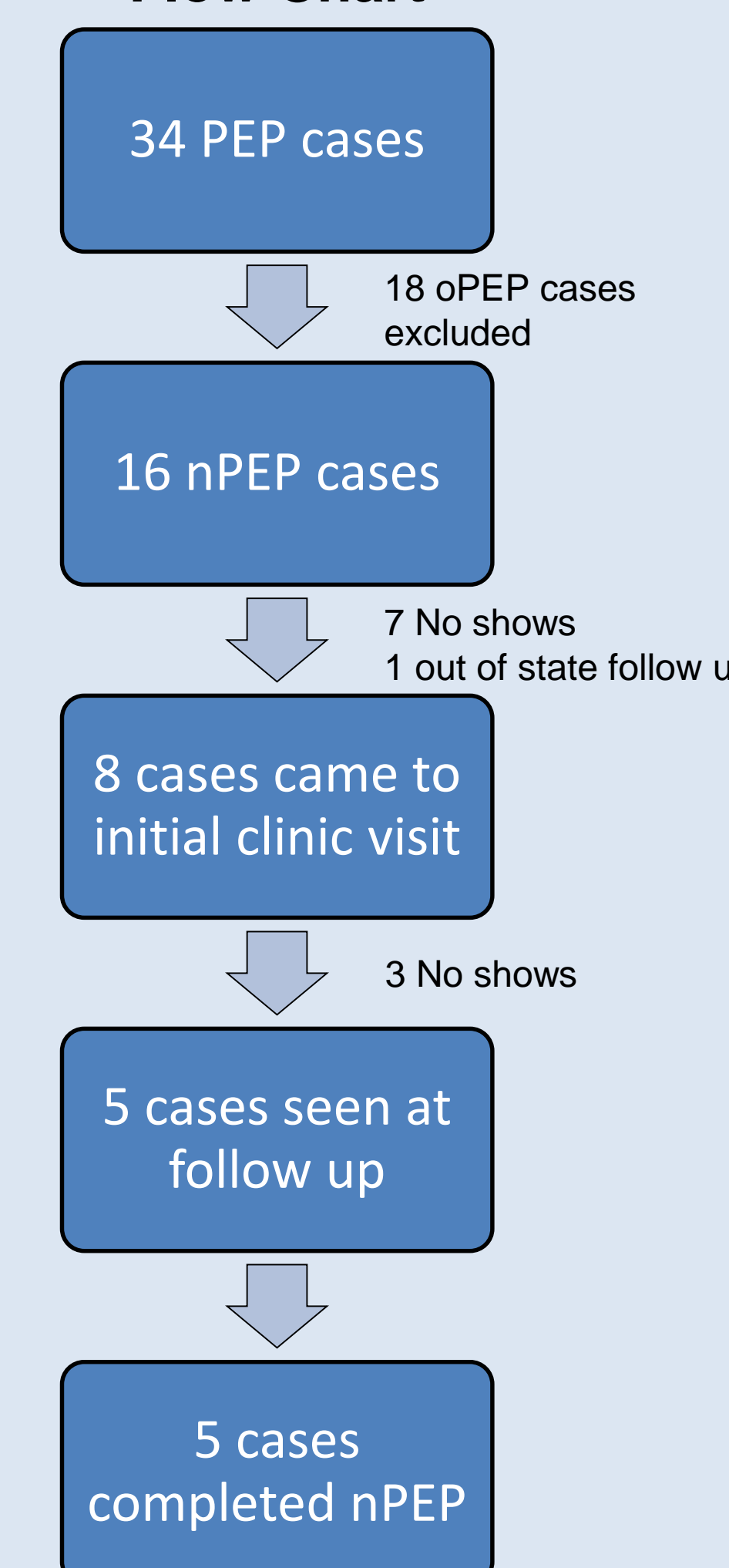
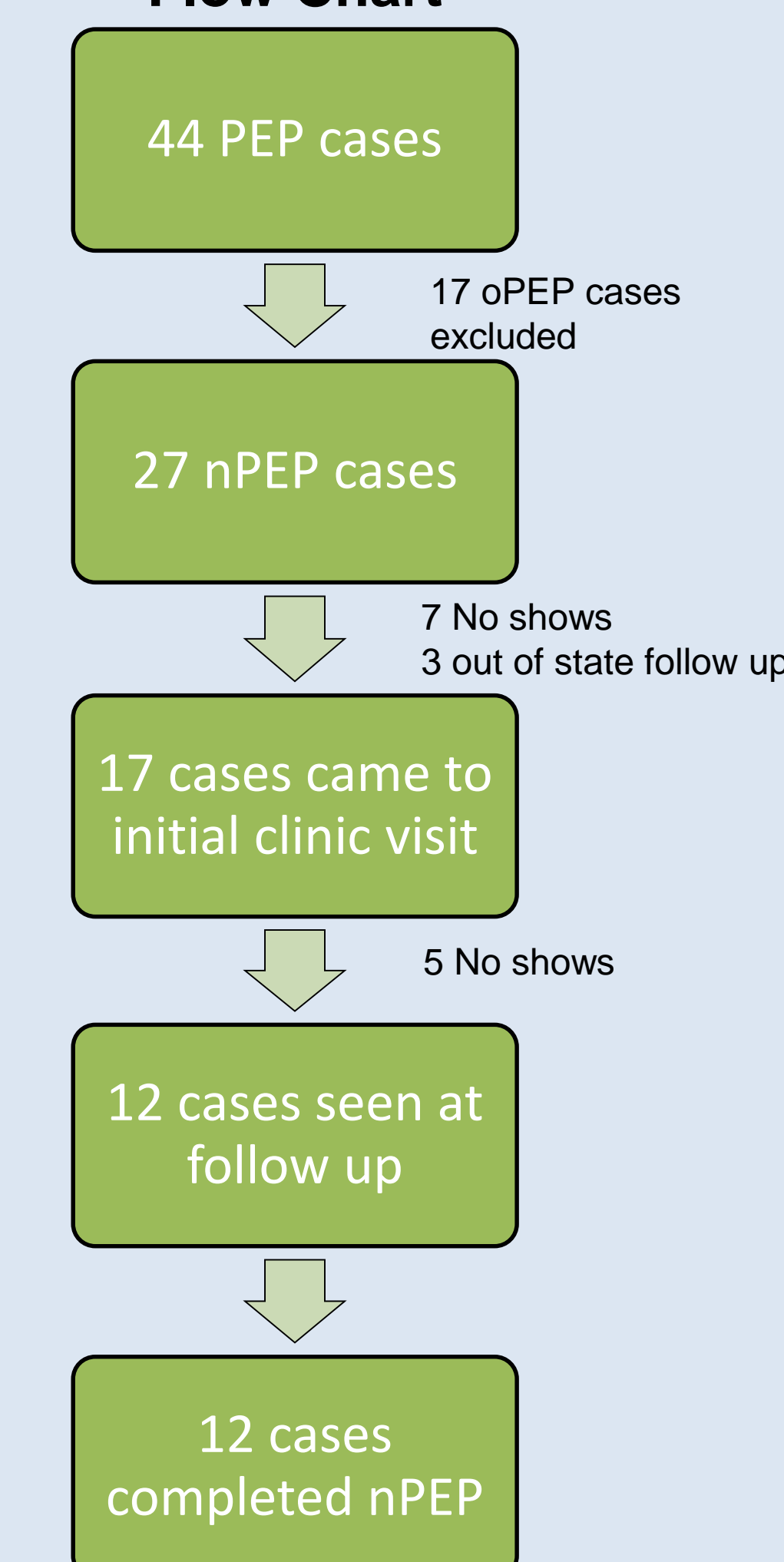


Figure 2: Post Rph PEP Flow Chart



Results

Table 2: Outcomes

	Pre-Rph (n=16)	Post Rph (n= 27)
Came to initial clinic visit	8 (50)	17 (63)
Pharmacist Interventions provided		
Benefits investigation – no. (%)	N/A	25 (93)
Adherence Counseling – no. (%)	N/A	15 (56)
Insurance override* – no. (%)	N/A	4 (15)
Copay card – no. (%)	N/A	9 (33)
Patient assistance program enrollment – no. (%)	N/A	0 (0)
Picked up completion Rx	8 (50)	18 (67)
Documented completion of nPEP course – no. (%)	5 (31)	12 (44)
Mean final cost to patient - \$ (+/-SD)	475 +/- 1,232	2.10 +/- 3.25
Total cost savings - \$		2417.97
Mean savings per pt - \$ (+/- SD)		142.23 +/- 350.65

*1 lost med, 2 specialty overrides, 1 over cost

- 100% of patients that came to initial clinic visit with pharmacist involvement picked up Rx same day from on site pharmacy compared to 63% prior to pharmacist involvement
 - One patient that filled at outside pharmacy had delay between starter pack and subsequent Rx with 1 day of missed medications
 - No cases of gaps in medication with patients with pharmacist intervention

Conclusions

- Pharmacist involvement was associated with substantial cost savings for nPEP patients
- Higher rates of patients picked up nPEP Rx's, attended clinic visits, and reported nPEP completion when pharmacist intervention was provided

Discussion

- This pilot project identified a potential benefit from consistent pharmacist involvement in nPEP workflow
- Higher capture rate of prescriptions at in house pharmacy may generate greater revenue for medical center and allow for easier access to medications for patients
- Limitations: small sample size, single center, power to ensure statistical significance was not calculated
- Rates of documented nPEP completion from initial prescribing remain low
 - Next steps to identify ways to improve adherence to Rx and follow up visits

References

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