

Strengthening Care Continuity to Primary Care Providers at Discharge from the Emergency Department

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Background

- 20-40% of emergency department (ED) visits are unnecessary, leading to long wait times, overstretched resources, higher healthcare costs, and disjointed care^{2, 7}
- Established relationships with primary care providers (PCPs) are associated with lower morbidity and mortality rates, and fewer urgent healthcare encounters due to proper disease management and routine preventative care^{3, 4}
- Patients are advised to follow-up with PCP after ED discharge, but many report difficulty obtaining appointment^{5, 6}
- Literature shows patients who are given a follow-up appointment prior to leaving the ED are highly satisfied with their experience, are likely to attend the appointment, and often continue to engage in primary care going forward¹

Purpose

Schedule rapid follow-up appointments during ED discharge process to help link patients to PCPs with in-house clinic and decrease burden on ED

Aims

1. Increase number of scheduled rapid follow-up appointments with in-house primary care clinic at discharge from the ED
2. 50% of patients given a rapid follow-up appointment will attend that scheduled appointment
3. Decrease in number of patients given a rapid follow-up appointment who return to the ED within 7 days of initial discharge from the ED

Methods

Design: Quality improvement (QI) project

Sample: Convenience sample of all patients age 18+ presenting to adult ED between March 24 – April 13, 2021

- Eligible if established with PCP at in-house clinic on admission to ED

Intervention: Rapid follow-up appointment within 2-7 days of discharge scheduled by ED nurses during discharge process using application within Epic

Outcome measures: Collected weekly through Epic report

- Number of patient visits
- Number of eligible patients
- Number of appointments offered
- Number of appointments scheduled
- Number of appointments attended
- Number of patients returning to the ED within 7 days of initial discharge

Results

Table 1: Patient Visit Characteristics at Baseline vs. Intervention Period

	Baseline (11/01/2019 – 01/31/2020)	Intervention (03/23/2021 – 04/13/2021)
Adult Patient Visits		
Total	12,243	2,426
GBMC Health Partners	3,359 (27.4%)	506 (20.9%)
FCA Practice	584 (4.8%)	76 (3.1%)
FCA Adult Patient Encounter Number	Mean = 1.17, Median = 1	Mean = 1.13, Median = 1
One	504 (86.3%)	67 (88.2%)
Two	66 (11.3%)	8 (10.5%)
Three	12 (2.0%)	1 (1.3%)
Four	1 (0.2%)	0 (0.0%)
Five	1 (0.2%)	0 (0.0%)
FCA Adult Patient Visit Type		
Initial		
Return within 7 days	528 (90.4%)	70 (92.1%)
Return within 30 days	21 (3.6%)	6 (7.9%)
	35 (6.0%)	N/A

Table 2: Outcome Measures by Aim

	Yes	No	Chi Squared p-value
Aim One			
Patients eligible for follow-up	46 (1.9%)	2,380 (98.1%)	$p = 0.0000$
Appointments offered	11 (23.9%)	35 (76.1%)	$p = 0.0004$
Appointments scheduled	6 (13.0%)	40 (87.0%)	$p = 5.35 \times E^{-7}$
Aim Two			
Patients given an appointment	6 (13.0%)	40 (87.0%)	$p = 5.35 \times E^{-7}$
Patients attended appointment	5 (83.3%)	1 (16.7%)	$p = 0.1024$
Aim Three			
Patients given an appointment who return to the ED within 7 days	0 (0.0%)	6 (100.0%)	$p = 0.0143$
Patients not given an appointment who return to the ED within 7 days	145 (6.0%)	2,275 (94.0%)	$p = 0.0000$

Conclusions

- Less than half of eligible patients were offered a rapid follow-up appointment, and only 13% received an appointment
- 83% of patients who received an appointment attended
- Patients who received an appointment were less likely to return to the ED within 7 days of initial discharge
- **Recommendation:** Focus on retraining ED nurses and promoting adherence to initiative
- **Sustainability:** Charge nurses to continue reminders and encouragement at daily huddle; process added to Epic training sessions; new DNP student to continue and expand process
- **Limitations:** Shorter intervention period, baseline data not during same time frame as intervention period

References

1. Carmel, A. S., Steel, P., Tanouye, R., Novikov, A., Clark, S., Sinha, S., & Tung, J. (2017). Rapid primary care follow-up from the ED to reduce avoidable hospital admissions. *Western Journal of Emergency Medicine*, 18(5), 870-877. doi: 10.5811/westjem.2017.5.33593
2. Coster, J. E., Turner, J. K., Bradbury, D., & Cantrell, A. (2017). Why do people choose emergency and urgent care services? A rapid review utilizing a systematic literature search and narrative synthesis. *Academic Emergency Medicine*, 24(9), 1137-1149. doi: 10.1111/acem.13220
3. Glass, D. P., Kanter, M. H., Jacobsen, S. J., & Minardi, P. M. (2017). The impact of improving access to primary care. *Journal of Evaluation in Clinical Practice*, 23(6), 1451-1458. doi: 10.1111/jep.12821
4. Petterson, S., McNellis, R., Klink, K., Meyers, D., & Bazemore, A. (2018). *The state of primary care in the United States: A chartbook of facts and statistics*. Retrieved from www.graham-center.org/content/dam/rgc/documents/publications-reports/reports/PrimaryCareChartbook.pdf
5. Schenahls, E., Haidet, P., & Kass, L. E. (2019). Barriers to compliance with emergency department discharge instructions: Lessons learned from patients' perspectives. *Internal and Emergency Medicine*, 14(1), 133-128. doi: 10.1007/s11739-018-1943-6
6. Sharp, B., Singal, B., Pulia, M., Fowler, J., & Simmons, S. (2015). You've got mail...and need follow-up: The effect and patient perception of e-mail follow-up reminders after emergency department discharge. *Academic Emergency Medicine*, 22(1), 47-53. doi: 10.1111/acem.12564
7. van den Berg, M. J., van Loenen, T., & Westert, G. P. (2016). Accessible and continuous primary care may help reduce rates of emergency department use. An international survey in 34 countries. *Family Practice*, 33(1), 42-50. doi: 10.1093/fampra/cmv082