



A scalable, automated warm handoff from the emergency department to community sites offering continued medication for opioid use disorder: Lessons learned from the EMBED trial stakeholders



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INTRODUCTION

- BUP initiation in the ED followed by referral for ongoing medication for opioid use disorder (MOUD) is twice as effective as referral alone in retaining patients with opioid use disorder (OUD) in formal addiction treatment [D'Onofrio et al., *JAMA* 2015]

OBJECTIVE

- To perform a needs assessment of stakeholders involved in the ED to MOUD community site referral process and to survey local community MOUD sites to help streamline the ED referral process

METHODS

- A needs assessment of the multiple, key stakeholders in the ED to MOUD referral process was performed
- 19 MOUD sites were surveyed to better characterize information needs when receiving an ED referral

MOUD SITES SURVEY RESULTS

- 12/13 (92.3%) provided BUP, 5/13 (38.5%) methadone
- 8/13 (61.54%) preferred fax as method of referral
- 8/13 (61.5%) required multiple patient data elements
- 7/13 (53.8%) able to accept patients within 3 days

CONCLUSION

- IT solutions must address discordant priorities of ED (rapid and flexible referral process) and community sites offering MOUD (referrals minimize variability and overbooking).
- To prevent drop-out in the referral cascade, need for increased availability and accessibility to MOUD on demand with protected communication channels between EDs and community providers of MOUD.

A rapid, flexible, automated referral system is needed for a warm handoff of patients with opioid use disorder from the emergency department to community sites offering continued medication for opioid use.



EMBED:
PRAGMATIC TRIAL OF USER-CENTERED CLINICAL DECISION
SUPPORT TO IMPLEMENT EMERGENCY DEPARTMENT-INITIATED
BUPRENORPHINE FOR OPIOID USE DISORDER

TABLE. STAKEHOLDER NEEDS ASSESSMENT RESULTS

Role	Needs	Solutions
EMERGENCY DEPARTMENT CLINICIANS AND STAFF		
<i>Attending physicians</i>	Automate referral	Referral automated and implemented into EMBED CDS
<i>Resident physicians</i>	Minimize disruption to workflow	
<i>ED addiction counselors</i>	Best match of MOUD site to patient's needs	Include more than one option for referral site selection
CLINICIANS AND STAFF AT THE COMMUNITY MOUD SITES		
<i>Attending physician</i>	Minimize disruption to workflow	Set a limit on how many patients can be overbooked per week by our referral system to ensure a balance between quick referral and manageable workload
<i>Front desk staff</i>	Efficiency	Create a standardized flow of how patients will be referred and booked for every case in order to minimize variability in the process
<i>Scheduling staff</i>	Minimize disruption to workflow	Work with IT staff to ensure the system has multiple modes of sending out referrals and tailor each MOUD site to its specific preference
INVESTIGATIVE TEAM		
<i>Principal Investigator</i>	Scalability	Referral can be sent out via multiple channels, e.g., e-mail, EHR message, or fax. Collect survey data from MOUD sites to determine their preferences.
	Quality Assurance	Build referral network with the capability to collect aggregate data on % of referrals who were scheduled at MOUD sites, those who attended and those who were started on medication
<i>Biostatistician</i>	Collect information on referral effectiveness	For MOUD sites with EHR linkage, we created an automated data pull that can extract referral usage metrics. For non-EHR linked sites, agree with administrative staff to send us usage data
HEALTH SYSTEM IT STAFF		
<i>Local EHR programmers</i>	Specificity of the automation process	Acquire an exact list of patient information that MOUD sites need in order to make a very specific request to IT to generate an automated referral message
MEDICAL ETHICS EXPERTS		
<i>Our institution's IRB</i>	Ensuring patient privacy	Worked with IT to encrypt automated email referrals sent to MOUD sites Fax is considered HIPAA compliant
<i>NIH Ethics Core</i>	Patient consent and collecting data	Since collecting patient consent for measuring referral efficiency would be too cumbersome, we collected data from MOUD sites as aggregate, de-identified data for QA/QI purposes, which does not require consent.