San Francisco Sobering Center: Collaborative Solutions for ED Diversion

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Captain
EMS

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Collaborative Solutions to ED Diversion: Partnerships between SFFD, SFHOT and Sobering

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CLEMENT YEH, MD
Background

- Prior to development of the Sobering Center (in 2003), nearly one-third of all ambulance transports to the ED were for homeless individuals intoxicated on alcohol. (Lelchuk, I. (2005). S.F. tries to aid homeless alcoholics. San Francisco Chronicle)
- Chronic public inebriates make up more than 20 percent of all ED visits with rates five to 10 times the general population rate. (Kushel, M. et al. 2002. Emergency Department Use Among the Homeless and Marginally Housed: Results From a Community-Based Study)
- EMS “superusers” encounters with EMS system are associated with alcohol use. (Hall, et all, EMS-STARS, 2014)
- In 2016, 25% of all Superuser encounters related to ETOH. (SFFD Data 2016)
- $18 Million unreimbursed costs annually in SF related to alcohol. (Lewin Group Study, 2010)

Who are we?

- San Francisco Sobering Center
- San Francisco Fire Department
- San Francisco Homeless Outreach Team
San Francisco Sobering Center

- Program of the SF Department of Public Health (SF DPH), co-located with Medical Respite.
- Started in 2003 in conjunction with Hospital Council.
- Mission: The mission of the San Francisco Sobering Center is to provide safe, short-term sobering and care coordination for acutely intoxicated adults in San Francisco.
- Goals: 1) Reduce inappropriate use of emergency department resources. 2) Decrease the inappropriate use of ambulance transports for acutely intoxicated individuals. 3) Increase care coordination for chronic inebriates.
- 24/7 Nurse-led program
- 12 beds (8 male, 4 female)
- Two on-site social workers (Jan 2016) and Part-time NP in collaboration with UCSF (June 2017)

Sobering Center: Encounters and Clients

- Referral sources include: EMS, EDs, Police, Case Management, Clinics, walk-in
- Total encounters since 2003 = over 56,000 at this point
- Total unduplicated clients = over 15,000 individuals
- Total admissions from EMS/ambulance directly (avoiding the ED altogether) = over 15,000 encounters
- 1% of total High Utilizer Clients make up 29% of total encounters.
- 20 clients receiving Intensive Case Management through on-site social workers
San Francisco Fire Department (SFFD)

- 64,000 + transports in 2017
- “Superusers” – defined as 10 or more EMS contacts in a year.
- 17.22% Superuser transports in 2017
- Superusers have a high correlation with ETOH use.
- Three SFFD Paramedic Captains are part of the EMS-6 team.

<table>
<thead>
<tr>
<th></th>
<th>2014*</th>
<th>2015*</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Transports</td>
<td>50,531</td>
<td>57,597</td>
<td>61,168</td>
<td>64,452</td>
</tr>
<tr>
<td>Transports of Super Users</td>
<td>7,064</td>
<td>8,217</td>
<td>8,144</td>
<td>11,097</td>
</tr>
<tr>
<td>Super Users as a % of Transports</td>
<td>13.98%</td>
<td>14.27%</td>
<td>13.31%</td>
<td>17.22%</td>
</tr>
</tbody>
</table>

EMS-6 TEAM

- Collaboration between San Francisco Fire Department and Homeless Outreach Team
- Started in January 2016 to provide linkage to non-emergent services for frequent EMS users.
- SFFD paramedic captains work in conjunction with SFHOT outreach workers.
- EMS Captain: Paramedic Supervisor Role
- SF DPH HOT Outreach Specialist: Care Coordination Role
- Dispatched to 911 incidents
- Special called by other EMS Resources, clinics, case managers
San Francisco Fire Department (SFFD)

- SFFD paramedic captains: 3 FTE
- 1 SFFD Paramedic captain and 1 SFHOT outreach worker each shift.
- 12-hour shifts, 7 days/wk
- In March 2018, addition of Mon-Thurs shift, 6am – 4pm
- Target: High utilizers of EMS system
- Criteria: >4 calls/month or >2 calls/day or “Super Users” >10 calls/year

SFHOT Outreach Specialists

- Ride with EMS-6 Captain for 10 hours. Outreach and care coordination in real-time, secure shelter beds.
- Frequently flex schedule to come in early to transport and escort clients to DMV, appointments, substance use intakes, benefits, housing appts.
- Interim case manager for multiple clients.
- Work with Sobering Center and Medical detox staff on a daily basis.
- Two SFHOT Outreach Specialists (2 FTE) are part of the EMS-6 team.
EMS-6: Encounters and Clients

- Complex interactions and lengthy encounters.
- Mobile team responds to 911 incidents involving high utilizers and super users.
- SFHOT outreach specialist component provides temporary care coordination and linkage to services.

<table>
<thead>
<tr>
<th>Description</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Number of EMS-6 Encounters in 2016</td>
<td>2244</td>
<td>2711</td>
</tr>
<tr>
<td>Total Number of EMS-6 Encounters in 2017</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily Average # of Encounters</td>
<td>7 encounters/watch</td>
<td></td>
</tr>
<tr>
<td>Total Clients to Date</td>
<td>734</td>
<td></td>
</tr>
<tr>
<td>Current Active Clients</td>
<td>304</td>
<td></td>
</tr>
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</table>

System Utilization Trends

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>10/30/17-10/3018***</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unique 911 users all</td>
<td>42,250</td>
<td>46,898</td>
<td>50,025</td>
<td>47,281</td>
<td>42,452</td>
</tr>
<tr>
<td>Unique frequent utilizer all</td>
<td>264</td>
<td>312</td>
<td>452</td>
<td>515</td>
<td>1,083</td>
</tr>
<tr>
<td>% that are frequent utilizers</td>
<td>0.62%</td>
<td>0.67%</td>
<td>0.90%</td>
<td>1.09%</td>
<td>2.55%</td>
</tr>
</tbody>
</table>

<table>
<thead>
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<th>Year</th>
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<th>2017</th>
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<td>911 transports all</td>
<td>50,531</td>
<td>57,597</td>
<td>61,168</td>
<td>64,452</td>
<td>65,229</td>
</tr>
<tr>
<td>911 transports attributed to frequent utilizers all</td>
<td>7,064</td>
<td>8,217</td>
<td>8,144</td>
<td>11,097</td>
<td>12,881</td>
</tr>
<tr>
<td>frequent utilizers as % of transports</td>
<td>13.98%</td>
<td>14.27%</td>
<td>13.31%</td>
<td>17.22%</td>
<td>19.75%</td>
</tr>
</tbody>
</table>

Data Compiled from SFFD Sources Only (No Private Ambulances)
*Limited data. Frequent utilizer definition >9/preceding 365 days only
**Frequent utilizer definition >9/preceding 365 days only
***Frequent utilizer definition all three criteria. Data compiled with matching algorithm
Collaboration

- Data shows alcohol use highly correlated with EMS encounters.
- Pre-existing relationship between Sobering and SFHOT.
- Collaboration began Jan 2016. Includes Sobering RNs and LCSWs, SFFD Paramedics and SFHOT Outreach Specialists.
- Three teams (Sobering Center, EMS-6 and SFHOT) incorporate basic medical services, substance use services, intensive case management and street outreach.
- Teams remain in daily contact with each other and mutual clients.
- Daily communication, direct implementation of care plans, weekly small team meetings and participation in bi-monthly city meetings.
- 15-20 clients (Superusers, HUMS) engaged in collaborative care.
- **KEY:** Incorporating EMS into plans of care for disconnected clients.

Paramedic Attitudes Toward Sobering Centers

- Survey of 297 SF Paramedics
- Frustration with challenging patient population
- Moderate concern for bad patient outcome from transport decision (36% agree)
- NOT concern for clinical care at sobering center (70% disagree)
- NOT lack of interest in patient population (64% disagree)
EMS “Must Haves”
- Clear protocols and policies (66% agree)
- Support from EMS agency (74% agree)

Paramedics: Important Factors
- Belief that sobering center has additional resources beyond ED (60% agree)
- Belief that patient outcome will be improved (63% agree)
- Belief that sobering center is a safe place (58% agree)
Safety of EMS Triage to Sobering?

- 2003-2017: >50,000 encounters, 12,500+ individuals
- Analyzed SF Sobering Center July 2013 – June 2016
- 10,980 total encounters
- 4,045 (37%) triaged by EMS
- 4.2% secondary transport to ED
- Most common reasons for secondary transfer: tachycardia, alcohol withdrawal

Smith-Bernardin SM, Kennel M, Glenn M, Yeh C. EMS Can Safely Transport Patients to a Sobering Center as an Alternate Destination. Ann Emer Med. October 2017. 70:4 (S92)

Case Study #1

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>911 Contacts</td>
<td>28</td>
<td>0</td>
</tr>
<tr>
<td>EMS-6 Contacts</td>
<td>57</td>
<td>0</td>
</tr>
<tr>
<td>Sobering Center Encounters</td>
<td>22</td>
<td>0</td>
</tr>
</tbody>
</table>

- PMH: Alcohol Use Disorder, Mental Health Diagnosis, Hx trauma
- Connection to Sobering SW and EMS-6
- Access to detox, connection to mental health services and medication
- Now reunited with family, living outside of CA.
Case Study #2

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018 (5/22)</th>
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</thead>
<tbody>
<tr>
<td>911 Contacts</td>
<td>86</td>
<td>14</td>
<td>5</td>
</tr>
<tr>
<td>EMS-6 Contacts</td>
<td>63</td>
<td>91</td>
<td>24</td>
</tr>
<tr>
<td>Sobering Center Encounters</td>
<td>70</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>

- Sobering services, case management, and detox
- No treatment was program available after detox, relapsed
- EMS-6 found a program suitable for him and sobering & HOT setup the necessary appointments for benefits. Sobering submitted housing application.
- Coordinated to have individual readmitted to medical detox and treatment program.
- Supportive housing
- Has relapsed several times, but has wrap-around care to be able to assist him. Remains connected to Sobering SW and EMS-6.
- Has remained mostly out of the 911/EMS system since August 2016.
- Utilizes Sobering when feels unsafe in housing or worried about harm to self. (EMS-6 has assisted with 5150's from Sobering)

Case Study #3

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>911 Contacts</td>
<td>38 (June – Dec only)</td>
<td>26</td>
<td>8</td>
</tr>
<tr>
<td>EMS-6 Contacts</td>
<td>32</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>Sobering Center Encounters</td>
<td>127 (June – Dec only)</td>
<td>113</td>
<td>6</td>
</tr>
</tbody>
</table>

- PMH: Alcohol Use Disorder, Chronic Venous Insufficiency, Hypertension
- Connected to Sobering SW and EMS-6 June 2016 after move to SF from out-of-county. Immediately hit all systems.
- Connection to primary care, wound care and med management done at Sobering, referred to Medical Respite following inpatient stay for sepsis, referral to supportive housing (move-in end of June 2017), connected to IHSS and paratransit.
- Initially, daily support from Sobering, SFHOT and EMS-6.
- Currently, daily support remains at Sobering, EMS-6 able to remove him from immediate case load but remains in contact for wrap-around support.
- Decreased drinking significantly despite no goal or intention to do so.
Case Study #4

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>911 Contacts</td>
<td>61</td>
<td>53</td>
<td>10</td>
</tr>
<tr>
<td>EMS-6 Contacts</td>
<td>53</td>
<td>41</td>
<td>11</td>
</tr>
<tr>
<td>Sobering Center Encounters</td>
<td>131</td>
<td>166</td>
<td>10</td>
</tr>
</tbody>
</table>

PMH: Alcohol Use Disorder, HCV, Gastritis, Seizure Disorder, Liver Mass
Connection to Sobering SW, EMS6, Primary Care, Medication management, Liver Clinic for Hep C, Medical Respite
Found to have liver mass through care with Liver Clinic
Admitted for voluntary inpatient detox prior to surgery
Respite stay following surgery; discharged to Oroville treatment program.
Had 3 months sobering prior to returning to SF; reconnection to family in Ohio

Case Study #5

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>911 Contacts</td>
<td>24</td>
<td>207</td>
<td>51</td>
</tr>
<tr>
<td>EMS-6 Contacts</td>
<td>4</td>
<td>143</td>
<td>90</td>
</tr>
<tr>
<td>Sobering Center Encounters</td>
<td>1</td>
<td>100</td>
<td>50</td>
</tr>
</tbody>
</table>

PMH: Alcohol Use Disorder; no chronic conditions. Hx anxiety and difficult ETOH withdrawal.
Psych/social: Housed in recent years, unclear why lost housing.
Connected to Sobering social work in 2017 after team discussion.
Encouraged to walk-in to Sobering rather than call 911.
Referred to detox several times. Not able to tolerate past 3-5 days.
Currently at medical detox – receiving daily visits from social work and/or EMS-6. SFHOT Psych NP plans to assess clients mental health needs. Now connected to EDCM.
Plan: continue daily outreach from both Sobering and EMS-6 teams. CI awaiting DAH placement.
Successes

- Case Studies (1-5)
- Increase in connections to chronic care management, detoxification and other substance use services; move-ins to permanent supportive housing.
- Decrease in emergency services use.
- Relationships bridged between SFFD and DPH.
- Real-time collaboration between teams.
- Access to DPH Street Medicine Team.
- Multi-disciplinary
- Significant positive outcomes for some of the most disconnected clients.
- This model works because clients receive wrap-around services where they are most frequently seen (Ambulance and Sobering Center).

Limitations

- Midnight to 06:00 hours EMS6 not available.
- Limited transport capabilities (taking clients to appts, quick discharge from ED to Sobering, etc).
- Difficult access to treatment programs.
- Limited detox beds.
California State Community Paramedicine Pilot Project

- Increased the collaboration between EMS and Sobering.
- Accepted to California EMSA/OSHPD pilot project beginning of 2017.
- Sobering Center became official alternative destination for EMS drop-offs.
- 10 Community Paramedics trained.
- Part of state-wide effort to advance pre-hospital care.

Contact information:

- Megan Kennel, Sobering Center Coordinator: megan.kennel@sfdph.org
- Simon Pang, SFFD Paramedic Captain: simon.pang@sfgov.org
- Clement Yeh, SFFD Medical Director: clement.yeh@sfgov.org
Questions

Go to www.menti.com and use the code 28 26 94

Questions?

Waiting for questions

Once questions are accepted by the moderator, they will show up here so that you can answer them one by one.

Thank You

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