Challenges to opioid treatment providers after Hurricane Sandy
Patient and Provider Perspectives on Planning and Recovery

Harlan Matusow, Ellen Benoit, Andrew Rosenblum
National Development & Research Institutes, Inc.
AATOD 2016 Conference
October 29-November 2, 2016
Baltimore, MD

Funded: Assistant Secretary for Preparedness and Response (ASPR), U.S. Dept. of Health & Human Services. Grant # HITEP140014
Hurricane Sandy’s Impact on New York and New Jersey

- Flooded entire neighborhoods
- Shut down electricity
- Shut down transportation
- Displaced thousands
OTP Patients, a Vulnerable Population

Service interruptions caused by:

- Weather
- Natural and human-made disasters
- Terror
Risks Associated with Service Interruptions

- Relapse
- Withdrawal
- Reduced access to psychotropic medication
- Job Loss/Economic hardship
- Relationship challenges
- Emotional distress
Why we undertook the Study

- Previous research undertaken by our institute
- Documented challenges with continuity of care
- ASPR RFA
Goals

- To develop recommendations for OTPs in their recovery efforts from Hurricane Sandy and their planning for future emergencies.
Objectives

To obtain data from OTPs Directors, staff, and patients and persons who sought addiction treatment to learn how OTPs prepared for the impending hurricane, whether recovery efforts were successful, and what impact (and continuing impact) the hurricane has had. Methods include qualitative and quantitative measures.
Methodology

Participatory Action Research: An approach to research in communities that emphasizes participation and action.

- Collaboration
- Reflection
- Collective inquiry
- Experimentation
Methodology

Mixed methods

- Collecting, analyzing and integrating quantitative (e.g., experiments, surveys) and qualitative (e.g., focus groups, interviews) research.

- Used when this integration provides a better understanding of the research problem than either of each alone.

- Quantitative data: Closed-ended information such as rating scales, checklists. Statistical analysis.

- Qualitative data: Open-ended information such as interviews, focus groups and observations. Content analysis.
Multidisciplinary Advisory Panel

Using our MAP to get from point A to point B

- Treatment
- Government
- Research
- Advocacy
Sample Selection

Inclusion Criteria
How we selected OTPs
Staff
Patients
Data Collection

Continuity of Operations Plans (COOPs)

- TAP34
- Communication
- Transportation
- Technology
Patient/Out of treatment opioid users
Focus Groups

Prior to Sandy
- e.g. In treatment? Other meds? Take home privileges? Referral to another program?

During Sandy
- e.g. Able to get to your OTP? Communicate with your counselor? Find medication? Relapse?

After Sandy
- e.g. Was your program closed? For how long? Access guest services? Dosing, scheduling changes?
Staff Surveys

- **Under normal operating conditions**
  - e.g. # patients? Reporting schedules? Communication between appointments?

- **Directly before the storm**
  - e.g. # patients voicing concern? What preparations were made?

- **During the storm and in its immediate aftermath**
  - e.g. Clinic evacuate? Changes in service provision? Did your work hours change? Communication difficulties? Transportation challenges?
Director Interviews

- Emergency preparations
- Guest services
- Clinic disruption
- Fiscal issues
- Data issues
- Additional service disruption
- Crisis counseling
- Ongoing problems
- Recommendations
SOTA Interviews with NY, NJ

- Assess interagency cooperation before, during and after Sandy? At local, state and Federal level?
- What would you recommend to improve interagency cooperation?
- Technology?
- Reciprocal relationships among OTPs?
- Coordination with the rest of NJ Mental Health & Addiction Services? (e.g., the Disaster and Terrorism Branch? Emergency management team?)
Supplement

- Extended inquiry of State Opioid Treatment Authorities to include a nationwide sample.
- Disseminated recommendations nationwide via two live webinars.
- Evaluated recommendations nationwide via online survey.
- Nationwide sample selected based on disaster risk (likelihood of service disruption).
Challenges to opioid treatment programs after Hurricane Sandy: Results from the parent study

Funded: Assistant Secretary for Preparedness and Response (ASPR), U.S. Dept. of Health & Human Services. Grant # HITEP140014
Findings: Emergency Manuals; AKA Continuity of Operations Plans (COOPs)

- 9 participating OTPs
  - Coastal NY, NJ
- 7 emergency manuals
  - 1 destroyed with clinic
  - 1 not readily available
  - 3 no provisions for alerting patients
  - 5 did not address transportation
  - 3 did not address alternative local programs
Disaster Planning Handbook for Behavioral Health Treatment Programs

Technical Assistance Publication Series
TAP 34

SAMHSA
Sandy’s Impact on Service (N=9)

- 6 OTPs were able to remain open
- 1 OTP was destroyed
- 2 OTPs were closed temporarily – in one of those cases, for 7 months
- 5 of the open OTPs operated without electricity
- Only one program was able to continue at normal capacity

Problem Domains:
- Communication
- Transportation
- Technology
Patient Focus Groups (n=82)

Prior to the Storm
- 90% were in methadone treatment
- 7% received no take homes
- Patients at 2 sites reported receiving information about guest dosing

During the Storm and Immediate Aftermath of the Storm
- Takes homes often inadequate
- Many endured symptoms of withdrawal
- Guest dosing procedures were confusing
- Street drugs were ubiquitous
Methadone during storm’s aftermath (Patient reports)

- Could not obtain their medication 10%
- From index program 43%
- From a different (guest) program 23%
- Received take-home medication 34%
- Given sufficient take homes 23%
Self-medication challenge

“I [...] took some Subutex, which put me in instant withdrawal... because after I took one I wasn’t feeling any better, so I took two. And then, that was it. I wanted to die, and there was nothing I could do. The streets were flooded, and I couldn’t get opioids if I wanted to because nobody was around. They had to boat me from my house because my house got destroyed. So... I was sick, and my house got destroyed.”
Several patients said there were no discussions before the storm about what to do in an emergency.

Patients and staff had difficulty communicating after the storm.
[Site 7] called me. “...We got you down there, go down there ... before they have not enough room and you’re going to have to go somewhere else. We think that might be the closest for you.” - Tom

And the sad thing again, the sad thing again, we would call here and nobody would answer the phone. Then we had to hear about it from another client ... - Slim (site 5)
Communication recommendations

- Update OTP outgoing voice mail, web site & social media sites with current status information
- Update and confirm patient contact information monthly
- Notify local radio stations of schedule changes and make sure patients know where to listen
- Provide patients with their complete dosage information for use at alternate clinics
- Give patients emergency kits that include solar phone chargers and crank radios
Transportation: Connecting Patients to Medication

- Patients reported little information received about transportation.
- Staff: 43% of their caseload anxious about pending storm; 40% had persistent commuting challenges after the storm. 60% of staff reported post-storm commuting challenges.
- Storm significantly interfered with getting medication.
- “They called me in advance and I came here, they gave me one take home, and the second day... the buses weren’t running, and I didn’t get medicated, and I’m like, why, if it’s going to be so bad, couldn’t I get a couple more doses just in case?”
Transportation (II): Connecting Patients to Medication

- Many patients relied on automobiles and buses to get to clinics and were stranded by flooded roads and gas shortages.

- Some patients made great efforts to reach their index clinic but found no transportation. Used street drugs to stave off withdrawal.

  “[T]hey had already stopped bringing people over here, so ... I was looking ... to buy methadone on the streets... I mean it’s just, the pain overwhelmed me, of withdrawing from the methadone so I had no choice, but you know – well, I made the choice to actually buy heroin.”

- OTP staff/directors made significant efforts to deliver medication, “I had my take-homes... but then I was evacuated to [a different town] and they had us in the shelter in the school... we couldn’t get transportation to come to the clinic... [My Clinic Director] would come to the shelter and give us our methadone. [D]id that the whole period of time until we got power back on, ‘til they were able to start running the clinic.”
Transportation recommendations

- Address transportation risks in OTP emergency manuals
- Work with transportation companies to develop emergency plans and make sure patients are aware of them
- Help patients identify alternate clinics and alternate routes and modes of transportation (e.g., bicycle, foot) to home clinic
Technology

- Cell phone service was interrupted.
- Lack of electricity.
- ATMs were not working.
- Medication had to be measured & dispensed manually (by candlelight).
- Lacked access to electronic databases w/pts dosing information.
- One program lost all paper records in flooding.
Technology

#Sandy #tip: If/When power goes out, banks & ATMs may be offline for some time. Be sure to have cash on hand.
ready.gov
Guest medication challenges

Some of the clinics we couldn’t contact and verify because they were not operating. ... Usually the patient had a take-home bottle, and ... and it has your name on it, and has your dose on it ... and you have an ID; we accepted that. In a couple of rare cases we just accepted the patient’s word ... If anything, patients were underestimating ... their dose. And then we followed up ... because many of these people stayed here for weeks.
- Director (Site 4, NJ)
Technology recommendations

- Establish a national patient database so that OTP personnel can look up guest dosages
- Provide patients with dosage documentation as back up
- Provide OTPs with generators
- Convert paper records to electronic form
Survey of OTP staff (n=74)

Preparation for the storm
- Take-home doses
- Staff contact information
- OTP website
- Substitute treatment locations for patients
- Records were backed up
- Hard copies of patient records
- No storm preparations
Staff survey (cont’d)

Storm damage to clinics & service interruption

- Case management & counseling
- Patient intake
- Referred patients
- Dispensing medication

Effects on patients

- Problems obtaining medication
- Relapses
OTP Directors (N=9)

- Adequacy of existing OTP emergency plan
- Effectiveness of take-home dosing protocol
- Distinctions between high and low risk patients
- Governmental facilitation & barriers (inter-agency cooperation)
- Financial considerations
- Arrangements for disabled patients
- Guest dosing
- Technological benefits & hindrances
- Disruptions to additional services
Preparedness domains are interrelated

- Emergency plans must be comprehensive and reviewed frequently
- More liberal take-home policies and patient emergency kits can help patients shelter in place and may prevent relapse
- Data sharing and coordination with other OTPs can prevent disruption in dosing schedules
- Interagency cooperation at federal, state and local level
Highest rated recommendations

❖ Update voice mail and website/social media (D, P)
❖ Emergency generators; State funded initiative (D, S)
❖ Uniform COOP template (S)
❖ Emergency communication packet for patients (D, S)/Regularly review and sign emergency procedures (P)
❖ Provide emergency IDs to staff (S)
❖ OTPs cultivate guest relationships with other programs (P)

D=directors, S=staff, P=patients
OTP adoption of recommendations

❖ Study participants undertook changes in disaster planning.

❖ Patients in one focus group reported that staff began to regularly update their contact information.

❖ OTP staff more likely to take storm warnings seriously and to prepare accordingly.

❖ One director issued a directive to update patient cell phone information and enlisted services of a mass-texting service to send periodic text messages to his patients to verify contact information.
Conclusion (I)

❖ Provision and access to methadone treatment hampered by an array of communication, transportation, and technological challenges. There were also regulatory challenges (e.g. mobile van approval) (McClure et al., 2014).

❖ COOPs should provide a degree of specificity to enable providers and consumers to feel confident that a mutually agreed upon plan of action would meet treatment challenges as they occur.

❖ Clinician and patient review emergency procedures to address differences between administrative and end-user experiences of disaster planning.

❖ Not all disruptions can be foreseen; COOPs should provide flexibility and redundancy in recovery plans.
Conclusion (II)

❖ OTPs made significant efforts to sustain treatment. Directors/staff worked long hours, travelled considerable distances, and were innovative in methods to provide medication.

❖ Hurricane Sandy experience represented an opportunity for OTPs to better prepare for future emergencies.

❖ Participatory research may have the potential to generate enthusiasm within the OTP community, result in tangible change, and underscore the relevance of developing and implementing recommendations to facilitate treatment continuity.
Sandy Supplemental Research
National Development & Research Institutes, Inc.
AATOD 2016 Conference
October 29-November 2, 2016
Baltimore, MD
Introduction

- Applied for and received 6 months of supplemental funding from ASPR

- Opportunity to find out if Sandy-related problems are also experienced by OTPs elsewhere
  - And whether our recommendations would be relevant

- ASPR grant # 6 HITEP140014-01-04
Supplement objectives

1) Survey additional OTPs to assess relevance of findings
2) Interview state and federal officials from relevant agencies about their roles in helping OTPs prepare for and respond to emergencies
   - State Opioid Treatment Authorities (SOTAs)
   - SAMHSA, DEA

Worked with AATOD to identify and recruit relevant agencies
Sampling additional OTPs

- Identified 21 states considered vulnerable to disaster
  - Insurance-based rankings (with FEMA data)
  - Map of US areas at highest and lowest risk
  - List of potential terrorist target types
- Randomized SAMHSA OTP list by state and by Rural Urban Continuum Code (RUCC) categories
- Extracted OTPs from the 21 vulnerable states & classified into RUCC categories
- Randomly selected 2 OTPs from each RUCC category
Sample states

- Alabama
- Arizona
- Arkansas
- California
- Colorado
- Connecticut
- Florida
- Illinois
- Indiana
- Kentucky
- Louisiana
- Massachusetts
- Mississippi
- Missouri
- Ohio
- Oklahoma
- North Carolina
- South Carolina
- Tennessee
- Texas
- Virginia
Webinar

- Disseminated findings to OTPs
- Presented twice
- Ended with link to Survey Monkey
- $100 donation to every participating OTP
- Interactive: Participants were able to type in questions
  - And answers to our questions
Online survey responses: Does your OTP have an emergency plan?

- Yes, but it has not been updated in ages
- We use local hospital and sister programs
- Not sure
- Yes for dosing and technology backup, no for communication
- Yes for communication and technology, no for transportation
- Yes, in our policy and procedures manual
- Back-up generator
- Hand-dosing, contract with neighboring OTP
Online survey responses: What do you think your OTP could have done better the last time it faced an emergency?

- Plan for additional take-home doses at larger programs better to manage the volume and time this takes
- Better preparation for contacting other OTPs
- Better visibility in local media and on internet with chance to update as emergency progresses
- National registry for dosage information
OTP online survey participation

- 76 respondents from 55 OTPs
- 24 states
  - Word of mouth
  - Some OTPs included programs in additional states
- Overall, responses similar to in-person survey
OTP survey results summary
(1 = strongly disagree … 5 = strongly agree)

<table>
<thead>
<tr>
<th>Rank</th>
<th>GOOD IDEA</th>
<th>Mean</th>
<th>Rank</th>
<th>FEASIBLE</th>
<th>Mean</th>
<th>Rank</th>
<th>GOOD IDEA/FEASIBLE</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Communication Plan</td>
<td>4.60</td>
<td>1</td>
<td>Contact information of the OTPs</td>
<td>4.51</td>
<td>1</td>
<td>Communication Plan</td>
<td>4.54</td>
</tr>
<tr>
<td>2</td>
<td>Objectives for Emergency Protocol</td>
<td>4.58</td>
<td>2</td>
<td>Update program voice mail</td>
<td>4.48</td>
<td>2</td>
<td>Contact information of the OTPs</td>
<td>4.53</td>
</tr>
<tr>
<td>3</td>
<td>Contact information of the OTPs</td>
<td>4.56</td>
<td>2</td>
<td>Communication Plan</td>
<td>4.48</td>
<td>2</td>
<td>Objectives for the Emergency Protocol</td>
<td>4.53</td>
</tr>
<tr>
<td>4</td>
<td>OTPs s/h have take home latitude</td>
<td>4.53</td>
<td>2</td>
<td>Objectives for the Emergency Protocol</td>
<td>4.48</td>
<td>4</td>
<td>Update program voice mail</td>
<td>4.49</td>
</tr>
<tr>
<td>5</td>
<td>Take-Home Plan</td>
<td>4.52</td>
<td>2</td>
<td>OTP staff receive IDs</td>
<td>4.48</td>
<td>5</td>
<td>OTP staff receive IDs</td>
<td>4.49</td>
</tr>
<tr>
<td>19</td>
<td>Intranasal naloxone</td>
<td>4.19</td>
<td>19</td>
<td>Intranasal naloxone</td>
<td>3.88</td>
<td>20</td>
<td>Intranasal naloxone</td>
<td>4.03</td>
</tr>
<tr>
<td>21</td>
<td>Update cell/email information</td>
<td>4.16</td>
<td>21</td>
<td>Develop National Patient DB</td>
<td>3.81</td>
<td>21</td>
<td>Review/sign emergency protocol</td>
<td>4.01</td>
</tr>
<tr>
<td>22</td>
<td>Review/sign emergency protocol</td>
<td>4.12</td>
<td>22</td>
<td>Establish relationship with radio</td>
<td>3.75</td>
<td>22</td>
<td>Establish a relationship with radio</td>
<td>3.92</td>
</tr>
<tr>
<td>23</td>
<td>Establish a relationship with radio</td>
<td>4.08</td>
<td>23</td>
<td>Solar phone charger</td>
<td>3.66</td>
<td>23</td>
<td>Update cell/email information</td>
<td>3.82</td>
</tr>
<tr>
<td>24</td>
<td>OTPs initiate relationships with transportation companies</td>
<td>4.05</td>
<td>24</td>
<td>Update cell/email information</td>
<td>3.47</td>
<td>23</td>
<td>Solar phone charger</td>
<td>3.82</td>
</tr>
<tr>
<td>25</td>
<td>Solar phone charger</td>
<td>3.97</td>
<td>25</td>
<td>OTPs initiate relationships with transportation companies</td>
<td>3.25</td>
<td>25</td>
<td>OTPs initiate relationships with transportation companies</td>
<td>3.65</td>
</tr>
<tr>
<td>26</td>
<td>OTPs facilitate a buddy system</td>
<td>3.32</td>
<td>26</td>
<td>OTPs facilitate a buddy system</td>
<td>3.19</td>
<td>26</td>
<td>OTPs facilitate a buddy system</td>
<td>3.25</td>
</tr>
</tbody>
</table>
Q 38: If a disaster like Hurricane Sandy happened now, I believe my program would be well prepared to ensure patients receive the best possible continuity of care.

Answered: 73    Skipped: 3
Q 39: If the recommendations I endorsed above were adopted by my program, my OTP would be better prepared to ensure patients receive the best possible continuity of care in the event of a disaster like Hurricane Sandy.

- Answered: 73  Skipped: 3

<table>
<thead>
<tr>
<th>Agreement?</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Don't know</th>
<th>Total</th>
<th>Weighted Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agreement?</td>
<td>0.00%</td>
<td>0.00%</td>
<td>6.85%</td>
<td>36.99%</td>
<td>54.79%</td>
<td>1.37%</td>
<td>73</td>
<td>4.51</td>
</tr>
</tbody>
</table>
Agency Interviews
SOTAs, SAMHSA, DEA
State Opioid Treatment Authorities

- Phone interviews with SOTAs from 13 of 21 states + NY and NJ
- Scope of authority varies among states
- Relevance of our recommendations varies by
  - Scope of SOTA’s authority
  - Public or private or for-profit status of OTPs
  - State geography and infrastructure
SOTAS: Communications

- Use multiple sources - uncontroversial
- Web-based resources problematic
  - Digital divide
  - Potential internet outages
- Online registries
  - Recommended by states that have them
  - Others say cost prohibitive and patients distrust them
Communications (cont’d)

- **Buddy system**
  - Peer-based support system, information sharing
  - Broadly rejected
    - Perceived to violate confidentiality
    - Fraternizing seen as risk factor for relapse

- “We have some clinics that have not moved beyond this old thinking that patients cannot socialize with one another, which kind of contradicts the whole recovery issue and peer support ...”

- “I think that happens organically, anyway ... the patients always know what’s going on with the clinic before even all the clinic staff ...”
SOTAs: Transportation

- Poorly addressed in current policies
- Particular need in large and predominantly rural states
- Major obstacles: Flooding, snow storms, road outages, cost and uncertainty about which state agencies would be involved in providing emergency transport
- “Our state Medicaid doesn’t fund opioid treatment programs, so they also would not cover the transportation.”
SOTAs: Take-homes

- Near universal desire for clear mandates
- Some lack authority to implement standards
- Sometimes differences with OTPs regarding diversion or misuse
- “There was one time the patients had to wade through 8 inches of water in the lobby ... So I will say they have now started to realize that it’s a lot easier to ... provide the take-home for everybody’s safety.”
- “It’s up to each individual program to make the decision to close. ... I strongly advise that they consider this, but some of the corporations, they would not allow them to close at all, regardless of what the cost was.”
SOTAs: Emergency Kits

- Emergency plan, contact info, communication resources
- Providing patients with naloxone (Narcan) broadly endorsed
  - Some OTPs already distribute to new patients
  - Some resistance at state level
  - Difficult to mandate
    - Lack of state funding
    - Lack of interest among some OTP companies
- Identification cards rejected as risk to confidentiality
SOTAs: Infrastructure

- **Backup generators universally endorsed**
  - But unlikely given expense and lack of regulatory authority to mandate

- **Mobile dosing units**
  - SOTAs aware of some states with units
  - DEA prohibition on licensing any additional units

- **Stockpiling adequate emergency medication**
  - DEA constraints on moving medication
SOTAs: Drilling & preparedness

- Emerged in SOTA interviews
- Practice universally endorsed
  - OTPs
  - Between OTPs and SOTAs
  - Between SOTAs and relevant federal agencies
- Minimal cost
- Potential complacency at OTPs with backup generators
SAMHSA

- Phone interviews: 2 Medical Officers and 1 Senior Medical Advisor
- Confirmed SOTA’s role as liaison between OTPs and federal agencies
- Variability in state take-home regulations
  - Some requests subject to state-level review before going to SAMHSA
  - Some states allow requests directly to SAMHSA digital portal
- SAMHSA working on patient-controlled health information exchange among OTPs
Drug Enforcement Administration

- Phone interview: Office of Diversion Control representative
- DEA working on regulations for mobile dosing units
- In past emergencies, DEA has worked with medication manufacturers and distributors and authorized temporary dosing facilities
- OTPs can request DEA assistance in moving medications to temporary dosing sites: natural.disaster@usdoj.gov
- http://www.deadiversion.usdoj.gov/disaster_relief.htm for online emergency resources
Discussion

- SOTAs seem key to planning and recovery efforts, but there are some challenges.
- Many SOTAs lack regulatory authority, particularly where significant expense is involved (e.g., central registries, generators, naloxone).
- SOTAs express considerable uncertainty regarding emergency transportation and potential role of other government agencies.
- SOTAs require more interagency dialogue and educational outreach.
  - Within states and with DEA & SAMHSA.
- Potential solutions:
  - Mock disaster drills with OTPs and SOTAs.
  - More dialogue between SOTAs and local DEA field agents.
Conclusions

- All OTPs should:
  - Educate patients about emergency plans and establish clear emergency communication and information sharing between dosing sites
  - Have emergency transportation available between dosing sites
  - Have clear reciprocity between OTPs regarding take-homes
  - Have backup power generators
  - Establish clear provisions for staff overtime during emergencies
  - Provide all patients with naloxone and overdose training
  - Conduct regular emergency drills to test procedures
Thank you for participating in our workshop!

Harlan Matusow, PhD, Project Director  matusow@ndri.org

Ellen Benoit, PhD, Co-Investigator  benoit@ndri.org

Andrew Rosenblum, PhD, Principal Investigator  rosenblum@ndri.org