Injection Drug Use and Infectious Disease Practice: A National Provider Survey

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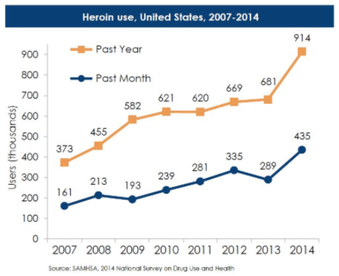
Infectious Diseases Society of America — IDSA — EMERGING INFECTIONS NETWORK

INTRODUCTION

- The opioid epidemic has swept across the U.S. at a staggering rate, with an estimated **half million to one million persons injecting annually.**
- Rates of hospitalization for injection drug use (IDU) related infection have risen precipitously, **comprising an escalating proportion of infectious diseases provider volume in highly impacted regions.**



METHODS

- The **Emerging Infections Network (EIN)** is a national provider-based network of IDSA members active in clinical practice. EIN regularly disseminates topic-based surveys to its membership.
- EIN staff and two active ID physicians collaborated to create a confidential, **14-question multiple choice/open comment survey**. Technical assistance was provided from the Centers for Disease Control and Prevention.
- **PRIMARY SURVEY OBJECTIVE:** To evaluate provider experiences and perspectives regarding the care of persons who inject drugs (PWID)
- February 27-April 9, 2017: **1,276 active EIN members** received the survey by email link or facsimile; non-responders received reminders.
- **CATEGORIES SURVEYED:**
  1) Provider estimates of PWID treated in an average month
  2) Range and frequency of exposure to five major IDU-related infections
  3) Opinions/experiences related to provision of multi-week parenteral antibiotic courses in PWID
  4) Comfort with assessment of patient injection practices and provision of counseling to offset infection risk
  5) Type and availability of inpatient addiction treatment and services
  6) Attainment of buprenorphine license waiver and prescribing
- Geographic and practice characteristics were compared between non-respondents and respondents in order to assess nonresponse bias.
- Categorical variables were compared using χ^2 or Fisher exact tests, and differences were considered significant at $P < .05$.
- For open response questions (2), comments were systematically reviewed, coded for relevant themes, and grouped into categories.
- No incentive for participation was provided.

RESULTS

SURVEY RESPONDENTS: CHARACTERISTICS

- **Over half (53%; N=672) of 1,276 active EIN members particpated.**
- **Geographic**: South 28%, Midwest 24%, Northeast 24%, West 23%, Canada 1%.
- **Employment:** academic, private and government
- **Practice Setting**: 79% provide both inpatient and outpatient care.
- **Years of Practice:** 50% <15 yrs; 50% ≥15 yrs.
- Non-respondents significantly more likely to have < 25 years of practice (p<0.0001).

FREQUENCY OF CARE PROVISION TO PWID

- **Of 672 respondents, 78% (N=526) reported treating PWID as part of clinical practice.**
  - Those in practice <5 vs. ≥25 years significantly more likely to treat PWID (89% vs. 67%) (p<0.0001).
- **Of 526 respondents who reported treating PWID:**
  - 45% (N=236) reported seeing 1-5 patients/month; 28% (N=149) 6-15; 15% ≥16

FREQUENCY OF TREATING IDU-RELATED INFECTION

- **"In the past year, how frequently have you seen each of the following complications of IDU?"** *[Most frequent answer in each row appears in **bold**]*

	Never	Rarely	Occasionally	Frequently
Endocarditis	9 (2%)	55 (10%)	199 (38%)	**263 (50%)**
Bone and joint	19 (4%)	91 (17%)	**240 (46%)**	171 (33%)
Bacteremia/fungemia	6 (1%)	44 (8%)	191 (37%)	**281 (54%)**
Spinal infection (epidural abscess)	24 (5%)	103 (20%)	**239 (45%)**	160 (30%)
Skin and soft tissue infection	3 (0.6%)	42 (8%)	151 (29%)	**324 (62%)**

PROLONGED PARENTERAL THERAPY: MANAGEMENT STATEGIES AND AREAS OF CONCERN

- Vast majority 79%(N=417) of participants reported at least 50% of IDU-related infections seen required ≥2 weeks of parenteral therapy.
- **"In the past year, for infections in PWID typically managed with at least 2 weeks of parenteral therapy, how frequently have you employed the following strategies? "** *[Most frequent answer in each row appears in **bold**]*

	Never	Rarely	Occasionally	Frequently
Transfer to other supervised facility for completion of parenteral therapy	61 (12%)	105 (20%)	176 (33%)	**182 (35%)**
Manage entire course of parenteral therapy on inpatient unit	40 (8%)	104 (20%)	162 (31%)	**218 (41%)**
Provide outpatient parenteral antibiotic therapy (OPAT) if clear evidence of sobriety	155 (30%)	**191 (37%)**	137 (26%)	37 (7%)
Provide OPAT if stable on opioid replacement therapy	**204 (40%)**	166 (32%)	123 (24%)	23 (4%)
Prescribe daily or weekly parenteral therapy administered in outpatient infusion setting	**226 (43%)**	128 (25%)	120 (23%)	45 (9%)
Prescribe oral antibiotics with good bioavailability in lieu of parenteral therapy	62 (12%)	176 (33%)	**221 (42%)**	67 (13%)

COMFORT WITH COUNSELING/NALOXONE PRESCRIBING

- Participants' rated comfort **"assessing patient injection practices and offering counseling regarding safe practices to offset infection risk."**
  - 43% (N= 225) "very comfortable/ comfortable
  - 27% (N= 142) "neutral"
  - 23% (N=124) "uncomfortable/very uncomfortable"
- 21% (N=117) had ever prescribed **naloxone** for overdose reversal.

AVAILABILITY OF ADDICTION SERVICES; ROLE OF ID PROVIDERS

- Only 22% (N= 116) reported their hospitals provided dedicated multi-disciplinary addictions services.
- 46% (N=241) felt ID providers should actively manage substance use disorders
- 3% (N=18) reported being waivered to prescribe buprenorphine.

OPEN TEXT FIELDS: SAMPLE QUOTATIONS

Respondent opinions/experiences relevant to the management of prolonged parenteral therapy for PWID

- "Dilemma over whether it is ethical and safe, or at least appropriate, to send an IDU home with a PICC line"
- "I am comfortable w signed consent for outpatient management. However, many have no payor source to allow any alternatives."
- "I struggle with this issue. On several occasions, I have felt a patient could be trusted to come to an infusion center daily with PICC to complete therapy, but my colleagues and hospital staff have adamantly refused to discharge with a PICC."

What strategies have you found particularly helpful to providing comprehensive medical management to PWID?

- "Creation of a separate multidisciplinary team that focuses on inpatient PWID with infection requiring IV [antibiotics]"
- "Inpatient order sets for patients with SUDs (includes STI screening, narcan prescribing), staff education/teaching lectures, leadership support, capacity building with community organizations"
- "Taking a nonjudgmental approach to interaction with patients appears to lead to more open communication"

CONCLUSIONS

TAKE HOMES:

- In this national sample of ID physicians, the vast majority reported providing care to PWID, ***signaling treatment of serious IDU-related infection as a common feature of today's ID practice in the U.S.***
- Providers consistently highlighted the often complex, resource intensive nature of providing care to PWID.
- Significant diversity among providers in regards to:
  1) Availability of comprehensive addiction services
  2) Perceptions regarding the role ID providers should play in the management of addiction.
- Attainment of federal buprenorphine waiver was rare among respondents, commensurate with national data reporting ~4% of practicing physicians with waiver certification.
- In the setting of the opioid crisis, complex care requirements for PWID will persist, **highlighting the need for guidelines and further research to identify best practices for management.**
- Expansion of ID providers' clinical purview to integrate concurrent addiction treatment merits further consideration.

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