

Variability in Gonorrhea (GC) Treatment Compliance in Four Midwestern States: Impact of Provider Type

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INTRODUCTION

Inappropriate treatment of *Neisseria gonorrhoeae* infection (GC) may contribute to antimicrobial resistance. We sought to evaluate compliance with CDC treatment recommendations for GC in a four-state region covered by the St. Louis STD/HIV Prevention Training Center (PTC). The objective was to identify specific types of providers who may benefit from additional training.

METHODS

State-level GC treatment reports between January 2015 and June 2015 were requested from seven states in our PTC coverage area. Data from four states (IA, IL, KY, MO) were received.

Provider type was defined according to the National Electronic Telecommunications System for Surveillance (NETSS) classification. GC treatment was assessed as "appropriate," "adequate but not recommended," or "inappropriate," based on CDC treatment guidelines in effect for that time period.

GC TREATMENT CRITERIA

Appropriate

•Ceftriaxone 250 mg IM PLUS [azithromycin 1 g PO or doxycycline 100 mg PO BID x 7 d]

Adequate but not recommended

- •Cefixime 400 mg PO PLUS [azithromycin 1 g PO or doxycycline 100 mg PO BID x 7 d]
- Azithromycin 2 g PO

<u>Inappropriate</u>

•All other regimens

Figure 1: Percentage of patients receiving appropriate, adequate, or inappropriate treatment

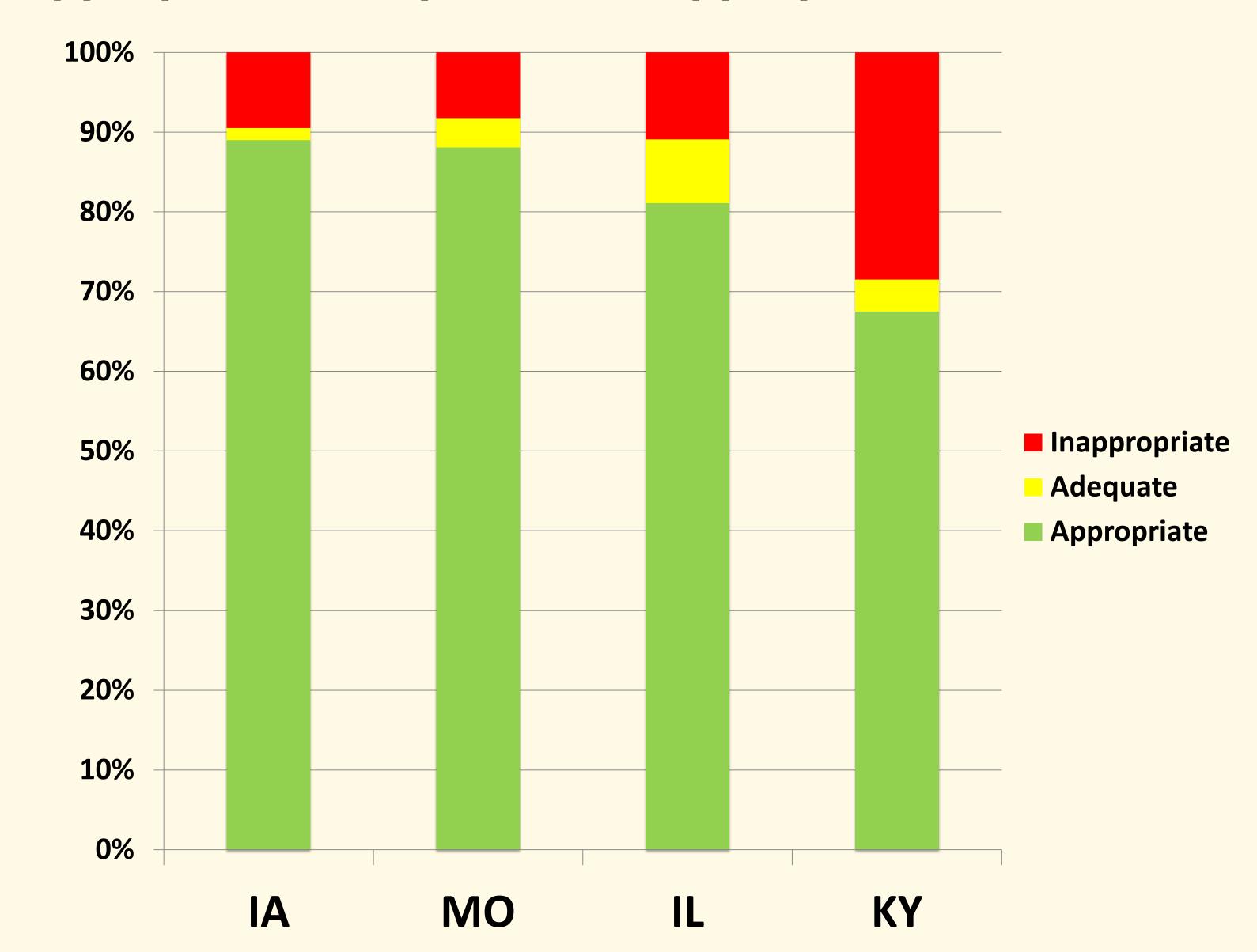


Table 1: GC treatment compliance by state

State	Inappropriate treatment	Appropriate treatment	Adequate but not recommended treatment
lowa	89	832	14
(n=935)	9.5%	89.0%	1.5%
Illinois	616	4,587	455
(n=5,658)	10.9%	81.1%	8.0%
Kentucky	324	768	45
(n=1,137)	28.5%	67.5%	4.0%
Missouri	260	2,776	101
(n=3,137)	8.3%	88.5%	3.2%
TOTAL	1,289	8,963	615
	11.9%	82.5%	5.7%

Table 2: GC treatment compliance by provider type

Provider type	Inappropriate treatment	Appropriate treatment	Adequate but not recommended treatment
Hospital	369	2,903	143
(n=3,415)	10.8%	85.0%	4.2%
Private /HMO	402	1,518	223
(n=2,143)	18.8%	70.8%	10.4%
Other	241	1,494	86
(n=1,821)	13.2%	82.0%	4.7%
STD Clinic	131	1,421	62
(n=1,614)	8.1%	88.0%	3.8%
Family Planning	60	580	34
(n=674)	8.9%	86.1%	5.0%

CONCLUSIONS

- Across four Midwestern states, 82.5% of patients received appropriate GC therapy.
- Private physicians/HMOs reported the lowest rates of appropriate treatment, and represent an important target for additional education and training.
- Despite efforts to homogenize data reports, important discrepancies exist which impede crossstate comparisons.
- Greater standardization in treatment reporting and delineation of provider type may lead to better verification system of GC treatment.