

Missed Pelvic Inflammatory Disease (PID)
Diagnoses and Treatment Detected through
Health Department Surveillance in Two
Western New York Emergency Departments

NASPAG Annual Clinical Meeting
April 15, 2010

Jennifer Sears, SUNY Albany School of Public Health

Gale Burstein, MD, MPH, University at Buffalo Pediatrics
Associates

Guthrie Birkhead, MD, MPH, NYSDOH, SUNY Albany School of
Public Health

Need for PID Surveillance

Public Health Significance

- Goals of female CT and GC screening include PID prevention
- PID underreported
 - No specific laboratory test or gold standard for diagnosis
 - Reportable as CT/GC complication in NYS

Erie County Enhanced PID Surveillance

- Goal: To estimate burden of PID at busy, urban Emergency Departments (EDs)
- Methods: Developed tool to capture PID cases
- Conducted medical record review for all ED-1 and ED-2 female CT and GC reports
 - ED-1: in 550 bed academic-teaching hospital and regional trauma center
 - ED-2: in 200 bed academic-teaching women's health and pediatric hospital center with adolescent medicine physicians on staff

Review medical records of all patients diagnosed with CT and/or GC between 1/1/09 - 6/30/09 in two Erie County EDs

Confirmed PID

Meets ≥ 1 criteria:

- 1. Physical exam (PE) and lab findings consistent with PID**
- 2. ED medical record diagnosis of PID**
- 3. Treatment consistent with PID**
- 4. CT/GC Case report included PID**

Suspect PID

Meets all criteria:

- 1. Lower abdominal or suprapubic tenderness on PE**
- AND**
- 2. No or incomplete pelvic examination documentation**
- AND**
- 3. No other medical diagnosis to account for tenderness**

No PID

– Does not meet criteria of Enhanced PID Surveillance Tool for confirmed or suspect PID

Physical Exam Findings C/W PID*

- Sexually active young women or those at risk of STDs with lower abdominal or pelvic pain and no cause other than PID for illness
- PID Diagnosis with one or more criteria:
 - cervical motion tenderness – OR –
 - uterine tenderness – OR –
 - adnexal tenderness

*CDC. *Sexually Transmitted Diseases: Treatment Guidelines 2006*. Atlanta: CDC; August 4 2006.

CDC Recommended PID Treatment*

Outpatient Treatment:

Ceftriaxone 250 mg IM x 1 dose

PLUS

Doxycycline 100 mg PO BID x 14 days

WITH OR WITHOUT

Metronidazole 500 mg PO BID x 14 days

*CDC. *Sexually Transmitted Diseases: Treatment Guidelines 2006*. Atlanta: CDC; August 4 2006.

Study Population for Enhanced PID Surveillance, 1/1/2009 - 6/30/2009

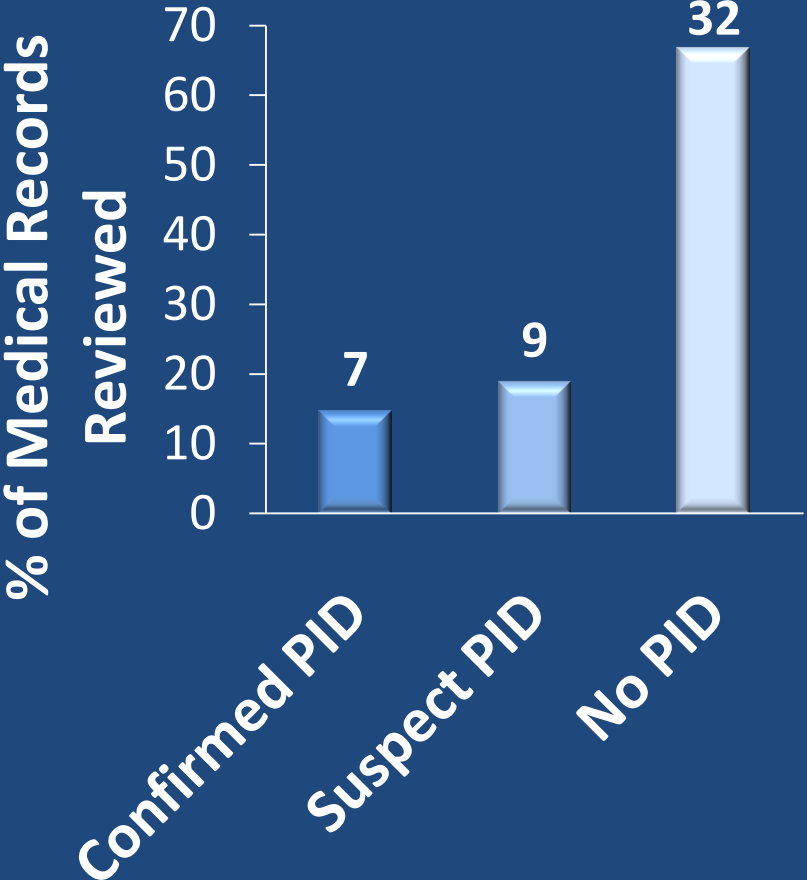
STD	ED-1 (<i>n</i> =48)		ED-2 (<i>n</i> =50)	
	No.	%	No.	%
CT	29	60.4	38	76.0
GC	14	29.2	5	10.0
CT and GC	5	10.4	7	14.0

Study Population for Enhanced PID Surveillance, 1/1/2009 - 6/30/2009

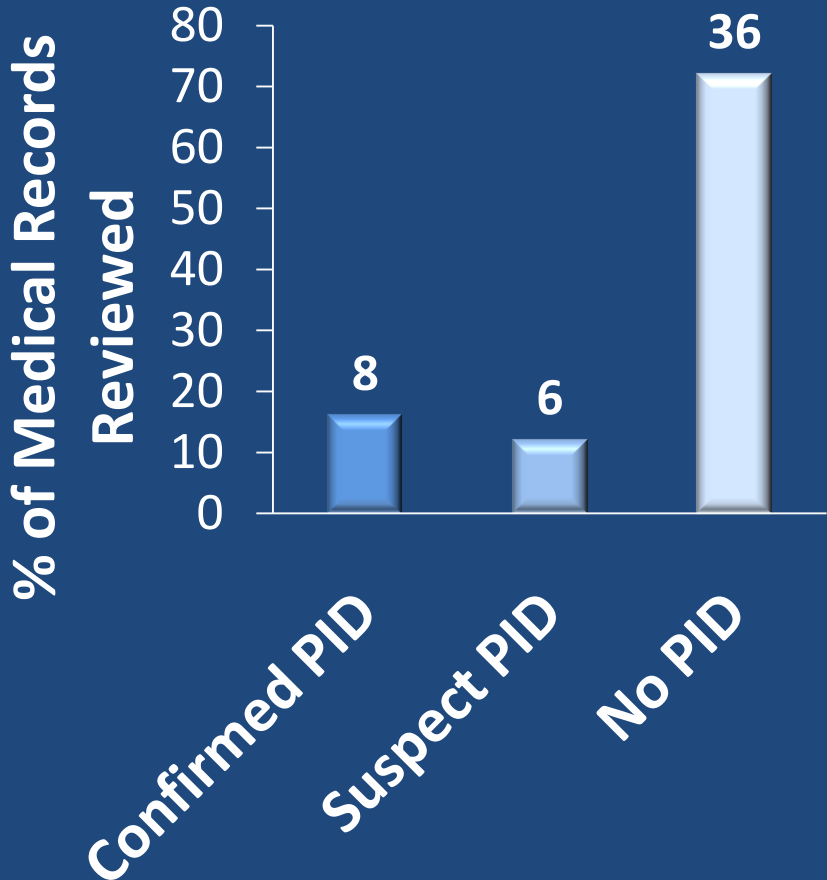
- Mean age of *GC and/or CT positive patients*
 - ED-1 = 22.8 yrs
 - ED-2 = 17.4 yrs
- Mean age of *patients with “confirmed PID”*
 - ED-1 = 23 yrs
 - ED-2 = 18 yrs

Erie County Enhanced PID Surveillance Findings

ED-1
n=48



ED-2
n=50



Findings for females seen at ED-1 & ED-2 between
1/1/2009 - 6/30/2009 classified as "confirmed PID" by
the Enhanced Surveillance Tool

Findings	ED-1 (n=7)		ED-2 (n=8)	
	No.	%	No.	%
PID case outcomes				
Diagnosed in ED	4	57%	6	75%
PE Findings, no ED PID Dx	3	43%	2	25%
CDC recommended Rx	2	29%	4	50%
Reported to ECDOH	0	0%	0	0%

Limitations

- Dependence on medical provider documentation of treatment and PE findings
- Inability to independently confirm PID due to absence of PID diagnostic gold standard

Conclusions

- Many ED patients with exam findings consistent with PID were not diagnosed with PID and/or not treated properly
- No PID cases diagnosed in ED-1 or ED-2 were reported to the Health Department
- PID diagnosis and management was more accurate in ED with a hospital-based adolescent medicine program

Recommendations

- Development of ED standard for PID diagnosis and treatment has potential to improve care
 - Program ED EMRs to prompt PID diagnosis with specific physical exam findings in female patients
 - EDs should implement uniform treatment guidelines for PID
- Educate ED staff to include PID on CT/GC report

Questions?

Jennifer Sears

SUNY Albany School of Public Health, MPH Candidate

js538462@albany.edu

Thank you!