**Attachment 4. United Hospital Fund Survey of Antibiotic Prescribers**

**Goal:** The goal of this survey is to obtain information from prescribers (including primary care physicians, residents, physician assistants, and nurse practitioners) regarding an important public health issue having to do with antibiotic utilization, specifically for adult patients with acute respiratory infections (ARIs). We have some questions to ask you about antibiotic prescribing, such as clinical reasoning leading to the decision to prescribe an antibiotic, and, once the decision is made, decisions about antibiotic selection, dose, and duration. The goal is to understand more about decisions providers make in antibiotic prescribing, antibiotic selection, dose, and duration.

**Instructions:** Please survey prescribers within your practice site to obtain an assessment of antibiotic prescribing practices and identify key drivers of decisions providers make in prescribing, antibiotic selection, dose, and duration for adult patients at your outpatient setting. We recommend including all prescribers in your practice who see adult patients, including primary care physicians, residents, physician assistants, and nurse practitioners. **Our suggested timeframe for administering this survey is from Monday, July 18, 2016 through Friday, August 19, 2016.** Prescribers can complete this survey either on paper or via SurveyMonkey. For surveys completed via paper, please ensure responses are entered into SurveyMonkey by **Monday, September 19, 2016**. This survey will take approximately 30 minutes to complete.

Once all survey data is entered into SurveyMonkey, UHF will aggregate results and provide a data summary back to practices. Once practices receive survey results, each hospital/health system will convene prescribers to have a discussion about the results and inform action planning as well as the final report for this initiative.

**Practice and Prescriber Characteristics**

1. Practice site name:

2. Hospital or health system affiliation:

3. How much of your time do you spend in direct patient care in this practice?

**O** Greater than or equal to 50% of your time

**O** Less than 50% of your time

4. Which of the following describe your role in the practice?

**O** Physician Attending

**O** Resident

**O** Nurse Practitioner

**O** Physician Assistant

**O** Other (Please specify:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)

5. How many years have you been practicing medicine?

**O** <5 years

**O** 5-10 years

**O** >10-20 years

**O** 21-30 years

**O** 31 or more years

**Antibiotic Selection**

6. How influential are the following factors in impacting you to prescribe antibiotics?

a. Concern about patient satisfaction/expectation of the visit

1 2 3 4 5

(least influential) (most influential)

b. Desire to prevent litigation as a result of complications of infections

1 2 3 4 5

(least influential) (most influential)

c. Perceived decreases in visit length of time

1. 2 3 4 5

(least influential) (most influential)

d. Other (please describe):

1 2 3 4 5

(least influential) (most influential)

7. Out of the factors below, please check off the **top** ***three*** **most important factors that impact** your decision to prescribe antibiotics AND the **top *three* factors that rarely impact** your decision to prescribe antibiotics.

| Factors for Antibiotic Selection | Check off the **top *three* most important factors** that impact your decision to prescribe antibiotics: | Check off the **top *three* factors that rarely impact** your decision to prescribe antibiotics: |
| --- | --- | --- |
| Illness severity |  |  |
| Clinical Practice Guidelines |  |  |
| Patient request /Patient satisfaction |  |  |
| Sample access |  |  |
| Patient medical history/comorbidities |  |  |
| Patient compliance |  |  |
| Concern for antibiotic resistance |  |  |
| Time pressure |  |  |
| Other (please describe): |  |  |

8. Does your practice have a policy or practice guideline in place for the **dose** of antibiotics used for clinical conditions?

**O** Yes

**O** No

**O** Sometimes

**O** Unknown

**O** Other (please explain):

9. Does your practice have a policy or practice guideline in place for the **selection** of antibiotics used for clinical conditions?

**O** Yes

**O** No

**O** Sometimes

**O** Unknown

**O** Other (please explain):

10. Does your practice have a policy or practice guideline in place for the **duration** of antibiotics used for clinical conditions?

**O** Yes

**O** No

**O** Sometimes

**O** Unknown

**O** Other (please explain):

11. What makes antibiotic selection most challenging for you?

**O** Patient Allergies

**O** Complicated medical histories

**O** Recurrent infections

**O** Other (please describe):

12. Do you know the difference between broad spectrum and narrow spectrum antibiotics?

**O** Yes

**O** No

Please explain:

13. Is antibiotic spectrum (broad versus narrow) a consideration when you prescribe an antibiotic?

**O** Yes

**O** No

**O** Sometimes

Please explain:

14. *Please indicate if you agree with this statement:* Broad spectrum antibiotics are more likely to cure an infection than narrow spectrum antibiotics.

**O** Agree

**O** Disagree

**O** Other (please explain):

15. What do you think are the pros and cons of using broad spectrum antibiotics?

|  |  |
| --- | --- |
| Pros: | Cons: |
|  |  |

16. When do you think it is appropriate to prescribe broad spectrum antibiotics instead of narrow spectrum antibiotics?

17. Do you think your colleagues can uniformly define the differences between broad versus narrow-spectrum antibiotics?

**O** Yes

**O** No

Please explain:

**Internists** **Sinusitis Case Scenario:**

You are in the Internal Medicine clinic seeing Michelle, an otherwise healthy 36-year-old female, who complains of fever and increasing nasal discharge over the past 5 days. She is concerned because her symptoms have not improved. Physical exam reveals the patient is afebrile (temperature <100°F), has erythematous and enlarged nasal turbinates, with cloudy discharge on the right and tenderness over her right maxillary sinus. Her lung exam is clear.

18. What would the work up for this patient include (please check all that apply)?

|  |  |
| --- | --- |
| ☐ Testing for Acute Respiratory Illness (e.g., PCR) | ☐Sinus radiographs or CT imaging |
| ☐ Blood culture | ☐Completing a thorough history |
| ☐ Urinalysis | ☐ Other, please specify: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| ☐Complete Blood Count (CBC) test |

19. Would you prescribe an antibiotic to this patient?

**O** Yes

**O** No

If yes, which antibiotic would you prescribe, and why? **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

If no, what would the treatment for this patient look like?

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Antibiotic Prescribing Habit Changes**

20. How challenging would it be to change you and your colleagues’ antibiotic prescribing behaviors?

**O** Very challenging

**O** Challenging

**O** Somewhat Challenging

**O** Not Challenging

21. What do you think are some of the key reasons for the challenges in trying to change antibiotic prescribing habits? Please answer on a scale of 1 (small factor) to 4 (large factor):

* 1. Prescribers are just reluctant to change their antibiotic prescribing practices:

1 2 3 4

(small factor) (large factor)

* 1. Prescribers are used to the way they have been prescribing medications for years:

1 2 3 4

(small factor) (large factor)

c. Prescribers can’t change their practices because of pressure from patients:

1 2 3 4

(small factor) (large factor)

d. Prescribers are challenged by a mix of patients with multiple comorbidities, making it difficult to change prescribing habits:

1 2 3 4

(small factor) (large factor)

e. Prescribers don’t need to change their prescribing practices because they are sufficient: 1 2 3 4

(small factor) (large factor)

f. Other (please describe):

1 2 3 4

(small factor) (large factor)

22. What methods would help in improving appropriateness of decisions about antibiotic use in patients with acute respiratory infections (check off all that you think could help)?

1. Improved methods for using electronic health records and clinical decision support to assist providers with antibiotic selection, dose, and duration
2. Improved use within practice setting of established clinical practice guidelines for antibiotic selection, dose, and duration
3. Data showing antibiotic prescribing practices among providers in the practice setting
4. Access to a quick reference guide for each major diagnosis, including antibiotic indications
5. Access to better educational materials for patients and families about antibiotic use and resistance
6. Improved access to antibiotic resistance data for local area(s) where patients are served
7. Delayed antibiotic prescribing, i.e. “wait and see” prescriptions
8. Use of shared decision-making tools in your practice
9. Communication skills training for health care providers to address benefits and harms of antibiotic treatment and management of patient expectations for antibiotics
10. Access to the Centers for Disease Control and Prevention’s *Get Smart: Know when Antibiotics Work* materials and tools to help learn about antibiotic resistance and appropriate antibiotic prescribing and use for common infections
11. Other, please describe:

**Antibiotic Resistance**

23. Do you think antibiotic resistance is a concern for your patients?

**O** Yes

**O** No

Please explain:

24. Do you think your patients understand what antibiotic resistance is?

**O** Yes

**O** No

Please explain:

25. Do you think antibiotic prescribing in outpatient settings is contributing to infections like *Clostridium difficile*?

**O** Yes

**O** No

Please explain:

26. Could you please provide us with any other information that can help to improve antibiotic prescribing in your practice setting?