Did you know that common 15-minute "rapid flu" tests can be wrong up to 50% of the time? Faster, less expensive test results are not better if the test result is inaccurate.

Geisinger offers flu test results that are 98% accurate in as little as 30 minutes after specimen collection. We call this testing program "FluWorks".

Geisinger FluWorks supports
the right test at the right time,
so you can provide
personalized treatment to your
patients, prescribing antiviral
medicine only when flu A or
flu B results are positive.

As a Geisinger provider you can have access to highly accurate, rapid flu testing, conveniently performed at your clinic site!

Lean more about Geisinger's
FluWorks at
<a href="https://www.geisingermedicallab">https://www.geisingermedicallab</a>
<a href="mailto:s.com/10xEssentials/testing\_guides.shtml">s.com/10xEssentials/testing\_guides.shtml</a>

# PREVENTING INFECTIONS, PREVENTING THE SPREAD OF RESISTANCE



Avoiding infections in the first place reduces the amount of antibiotics that have to be used and reduces the likelihood that resistance will develop during therapy. There are many ways that drug-resistant infections can be prevented: immunization, safe food preparation, handwashing, and using antibiotics as directed and only when necessary. In addition, preventing infections also prevents the spread of resistant bacteria.

### TRACKING



CDC gathers data on antibiotic-resistant infections, causes of infections and whether there are particular reasons (risk factors) that caused some people to get a resistant infection. With that information, experts can develop specific strategies to prevent those infections and prevent the resistant bacteria from spreading.

### IMPROVING ANTIBIOTIC PRESCRIBING/STEWARDSHIP



Perhaps the single most important action needed to greatly slow down the development and spread of antibiotic-resistant infections is to change the way antibiotics are used. Up to half of antibiotic use in humans and much of antibiotic use in animals is unnecessary and inappropriate and makes everyone less safe. Stopping even some of the inappropriate and unnecessary use of antibiotics in people and animals would help greatly in slowing down the spread of resistant bacteria. This commitment to always use antibiotics appropriately and safely—only when they are needed to treat disease, and to choose the right antibiotics and to administer them in the right way in every case—is known as antibiotic stewardship.

### DEVELOPING NEW DRUGS AND DIAGNOSTIC TESTS



Because antibiotic resistance occurs as part of a natural process in which bacteria evolve, it can be slowed but not stopped. Therefore, we will always need new antibiotics to keep up with resistant bacteria as well as new diagnostic tests to track the development of resistance.

CDC. (2017). CDC's Role. Retrieved from https://www.cdc.gove/drugresistence/cdc\_role.html

## FluWorks and Antimicrobial Stewardship

How the FluWorks Program supports Geisinger providers with the right test, at the right time, for the right treatment.



#### The Science behind FluWorks



Begin by collecting a nasopharyngeal (NP) swab and placing it in Universal Transport Media (UTM).

After transport, laboratory scientists in the Geisinger Regional

Laboratory System (GRL) perform real-time nucleic acid analysis (Geisinger's ABRP test) that purifies, concentrates, amplifies, and identifies unique genetic regions from the sample. The laboratory reports a positive or negative result for each of the three viruses analyzed; FluA, FluB, and RSV.



The test takes about 30 minutes, start to finish. Before your patient leaves the clinic, you may have a result to direct your treatment.





### FluWorks Best Practice

ABRP test results will immediately link to your patient's *MyGeisinger* account, along with education describing why antivirals or antibiotics may or may not be appropriate for them.

Confirmation of a flu diagnosis with a positive flu A of flu B result assures appropriate use of antivirals and may prevent misuse of antibiotics. A negative flu result may indicate additional testing or symptom management only.

Patients who have a negative flu result and have not received a flu vaccine should be encouraged to be vaccinated once their illness resolves, when not contraindicated, to prevent infection.

Talk with your patients about other preventative measures, such as staying at home when sick, cough/sneeze etiquette,

### FluWorks Potential Impact

FluWorks 2017 Pilot Program Data from Rapid Response Laboratories:

- On-site testing reduced Collect-to-Result time by 70%.
- According to the pilot data, in a typical flu season, 933 patients could have avoided antiviral therapy because it would be of no benefit.
- The potential for yearly recovered costs last flu season exceeded \$74,640 in antiviral medication alone.
- Patient cost per test is the same as last year's PCR, just faster. You get an accurate result, on which to base your decisions - no guessing as with antigen based 15 minute tests of low accuracy used at other organizations.