

On motion of Commissioner D'Agostino, seconded by Commissioner Lehman, it was agreed for the County of Lancaster to approve the following:

Memorandum of Understanding

Lancaster General Hospital (LGH)
Lancaster, Pennsylvania

With:

Purpose:

To proceed with the development of a services agreement to engage LGH to immediately commence with development of and implementation of the COVID-19 contact tracing and testing program as described in Penn Medicine LGH's Proposal dated May 12, 2020. LGH is further authorized to work with other community entities and governmental authorities as necessary to effectuate the contact tracing and testing program as contemplated in the attached Proposal.

Note:

Each party understands that this Memorandum of Understanding is not legally binding or enforceable until a Services Agreement has been duly authorized, executed and delivered by all parties and approved by the Commonwealth of Pennsylvania Department of Health and other governmental authorities, as required.

Motion passed unanimously.

5/13/20

**MEMORANDUM OF UNDERSTANDING
FOR
COVID- 19 CONTACT TRACING AND TESTING**

This Memorandum of Understanding (“MOU”), made and entered into this__day of May, 2020 by and between the County of Lancaster, a third class county of the Commonwealth of Pennsylvania with an address as 150 North Queen Street, Lancaster, Pennsylvania, (the “County”) and Lancaster General Hospital (“LGH”), a tax exempt, non-profit hospital located at 555 North Duke Street, Lancaster, Pennsylvania.

RECITALS:

WHEREAS, on March 13, 2020, the President of the United States declared a national emergency as a result of the novel coronavirus (COVID-19) pandemic; and

WHEREAS, on March 6, 2020, the Governor of the Commonwealth of Pennsylvania signed an emergency disaster declaration regarding the COVID-19 pandemic; and

WHEREAS, on March 17, 2020, the Board of Commissioners of the County of Lancaster signed Resolution No. 25 issuing a declaration of a disaster emergency as a result of the COVID-19 pandemic; and

WHEREAS, on March 27, 2020, the Governor of Pennsylvania extended his March 23, 2020 stay-at-home order to Lancaster County thereby restricting Lancaster County residents to essential travel and activities;

WHEREAS, as of May 8, 2020, over twenty one hundred cases of COVID-19 have been confirmed in Lancaster County; and

WHEREAS, effective contact tracing and testing of new cases of COVID- 19 will assist in the ability to monitor the progress of the spread of the virus and facilitate the lifting of restrictions within Lancaster County; and

WHEREAS, a comprehensive program of effective identification of index cases through testing and subsequent contact tracing with testing will be of benefit in reopening the County; and

WHEREAS, LGH is a nonprofit acute care hospital with the resources and experience necessary to develop and implement a contract tracing and testing program as requested by the County, and has submitted a proposal to the County in that regard (the “Proposal”); and

WHEREAS, the parties desire to develop an agreement whereby creates and implements a comprehensive contact tracing and testing program.

NOW, THEREFORE, in consideration of the mutual agreements and covenants contained herein and for other good and valuable consideration, the receipt and sufficiency of which hereby are acknowledged, it is mutually agreed and covenanted, under seal, by and between the parties to this MOU, as follows:

1. **Proposal and Further Action.** The County hereby approves LGH, the County and other entities and government authorities, as necessary, to proceed with the development of a services agreement to engage LGH to immediately commence with development of and implementation of the COVID-19 contract tracing and testing program as described in the Proposal. LGH is hereby further authorized to work with other community entities and governmental authorities as necessary to effectuate the contact tracing and testing program as contemplated in the Proposal.
2. **Nature of MOU.** Each party understands that this MOU is not legally binding or enforceable until a services agreement as identified in Section 1 above has been duly authorized, executed and delivered by all parties and approved by the Commonwealth of Pennsylvania Department of Health and other governmental authorities, as required.

IN WITNESS WHEREOF, the County and LGH have executed this Memorandum of Understanding as of the date first written above.

**LANCASTER COUNTY BOARD
OF COMMISSIONERS**

Joshua G. Parsons, Chairperson

Ray D'Agostino, Vice Chairperson

Craig E. Lehman, Commissioner

LANCASTER GENERAL HOSPITAL

Jan L. Bergen, President and CEO



Attachment A

**Proposal for Lancaster County
COVID-19
Contact Tracing and Testing Program**

May 12, 2020

Introduction

The Lancaster County Chamber of Commerce and the Lancaster County Economic Development Company have developed an economic recovery plan for Lancaster County. An essential component of that plan is contact tracing and testing. LG Health submits this Proposal for contact tracing and testing as contemplated in the Chamber/EDC's economic recovery plan.

Contact tracing is an essential action to effectively reopening society in the midst of a pandemic. It is also an effective containment strategy during most infectious disease outbreaks to quarantine those individuals infected and prevent the disease from being spread. However, with the exponential spread of COVID-19, the public health departments quickly lost the capacity to effectively trace contacts. Instead of quarantining only those exposed to the virus; a significantly broader mitigation strategy occurred, placing most of the country under stay-at-home orders to gain control of the spread.

Without any vaccine in the near-future, the ability to safely and effectively lift coronavirus restrictions within Lancaster County will depend on the capacity to aggressively test and trace new cases of the virus. Penn Medicine Lancaster General Health (LG Health) offers the following background information and Proposal to benefit all Lancaster County residents:

- COVID-19
- Role of Contact Tracing
- Lab Testing
- Current Landscape
- Scope of Services
- Information Technology/Data Management
- General Considerations and Assumptions
- Financial Considerations
- Recommendation

COVID-19

The SARS-CoV-2 virus spreads mainly from person to person, primarily through respiratory droplets produced when an infected person coughs, sneezes, or even exhales. Spread is more likely when people are in close contact (within 6 feet for 10 minutes). It can also spread by a person touching a surface that has the virus on it and then touching their own mouth, nose, or eyes. The virus can spread very easily and quickly; particularly, given a person with the virus can shed virus particles for 48 hours prior to developing any symptoms. In addition, the virus has the ability to spread in people with minor symptoms or even no symptoms. As a result, a person with COVID-19 can infect twice as many people as the seasonal flu.

Role of Contact Tracing

Contact tracing is the process of identifying and supporting people with confirmed or potential infection as well as those that are at high risk of having been exposed to the disease, in order to prevent further spread. If communities are unable to effectively isolate patients and ensure contacts can separate themselves from others, rapid community spread of COVID-19 is likely to increase to the point that strict mitigation strategies will again be needed to contain the virus.

Key principles of contact tracing are:

- Contact tracers, from a team of registered nurse and community health workers, will speak with the person who has a positive test as soon as test results are known and help them recall with whom they have had close contact (within 6 feet) during the period that they may have been infectious (2 days prior to symptoms starting until present). The number of contacts can range from two (if they have not left their house) to more than 20 (if they have continued to work, reside in a congregate living situation, or have been unable to comply with the stay at home order and social distancing recommendations).
- Contact tracers will notify all exposed contacts, ideally within 24 hours, to inform them that they have been potentially exposed to someone who is positive for COVID-19 and the date of the exposure. They are then asked to restrict their interactions with others for 14-days from that exposure.
- Provide information and support for the exposed contacts so they understand what they can do to care for themselves and reduce the risk to those in their household. Education and tools are provided for self-monitoring of symptoms.
- Monitor all exposed contacts on a daily basis to ensure that they are self-monitoring and have not developed symptoms.
- Protect privacy. Contacts only know that they have been exposed to someone who has tested positive for COVID-19 infection. They are not told the identity of the individual who may have exposed them. To ensure this privacy, the tracer is not even aware of the individual who has tested positive.
- If contacts are not high risk (i.e., they were wearing a mask and exposure to an individual who is COVID-19 positive was at a distance of greater than 6 feet and the time of exposure was less than 10 minutes), they would be asked to monitor for symptoms for 14 days from the date of the exposure, but would not need to restrict their activities. If they do develop symptoms, they would be tested and asked to restrict their interactions with others pending the test results.
- Contact tracers are trained to provide health information in plain language and will have access to language translation services for both telephone conversations, as well as in-person when indicated.
- LG Health works closely with all major social service organizations throughout Lancaster County and will initiate contact with the appropriate agencies regarding the anticipated needs of COVID-19 positive individuals or contacts, as necessary. The contact tracing team will include a coordinator of social services that will be responsible for ensuring all people are linked to appropriate social service needs. LG Health will explore subcontracting to one or more social service organizations which will be responsible for assisting and navigating resources for individuals, including medications, food, masks, thermometers, and cleaning supplies. Furthermore, contact tracers will refer persons back to their identified primary care provider (PCP) to help address barriers that may make it hard for households to follow recommendations, including but not limited to food insecurity, housing issues, social support and transportation to providers for care. PCPs routinely address social barriers and needs for their patients and are best positioned to help during this time. Persons without an identified PCP will be referred to local social services agencies to help triage and mitigate any barriers identified.

LG Health already has a team of 25 nurses who have contacted individuals with positive and negative COVID-19 testing results. The team has created a training plan for this expanded focus on contact tracing. LG Health will begin as soon as possible with those teams in cooperation with the Pennsylvania Department of Health (PA DOH) for the County. LG Health is preparing to expand the team following the approval of this Proposal.

Lab Testing

As outlined in the Governor's *Process to Reopen Pennsylvania*, reopening necessitates that Lancaster County have diagnostic COVID-19 testing available. Testing has to be accessible in rural and urban locations and available for long periods every day. LG Health is exploring long-term options for testing beyond our two community testing tents which are currently secured by Pennsylvania constables. Furthermore, the testing strategy includes a plan to test underserved populations and those with limited access to transportation. Mobile community-based testing will be considered if LG Health identifies that patients are not able to get to testing sites and will depend on the availability of personal protective equipment. LG Health will also examine alternative sources of transportation to testing centers. Tabor Community Services and Lanc Co MyHome (Lancaster County Homeless Coalition) are already coordinating transportation.

Lack of access to testing technology and supplies is a nationwide issue. As a result, all COVID-19 testing in Lancaster County by LG Health will strictly adhere to a medically driven testing protocol as described below and will be subject to test availability. LG Health will use the COVID-19 PCR (polymerase chain reaction) test to determine if a patient is actively infected with COVID-19. PCR tests are highly specific as they look for the genetic sequence (RNA) of the virus causing COVID-19. The sensitivity of these tests can vary based on the when the specimen is taken and the duration of the patient's illness as well as the way in which the sample was collected. Turn-around times vary from two hours (LG Health) to up to 48 hours (Quest and other commercial laboratories). LG Health does not plan to utilize antibody testing as this will not identify patients who CURRENTLY have COVID-19.

Per the protocol and subject to testing availability, the following patient populations will be tested with the PCR test:

- Patients with a known contact positive with COVID-19 and **ONE** symptom from any of the following: fever (Temp>100.0°F), shortness of breath, cough, sore throat, headaches, muscle aches, loss of taste or smell, and chills.
- Patients with **TWO** symptoms from any of the following: fever (Temp>100.0°F), shortness of breath, cough, sore throat, headaches, muscle aches, loss of taste or smell, and chills.
- Asymptomatic populations based on potential high-risk exposures as defined by the Centers for Disease Control and Prevention or HERCs (High-Exposure Risk Contacts) discovered through contact tracing. That individual will still need to self-quarantine despite any testing result. If an asymptomatic person tests positive, they will need to follow a self-isolation protocol.
- In addition to the above categories, asymptomatic testing of the following special populations: patients having elective procedures and laboring mothers. LG Health has completed tests for symptomatic nursing home residents as a part of its pre-existing lab agreements at 14 locations. LG Health would explore expanded asymptomatic testing based on the protocol above, if the additional SNFs/nursing homes agree to testing, and if there is sufficient testing supplies.

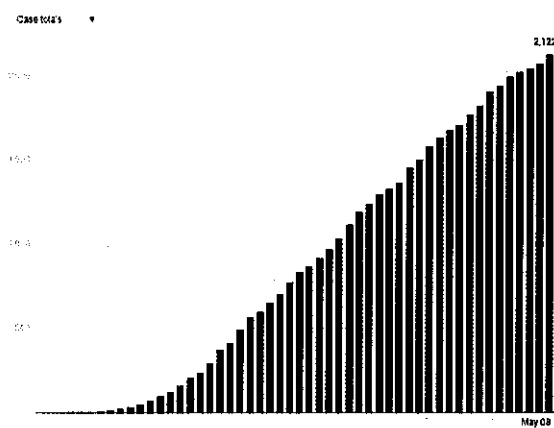
LG Health anticipates that access to testing capacity will increase over time based on supply chain availability. This increased capacity will come from multiple potential sources including the Pennsylvania Emergency Management Agency, Quest, and other suppliers. Notably, the CDC recently supported the use of anterior nasal swab for the collection of samples for COVID-19 testing, which will vastly improve testing capability. LG Health has already had encouraging conversations with Quest to support this increased volume through anterior nasal swabs.

Current Landscape

Lancaster County continues to see increased cases of patients with COVID-19. As of May 8, there were 2,122 positive cases in the county. Only 11,403 (2.1%) out of 545,724 of the county population has been tested for COVID-19 per the Pennsylvania Department of Health. Over the last 14 days ending on May 8, the County has seen an average of 48 new positive patients per day with a range of 25 to 84. There were 671 cases over the last two weeks which places the county at a rate of 123 per 100,000.

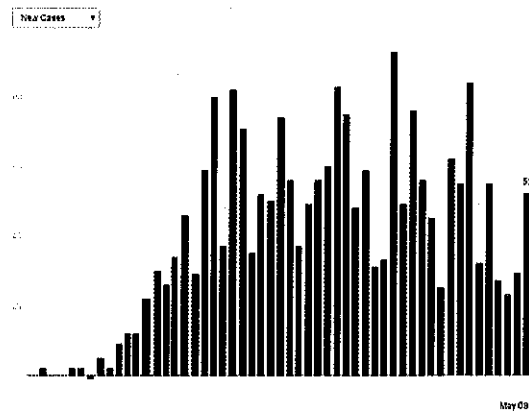
In addition to testing, the Governor's plan also notes that reopening requires a monitoring and surveillance program that enables swift actions for containment or mitigation. Positive cases will need to be quickly isolated and their close contacts counseled and quarantined.

COVID-19 Cases in Lancaster



Source: LGH - Lancaster County Health Services, Pennsylvania Department of Health & Lancaster County Coroner's Office. *Get the data: [Data for Lancaster County](#)

COVID-19 Cases in Lancaster



Source: LGH - Lancaster County Health Services, Pennsylvania Department of Health & Lancaster County Coroner's Office. *Get the data: [Data for Lancaster County](#)

LG Health has tested more than 9,000 people for COVID-19. As of May 8th, 86% of those tested live in Lancaster County. Over the last two weeks LG Health is testing an average of more than 200 persons per day. Since March 16th, 9,374 patients were tested at the following locations:

- 49% at LG Health community testing tents at the Pennsylvania College of Health Sciences (83%) and Clipper Stadium (17%);
- 20% in the Lancaster General Hospital (LGH) Emergency Department;
- 11% in LGH and Women & Babies Hospital (WBH) for inpatients and pre-procedural testing;
- 9% in LG Health's urgent care centers located throughout Lancaster County and sites in Lebanon and Chester Counties;
- 7% in Lancaster General Health Physician practice sites; and
- 4% in nursing homes/SNFs.

Scope of Services

Functions that the Lancaster County COVID-19 Contract Tracing and Testing Program can provide include:

- Establish multiple **Lancaster County Community Testing sites** with the capacity to perform up to 1,000 tests per day. Consideration for the sites must support seasonal weather challenges for a 12-month testing site and include the ability to provide:
 - Adequate space for social distancing;
 - Access to public transportation;
 - Adequate parking if the persons being tested must leave their vehicle;
 - Technology and internet access;
 - Staffing to screen and order testing;
 - Staffing to register patients and perform the test;
 - Personal protection equipment (PPE) for all staff; and
 - Security.
- Establish a process to **provide test results** to the individual (and their physician) and if the test is positive, provide the information needed for the individual to self-quarantine and begin questions for contract tracing.
- Establish a **contact tracing program** to trace and counsel up to an average of 50 new cases per day. Contacts with high risk exposures would be asked to restrict their interactions with others for 14-days from the date of exposure. Contacts would be monitored daily and if they developed any symptoms, they would be quickly tested.
- Tracers will provide support and education to any positive COVID-19 individual including precautions that need to be taken to reduce the risk to other household members.
- If businesses have employees that test positive for COVID-19, the contact tracing would extend into the work environment to identify potential employees that may have been exposed and identify the proper precautions that need to be taken to reduce the risk of spread.
- Contact tracing would also include congregate housing facilities including retirement communities, long-term care and assisted living facilities, and senior apartments (unless the facility already has a contact tracing program in place).

Information Technology/Data Management

LG Health will use a secure, HIPAA-compliant data system to record required information and to share this information with staff conducting initial interviews and performing contact outreach and follow-up. LG Health understands that PA DOH prefers the use of the Sara Alert system which sends alerts to contacts and records their symptoms via texting. However, LG Health will investigate technologies and applications that might be helpful for county residents to monitor their own temperature and symptoms. Any technology utilized in the contact tracing program will not utilize geo-tracking or location monitoring. A final decision on technology will depend on the agreement of the PA DOH.

Key outcome measures will be identified to track and provide county and city officials with routine data reports related to the services provided, results, quality controls, costs, and any gaps or opportunities for improvement that are identified. The LG Health business intelligence department will also analyze the data to identify any hot spots, geo mapping of positive cases, and potential risk factors that may require focused interventions. Data and reports will be made available to the County as permitted by Commonwealth and federal law and regulation.

General Considerations and Assumptions

This Proposal is based on:

- Implementing a contact tracing and testing program that would be established for a 12-month period of time and would be inclusive of all Lancaster County residents.
 - Assuming the PA DOH would continue completing contact tracing within Lancaster County Prison and for presumptive COVID-19 deaths at nursing homes. Since there is no lab result, only the PA DOH would know that the death was presumptive COVID-19 based on symptoms and possible exposure.
- Predicting contact tracing volumes modeled using an average of 50 new positive cases per day within the county. LG Health will plan to accommodate daily volume fluctuations on catch up days. The goal is to complete the contact tracing and notifications within 24 hours.
- Requiring 20-24 hours of total work per positive case to conduct effective contact tracing and daily follow-up of all contacts.
- Staffing for contact tracing will predominately consist of community health workers (high school graduates). Registered nurses will provide oversight and clinical support. Approximately 50% of the staffing will have flexible hours to be able to accommodate fluctuations in new cases and associated staffing requirements.
- Utilizing identified, community social-services organizations to assist individuals who are required to self-isolate. These resources would support access to food, thermometers, cleaning supplies, cloth masks, and medical care as need.
- Expanding LG Health's current supply of approximately 70 percent of the testing in Lancaster County. This would enable the health system to access all positive results as soon as they are received. To avoid delays in receiving the positive results of those residents who utilized a non-LG Health testing location, the following options can be considered:
 - Recommend that county businesses encourage their employees to utilize a LG Health testing site or the Lancaster County Community Testing sites if testing is appropriate.
 - Request that other non-LG Health testing locations (WellSpan Ephrata, UPMC Lititz, Quest Lab, Lancaster Health Center, etc.) have patients sign an authorization at the time of the test, that if the test results are positive, the Lancaster County Contact Tracing Program would be notified.
 - Have retirement communities and extended care facilities obtain each resident's authorization to directly notify the Lancaster County Contact Tracing program to initiate the process for contact tracing if a resident tests positive from a non-LG Health lab (if they are not doing contact tracing themselves)
 - Offer Lancaster Health Center, WellSpan Ephrata and UPMC Lititz a contract to participate in the program. LG Health could then create a business agreement to provide the contact tracing on their behalf.
- Utilizing a mobile community-based testing strategy if the need is identified for vulnerable populations who may have difficulty accessing transportation.
- Working collaboratively with the PA DOH.
 - If the PA DOH provides the list of contacts, it will be used as a method to ensure all contacts are identified, particularly if the county resident obtained a test outside of Lancaster County.

Financial Implications

From April 25 to May 8 (14 days), there has been an average of 48 new cases per day in Lancaster County. The projected hours within the Proposal are based on the literature for contact tracing and LG Health current contract tracings for our patients and employees. The contact tracing costs are entirely driven by staffing. The lab financial implications were based on the cost of the current community testing and the associated variable and fixed resource requirements. All staffing costs include a 37% benefits calculation for both lab and contact tracing. Assumptions in this Proposal are based estimations that each patient who is positive with COVID-19 will have 5-15 contacts during the period that they were infectious. Finally, the costs below are also based on the assumption that supplies will become increasingly available over the next couple of months.

Costs for Contact Tracing:

| Role | Hrs/Case | Hourly Rate | Cost/Case | New Cases/Day | Cost/Day | Cost/Year | Max FTEs |
|---------------------------|-----------|-------------|---------------|---------------|------------------|----------------------|--------------|
| Community Health Workers | 18 | \$ 25 | \$ 450 | 50 | \$ 22,500 | \$ 8,212,500 | 158 |
| RNs | 2 | \$ 51 | \$ 102 | 50 | \$ 5,100 | \$ 1,861,500 | 17.5 |
| Data Reporting/Management | 0.2 | \$ 54 | \$ 11 | 50 | \$ 540 | \$ 197,100 | 1.7 |
| Total | 20 | | \$ 552 | 50 | \$ 27,600 | \$ 10,271,100 | 175.5 |

Costs for Community Testing:

| | Cost/Case | Tests/Day | Cost/Day | Cost/Year |
|------------------------------------|-----------|--------------|------------------|----------------------|
| Non-reimbursed Lab testing | \$ 20 | 1,000 | \$ 20,000 | \$ 7,300,000 |
| Cost of high capacity testing site | NA | 1,000 | \$ 1,900 | \$ 693,500 |
| Staffing | NA | 1,000 | \$ 6,650 | \$ 2,427,250 |
| Security | NA | 1,000 | \$ 2,400 | \$ 876,000 |
| Information Technology | NA | NA | NA | \$ 150,000 |
| Transportation assistance | NA | NA | NA | \$ 350,001 |
| PPE | NA | 1,000 | \$ 1,350 | \$ 492,750 |
| Other supplies | \$ 5 | 1,000 | \$ 5,000 | \$ 1,825,000 |
| Total | | 1,000 | \$ 21,900 | \$ 14,114,501 |

Combined Costs for Contact Tracing and Community Testing:

| Program | Daily Volume Capacity | Cost for 12 Months |
|--------------------------------|-----------------------|-------------------------|
| Contact Tracing & Surveillance | 50 new cases/day | \$ 10,271,100.00 |
| Community Testing | 1,000 tests/day | \$ 14,114,501.00 |
| TOTAL | | \$ 24,385,601.00 |

Recommendation

Given the broad scope of services and wide geography served, LG Health can provide large scale community based testing throughout Lancaster County through its primary care physician network, LGH Emergency Department, urgent cares, and community testing sites. LG Health is also prepared to establish agreements for a comprehensive contact tracing and surveillance program in partnership with the state, county and city agencies. LG Health does not anticipate needing agreements with employers for this service. Any final agreement regarding contract tracing and testing will require the approval and agreement of the Commonwealth of Pennsylvania Department of Health and possibly other governmental entities.

As indicated on the contact tracing page of the Department of Health's Plan for Pennsylvania, Lancaster General Hospital is already partnering with Lancaster City's Board of Health on contact tracing. In addition, the Department of Health is seeking partnerships with local health systems across the state to develop and implement contact tracing and testing programs. As the leading health care provider in Lancaster County, LG Health is in an excellent position to partner with the County, the Department of Health and other governmental agencies to provide a high quality, high capacity contact tracing and testing program for the citizens of Lancaster County.