

**Quality and Productivity Commission
34th Annual Productivity and Quality Awards Program
"Leading with Excellence"**

2021 APPLICATION

Title of Project (Limited to 50 characters, including spaces, using Arial 12-point font):

NAME OF PROJECT: DPH COVID-19 Isolation and Quarantine Legal Orders

DATE OF IMPLEMENTATION/ADOPTION: MARCH 30, 2020

(Must have been fully implemented for a minimum of at least one year - on or before July 1, 2020)

CHECK HERE IF THIS PROJECT IS BEING SUBMITTED FOR THE **COVID-19 IMPACT AWARD ONLY**. (Projects must be implemented on or before December 31, 2020. **Note:** Projects implemented less than one year ago will not be eligible for any other PQA awards. In addition, once a project is submitted, you cannot submit the same project for awards consideration in subsequent years).

PROJECT STATUS: Ongoing One-time only

HAS YOUR DEPARTMENT PREVIOUSLY SUBMITTED THIS PROJECT? Yes No

EXECUTIVE SUMMARY: Describe the project in 15 lines or less using Arial 12 point font. State clearly and concisely what difference the project has made.

1 Isolation and quarantine are recommended by public health experts, including the CDC,
2 as proven strategies for preventing transmission of COVID-19. When COVID-19 cases
3 are reported, the Los Angeles County Department of Public Health (DPH) activates a
4 case and contact investigation process, issues Isolation and Quarantine Health Officer
5 Orders (HOOs) providing home isolation and quarantine instructions to cases and
6 contacts. Typically, Public Health Investigators issue HOOs to individuals, but the
7 unprecedented volume of COVID-19 cases and exposures required DPH to develop
8 innovative technology solutions and workflows for administering COVID-19 orders.
9 Several DPH units, other County entities, and external vendors, collaborated to develop
10 an automated system to administer these orders. This system enabled DPH to issue
11 422,098 Isolation and 123,316 Quarantine HOOs, in multiple languages, by mail and/or
12 email in 2020 alone; improved productivity and efficiency; and reduced the risk for
13 errors. As cases wane, Isolation and Quarantine HOOs will continue to be essential to
14 efforts to protect families and communities from COVID-19 and DPH will continue to
15 enhance processes and apply lessons-learned to other communicable disease HOOs.

BENEFITS TO THE COUNTY

(1) ACTUAL/ESTIMATED ANNUAL COST AVOIDANCE	(2) ACTUAL/ESTIMATED ANNUAL COST SAVINGS	(3) ACTUAL/ESTIMATED ANNUAL REVENUE	(1) + (2) + (3) = TOTAL ANNUAL ACTUAL/ESTIMATED BENEFIT	SERVICE ENHANCEMENT PROJECT
\$	\$	\$		<input checked="" type="checkbox"/>

ANNUAL = 12 MONTHS ONLY

SUBMITTING DEPARTMENT NAME AND COMPLETE ADDRESS Public Health 313 N. Figueroa Street, 8 th Fl, Los Angeles, CA 90012		TELEPHONE NUMBER (213) 288-8117
PROGRAM MANAGER'S NAME Marilyn Smith, MPH & Julia Heinzerling, MPH EMAIL msmith@ph.lacounty.gov jheinzerling@ph.lacounty.gov		TELEPHONE NUMBER (323) 914-7801
PRODUCTIVITY MANAGER'S NAME AND SIGNATURE <small>(PLEASE CALL (213) 893-0922 YOU DO NOT KNOW YOUR PRODUCTIVITY MANAGER'S NAME)</small> Catherine Mak, MBA Signature on File		DATE 6-25-2021 TELEPHONE NUMBER (213) 288-7240
DEPARTMENT HEAD'S NAME AND SIGNATURE Barbara Ferrer, MPH, MEd, PHD Signature on File		DATE 6-25-2021 TELEPHONE NUMBER (213) 288-8117

****ELECTRONIC, WET, OR SCANNED SIGNATURES ARE ACCEPTABLE****

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1st FACT SHEET – LIMITED UP TO 3 PAGES ONLY: Describe the **challenge(s), solution(s), and benefit(s)** of the project to the County. What quality and/or productivity-related outcome(s) has the project achieved? Provide measures of success and **specify assessment time frame.** Use Arial 12 point font.

Challenges:

Prior to the COVID-19 pandemic, DPH issued isolation and quarantine orders for various communicable diseases and because disease rates were generally low, staff typically hand-signed and hand-delivered the orders. DPH's first COVID-19 isolation and quarantine orders were hand-typed, envelopes were manually stuffed, labels were printed via mail merge, addresses were verified by an address verification system (Melissa Data), and the orders were hand-delivered, or emailed manually. However, it quickly became clear that there would be far too many COVID-19 cases and contacts for this approach and that alternative approaches that increased productivity, efficiency, and accuracy were needed. When considering possible solutions, DPH had to address the following staffing and logistical challenges:

- **Staffing:** Manually processing the HOOs was labor intensive and required significant staffing resources and overtime expenses, with multiple Public Health Investigation and other Program staff being scheduled to process the orders via mail and email 7 days per week.
- **Timeliness:** COVID-19 is highly contagious and can be spread through asymptomatic contact. To prevent disease spread, it's critical that cases and contacts receive HOOs and isolation and quarantine instructions quickly. Early in the pandemic, DPH was challenged to issue orders promptly due to testing and reporting delays, as well as reliance on time-consuming manual processes.
- **Signatures:** HOOs are legal orders, which must be signed by the County Health Officer or Deputy Health Officers. Due to high volume, it would not be feasible to individually sign orders or approve electronic signatures for each individual HOO, in real-time. Thus, with guidance from County Counsel, DPH needed to identify an efficient process for securing legally valid electronic signatures for HOOs.
- **Privacy and Security Concerns:** HOOs typically include cases' and contacts' personal information, including protected health information. Any electronic solution being considered needed to integrate privacy and security safeguards.
- **Language Needs:** To increase comprehension and compliance, it was important that HOOs and accompanying instructions be issued in the County's threshold languages. This required various workflow changes and technology solutions including translating the HOO and instructions into multiple languages, updating these translations each time that public health guidance changed, revising interview scripts to collect preferred language, modifying the contact management database to capture preferred language, and building an interface to automatically generate HOOs/packets in the recipient's preferred language.

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- *Quality Assurance:* DPH was processing hundreds to over ten thousand HOOs per day and there was potential for clerical errors that could result in HIPAA violations. Furthermore, the manual process for checking incomplete or inaccurate addresses was time-consuming and led to delays in HOO issuance. Thus, workflows and technology solutions needed to include effective QA safeguards and more efficient address checks, to reduce potential errors.

Solutions:

DPH convened key Programs from across the Department including PHI Administration, Public Health's Information Technology unit, Community and Field Services, the Case and Contact Investigation Branch, and the Bureau of Disease Control Administration unit to identify project needs, consider possible approaches, and implement technology solutions and workflow changes. When considering possible solutions, DPH also consulted with County Counsel and DPH's Compliance Office regarding privacy, security, and legal considerations.

After considering project objectives, the aforementioned challenges, available resources, and sustainability, DPH developed a new system for administering the COVID-19 HOOs. DPH was approved to utilize pre-signed HOO templates rather than issue signatures for each individual order and has automated most of the process for administering the orders by email and mail.

- *Email Solution:* DPH developed an automated process that exports data from the contact investigation database and autogenerates an email that is sent through a commercial email service (DocuSign) to the case/contact with a link to the appropriate order and a resource list. Orders are issued immediately following disposition of the case, the status of the order is recorded (e.g., received, viewed, downloaded), and automated reminders are sent to the cases/contacts who have not accessed the order.
- *Mailed Solution:* DPH developed a system that exports data from the contact investigation database and auto-populates the health officer order in the case's or contact's language of choice. DPH also has a high capacity printer, Bulk Mailer (automated validation of addresses) and a machine that sorts, stuffs, and seals the Health Officer Orders which are printed electronically.

Benefits:

As noted, DPH has automated most of the process for administering the orders via email and mail and during 2020, 422,098 Isolation and 123,316 Quarantine Health Officer Orders were served by this process. Workflow changes and technology solutions have yielded numerous benefits for the Department and the residents who are receiving isolation and quarantine orders including the following:

- *Staffing:* Automated the process has significantly improved efficiency and reduces staffing needs. Prior to implementation of these systems, DPH assigned up to 6 additional staff to complete the daily mailings

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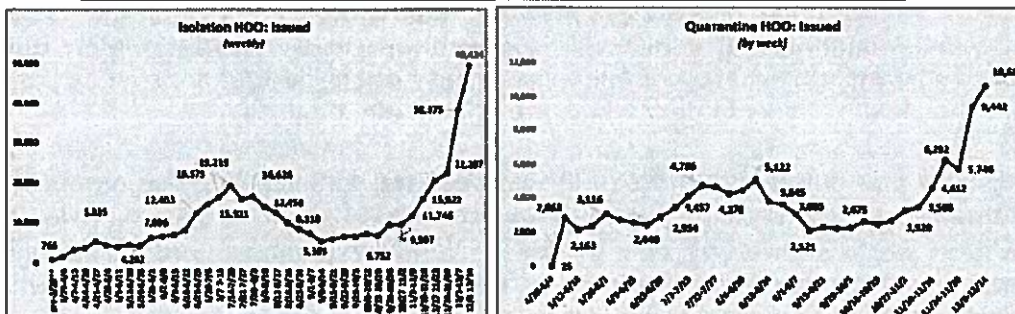
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and emails, seven days per week and overtime was frequently needed to complete assigned tasks. Currently, the process is managed by one staff member and overtime is rarely required. Thus, the changes resulted in significant resource savings for DPH and has allowed key staff to be deployed to other critical COVID-19 response or Program activities.

- **Timeliness:** Automation has improved timeliness, which benefits DPH as well as cases/contacts who can more quickly act on the public health guidance to protect their family, household and community.
- **Signatures:** With approval from County Counsel, DPH has integrated electronic signatures into the workflow, which saves significant time for signatories and prevents delays in issuance of orders.
- **Privacy and Security Concerns:** DPH has integrated workflow and technology changes that help to safeguard cases' and contacts' personal and protected health information, which benefits them and reduces DPH's risk for potential HIPAA breaches.
- **Language Needs:** DPH has developed a system that allows for cases and contacts to receive HOOs and instructions in multiple languages, which can improve recipients' satisfaction, comprehension, and compliance.
- **Quality Assurance:** By improving the address verification process and automating the process for populating the HOOs, DPH has reduced the chance for errors, which is especially critical because the HOOs are legal documents, contain PHI, and provide important information that can prevent spread of COVID-19 in households and communities.
- **Data and Reporting:** Automated reports enable DPH to easily track HOO data and trends.
- **Future Applications:** Many of the processes, workflows, technology solutions, and lessons-learned from the COVID-19 experience are generalizable and could be applied to HOOs for various communicable diseases in the future.

WEEKLY ISOLATION AND QUARANTINE ORDERS ISSUED



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Linkage to the County Strategic Plan – 1 page only. Which County Strategic Plan goal(s) does this project address? Explain how. Use Arial 12-point font.

Goal III.2.3 Prioritize and Implement Technology Initiative That Enhance Service Delivery and Increase Efficiency: Support implementation of technological enhancements and acquisitions that increase efficiency (e.g. infrastructure, software, hardware, applications) including replacement of legacy systems.

- Since the beginning of the COVID 19 pandemic, we have enhanced service and increased the efficiency by automating mailing and emailing through improved workflows and use of technology including a high capacity printer, a commercial machine that sorts, stuffs, and seals mailings; a Bulk Mailer (address verifier); and a commercial mail distribution system.
- Prior to receiving these systems, we manually emailed and mailed the Health Officer Orders. Employees had to work overtime to accomplish sending out the Health Officer Orders. We had to request additional staff to assistance in processing these orders.

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COST AVOIDANCE, COST SAVINGS, AND REVENUE GENERATED (ESTIMATED BENEFITS TO THE COUNTY): If you are claiming cost benefits, include a calculation on this page. Please indicate whether these benefits apply in total or on a per unit basis, e.g., per capita, per transaction, per case, etc. You must include an explanation of the County cost savings, cost avoidance or new revenue that matches the numbers in the box. Remember to keep your supporting documentation. Use Arial 12-point font

Cost Avoidance: Costs that are eliminated or not incurred as a result of program outcomes. Please indicate whether these are costs to the County or to other entities.

Cost Savings: A reduction or lessening of expenditures as a result of program outcomes. Please indicate whether these were expenditures by the County or by other entities.

Revenue: Increases in existing revenue streams or new revenue sources to the County as a result of program outcomes.

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The process improvements that DPH made enabled the Department to issue isolation and quarantine health officer orders to hundreds of thousands of Los Angeles County residents who were diagnosed with or were at risk for becoming infected with COVID-19. Issuing these legal orders with the accompanying instructions for actions that cases and contacts could take to prevent transmission of COVID-19 was an important part of the Department's COVID-19 response, which may have helped to prevent further spread of COVID-19 in families, households, and communities.

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COLLABORATING DEPARTMENTS ONLY

(For single department submissions, do not include this page)

DEPARTMENT NO. 2 NAME AND COMPLETE ADDRESS COUNTY COUNSEL 500 W. TEMPLE STREET, ROOM 475 LOS ANGELES CALIFORNIA 90012	
PRODUCTIVITY MANAGER'S NAME AND SIGNATURE <i>Jesus Castillo</i> JESUS CASTILLO EMAIL: JCASTILLO@COUNSEL.LACOUNTY.GOV	DEPARTMENT HEAD'S NAME AND SIGNATURE <i>Rodrigo Castillo Silva</i> RODRIGO CASTILLO SILVA EMAIL: RCASTROSILVA@COUNSEL.LACOUNTY.GOV
DEPARTMENT NO. 3 NAME AND COMPLETE ADDRESS	
PRODUCTIVITY MANAGER'S NAME AND SIGNATURE EMAIL: _____	DEPARTMENT HEAD'S NAME AND SIGNATURE EMAIL: _____
DEPARTMENT NO. 4 NAME AND COMPLETE ADDRESS	
PRODUCTIVITY MANAGER'S NAME AND SIGNATURE EMAIL: _____	DEPARTMENT HEAD'S NAME AND SIGNATURE EMAIL: _____
DEPARTMENT NO. 5 NAME AND COMPLETE ADDRESS	
PRODUCTIVITY MANAGER'S NAME AND SIGNATURE EMAIL: _____	DEPARTMENT HEAD'S NAME AND SIGNATURE EMAIL: _____
DEPARTMENT NO. 6 NAME AND COMPLETE ADDRESS	
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DEPARTMENT NO. 7 NAME AND COMPLETE ADDRESS	
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