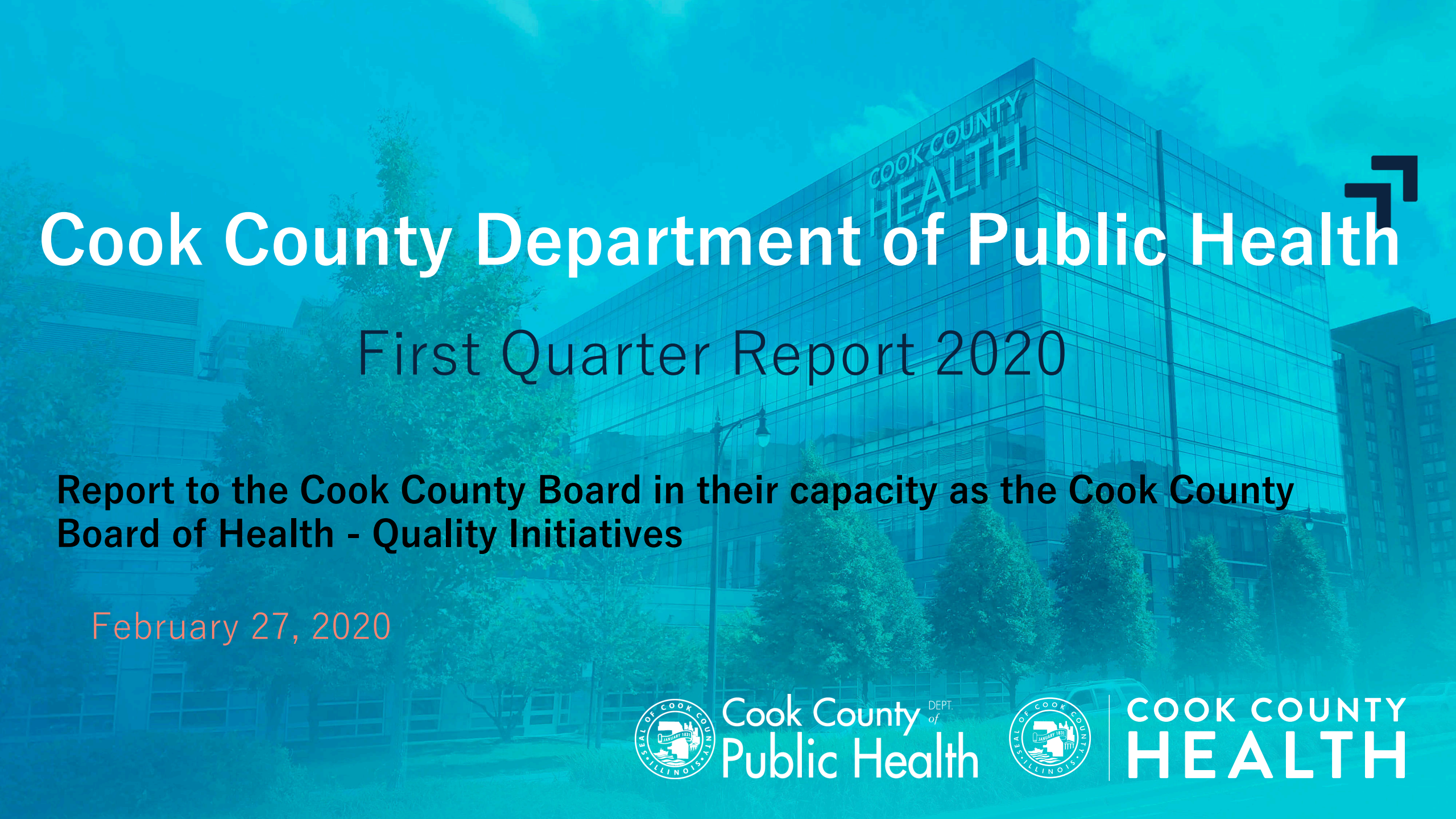


Cook County Department of Public Health

First Quarter Report 2020

Report to the Cook County Board in their capacity as the Cook County Board of Health - Quality Initiatives

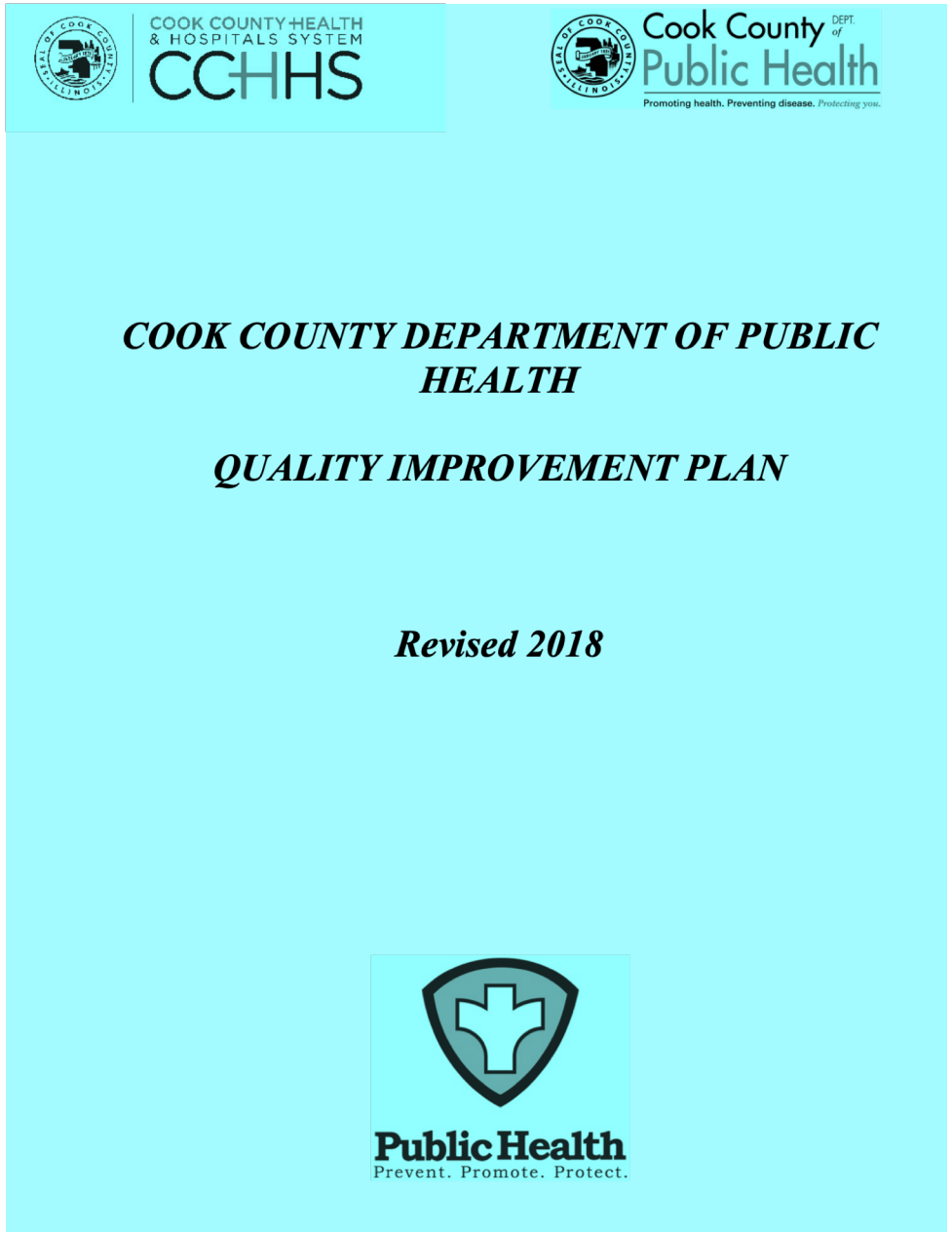
February 27, 2020

Cook County DEPT. of Public Health

COOK COUNTY HEALTH

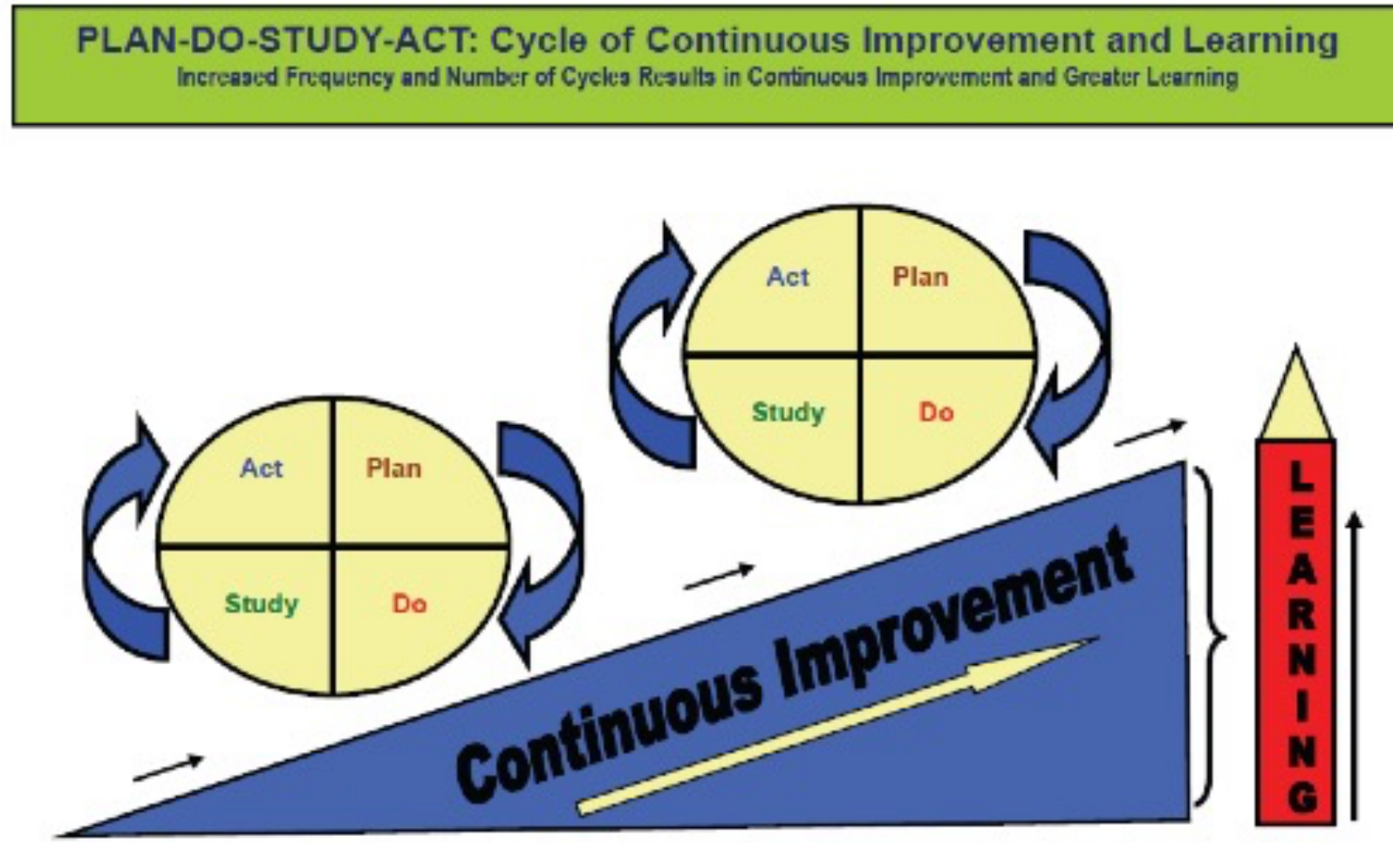
CCDPH Quality Program

- CCDPH Quality Committee meets monthly, chaired by Dr. Rachel Rubin
- Representatives from all units and programs and senior administration (20-25 members)
- Expectation is one QI project per unit/program per year
- Project storyboards are presented yearly at all-staff meeting
- On-going periodic training of all staff and working to incorporate more staff into QI projects
- CCDPH QI Plan is updated periodically as is required by Public Health accreditation Board (PHAB)



Quality Improvement Projects

Methodology-PDSA Cycle



PDSA: The Improvement Cycle

P is for PLAN: the first phase of the cycle, usually the longest and the most important!)

- During **PLAN**, the goal is to **understand** and **analyze** the problem.
- There are four steps to effective PLANNING:
  - Step 1 - Set a goal
  - Step 2 - Pick appropriate measures to monitor progress
  - Step 3 - Collect information and data about the current situation
  - Step 4 - Analyze and identify potential solutions

PDSA: The Improvement Cycle:

D is for DO

- This is the testing phase

- **During this phase, the potential solution(s) discovered during the planning phase are pilot tested.**

PDSA The Improvement Cycle:

STUDY

S is for STUDY

- This is the evaluation phase.
- During this phase, you **analyze** the results of your pilot test
  Evaluate whether the solution you tested in **DO** truly addresses your problem and helps you reach your goal.

PDSA The Improvement Cycle:

The final phase in PDSA is ACT

- During this phase, you **implement** the new process that you've been testing. It becomes a part of your everyday workflow.
- Remember to continuously monitor your measures and begin a new improvement cycle to address any new or recurring issues.
- It is all about continuous quality improvement!

Outline of Project Process

- Identify team members
- Identify and describe the problem, issue, or opportunity to be addressed
- Develop a goal statement
- Set a timeline for completing the stages of the PDSA cycle
- Set measures of success and identify as efficiency, outcome or output metrics
- Determine the internal and external stakeholders
- Develop a storyboard using the template provided
- Communicate progress to the CCDPH Quality Committee at least quarterly
- Communicate results and measures to stakeholders as appropriate
- Other QI methodologies and techniques may be employed and are encouraged as appropriate to the project

CCDPH 2019 Quality Projects

Cook County Department of Public Health

COOK COUNTY HEALTH

2019 CCDPH Quality Projects

8 projects completed

- Investigation of Food-borne Diseases and Outbreaks
- Promotion of Smoke-Free Multi-Unit Housing
- Improving Tuberculosis Direct Observation Therapy
- Annual School Health Conference Check-Out Process
- Improving Access to Services in the Illinois Breast and Cervical Cancer Program (IBCCP)
- Environmental Health Services (EHS) Digitization: Forms
- Improving Perinatal Hepatitis B (PHB) Post Exposure Prophylaxis
- Adverse Pregnancy Outcomes Reporting System (APORS) Program Face-to Face Contacts

Investigation of Food-borne Diseases and Outbreaks

GOAL STATEMENT

To reduce the time it takes to collect the necessary information to conduct enteric case investigations for the benefit of the community we serve by standardizing and expediting the investigation process so that we can reduce the transmission of enteric diseases and potential outbreaks in suburban Cook County.

METRICS TO MEASURE SUCCESS

- 1 day from case report (INEDSS, phone call, email) is received until investigation is initiated
- 5 days between case is received until investigation is completed
- 3 days between case report is received until CD staff sends food-borne illness (FBI) form to environmental health for inspection
- 30 days max from time case report is received and investigation is closed

Promotion of Smoke-Free Multi-Unit Housing

GOAL STATEMENT

To examine and improve our outreach strategies and ensure educational messages were reaching our target audience that would result in an increase in the number of units with smoke-free protections, and in turn protecting SCC residents from exposure to the negative health effects of second and third-hand smoke.

METRICS TO MEASURE SUCCESS

- Measure visits to CCDPH's Healthy HotSpot website during peak times of digital message dissemination.

- Increase in the number of suburban Cook County units that implement smoke-free protections by 5,312 over a three-year period.

Improving Tuberculosis Direct Observation Therapy

GOAL STATEMENT

The use of Video Directly Observed Therapy (vDOT) will improve our ability to provide DOT to more cases of TB without a decrease in patient compliance, patient satisfaction or an increase in cost.

METRICS TO MEASURE SUCCESS

- Percent of TB cases who receive direct observation therapy: Goal 80%
- Patients receiving video direct observation therapy are compliant with VDOT: Goal 90%
- Patients will rate their satisfaction with VDOT as a “satisfied” or “very satisfied”: Goal 80%

Annual School Health Conference Check-Out Process

GOAL STATEMENT

Impact Objective: By 2020, reduce the number of negative comments made on the evaluation regarding the check-out process.

Process Objective: By April 2019, revise and implement a new check-out process.

METRICS TO MEASURE SUCCESS

- Include questions on evaluation measuring satisfaction with the check-in check-out process. These responses will allow measuring improvement in check-out process

- Fewer negative comments on future evaluations

Improving Access to Services in the Illinois Breast and Cervical Cancer Program (IBCCP)

GOAL STATEMENT

By November 1st, 2020, 80% of activated IBCCP clients will be scheduled for their first IBCCP service within three business days.

METRICS TO MEASURE SUCCESS

Data will be obtained monthly, from the 1st through the last business day of each month for all eligible activated clients.

Data to be collected:

- Date of activation
- Date the first payable service is scheduled
- Time from the date of activation to the date the first payable service is scheduled measured in business days
- Total clients scheduled within 3 business days
- Percentage of clients scheduled - obtained by taking the total clients scheduled within 3 business days divided by the total number of activated clients.

EHS Digitization: Forms

GOAL STATEMENT

1. Create forms that reduce the total number of forms needed.

2. Create forms that capture data we currently need and/or have real public health value.

3. Create forms with the intent of having them used digitally.

METRICS TO MEASURE SUCCESS

Output – Eliminate forms and sections within forms that are no longer needed.
Reduce number of forms used by 10%

Outcome – Have forms capture current required data and public requests.
Scoring a 4 or better on the reviewer's survey.

Improving Perinatal Hepatitis B (PHB) Post Exposure Prophylaxis

GOAL STATEMENT

By October 2020, the percentage of infants who complete the recommended PHB post-exposure prophylaxis will increase to 70%.

METRICS TO MEASURE SUCCESS

- 70 % of infants born to HBsAG+ mothers will complete the Hepatitis B vaccine series by 6 months of age

- 70 % of infants born to HBsAG+ mothers will complete post-vaccine serology testing (PVST) 1-2 months after their last dose of Hep B vaccine and between the ages of 9-12 months

Adverse Pregnancy Outcomes Reporting System (APORS) Program Face-to Face Contacts

GOAL STATEMENT

FY20: Improve number of APORS children 0-24 months face-to-face contacts within specific intervals.

METRICS TO MEASURE SUCCESS

FY20: Ensure 90% of APORS children 0-24 months of age have completed six face-to-face contacts within specific intervals.

Example

Cook County Department of Public Health

COOK COUNTY HEALTH

WASTE ANALYSIS

PLAN

Wastes/Opportunities

- XDRO registry running since 2013
- Testing sponsored by CDC and/or IDPH
- In service availability as needed

	Least frequent	Most frequent
Most Impact	Rapid turnover of staff No staff devoted to Infection control (IC) Lack of communication between facilities	Access to XDRO registry Lack of awareness of XDRO Gaps IC practices (hand washing, Contact precautions)
Least Impact	Delayed report (lab, hospital, LTACH) No XDRO registry utilization (querying) Duplication of investigation efforts among LHD	Delayed point prevalence surveys (PPS) Delayed contact tracing

ROOT CAUSE ANALYSIS - THE 5 "WHYS"

PLAN

Why *Why* *Why* *Why* *Why*

Lack of awareness of XDRO: XDRO are emergent organisms ➡ deficient understanding of mode of transmission ➡ difficult to identify with standard lab methods ➡ lack of training opportunities

Access to XDRO registry : Lack of awareness ➡ Portal PRA agreement ➡ account deactivated for inactivity ➡ account for specific individual ➡ staff turnover

Gaps in IC practices : Asymptomatic carriage ➡ cases are not recognized ➡ availability of private rooms ➡ inefficient hand hygiene monitoring ➡ challenges implementing contact precautions ➡ deficient environmental cleaning and disinfection

COOK COUNTY HEALTH

Cook County DEPT. of Public Health
Promoting health. Preventing disease. *Protecting you.*

SOLUTIONS IDENTIFIED

PLAN

1. Creation and periodic update of a Listserv of Directors of Nursing (DONs)/Infection Preventionists (IPs) for all LTCFs in our jurisdiction.

2. Encourage LTCFs to create an XDRO account and utilize the registry to check status of new admissions.

3. Prioritized PPS in facilities with higher burden.

4. Survey to determine baseline information about XDRO awareness, XDRO registry utilization and IP practices.

5. Generation of surveillance reports to monitor transmission and success of IC in facilities with higher burden of XDRO.

6. Training for DONs and IPs in Infection Prevention best practices with focus in hand hygiene, transmission-based precautions and environmental cleaning and disinfection.

COOK COUNTY HEALTH

Cook County DEPT. of Public Health
Promoting health. Preventing disease. Protecting you.

PILOT PROJECT TO TEST A SOLUTION

DO

- Design survey to collect information about XDRO awareness, XDRO registry utilization and Infection Control practices delivered to LTCFs (Long Term Acute Care Hospitals (LTACHs), ventilator Skilled Nursing Facilities (vSNFs), Skilled Nursing Facilities (SNFs)).
- Data collected in survey to be analyzed to characterize magnitude of the XDRO awareness, XDRO registry utilization and IC practices.
- Data to be extracted from the XDRO registry analyzed and summarized to create surveillance reports to monitor facilities with higher burden.
- Plan periodic site visits for capacity building and quality improvement to prioritized facilities.
- Offer training opportunities in strategic locations throughout our jurisdiction to LTCFs staff.

ANALYSIS OF PILOT

STUDY

87 (72%) out of our 121 SNF responded to our survey by February 2018

76 (87%) facilities that responded do not have a devoted Infection Preventionist

49 (57%) facilities do not even know what the XDRO registry is, only 12

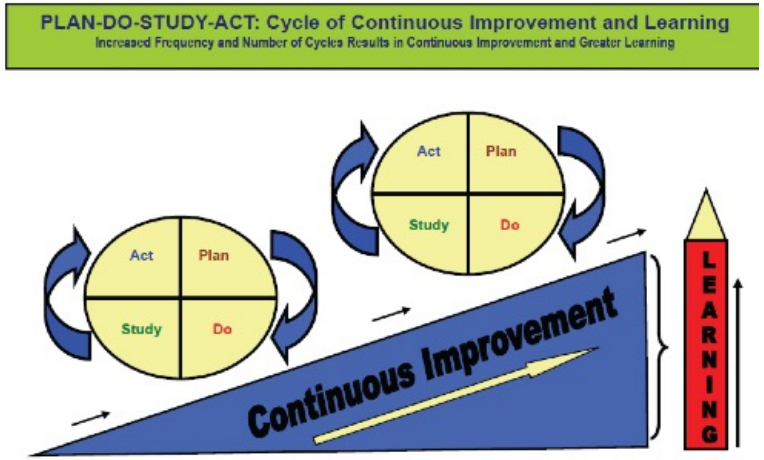
12 (14%) facilities use the XDRO as intended

20 (23%) facilities do not have measures in place to prevent spread of XDROs among patients and staff

CONCLUSION: SUCCESSES & NEXT STEPS

ACT

- Surveillance reports with data extracted from the XDRO registry are now created every six months to monitor 12 facilities with the highest burden.
- Site visits for capacity building and quality improvement are conducted with 12 prioritized facilities, frequency of visits depends in transmission, team capability and resources.
- Round table meetings under Public Health leadership are organized every quarter with experienced presenters and moderators. Attendance varies from 20 to 50 attendees.
- Infection Prevention and Control 101 training modules were developed in partnership with other LHDs and IDPH, this training is offered at corporate offices with mandatory attendance of member facilities. Thus far only 3 of such events have been held with around 30 attendees each.



COOK COUNTY HEALTH

Cook County DEPT. of Public Health
Promoting health. Preventing disease. Protecting you.