

## **PDCA** STORYBOARD

Division of Disease Prevention

SECTION: Communicable Disease

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PROJECT TITLE: Improvement of case completion rates in STD program

DATES OF PROJECT:

**DIVISION/OFFICE:** 

## **PLAN**

Identify an opportunity and Plan for Improvement

## 1. Getting Started

Kane County Health Department (KCHD) Communicable Disease (CD) staff recognized a large backlog of open Human Immunodeficiency Virus (HIV) cases (more than 100 cases in the HIV program alone) and as well a large number of Chlamvdia and Gonorrhea cases not completed on time (more that 200 Chlamydia cases alone reported each month). In August 2011, the Illinois Department of Public Health recommended (IDPH) a new management of Gonorrhea cases including counseling.

The Sexually Transmitted Disease (STD) program was transferred to the CD section in November 2010, following the reorganization of the Health Department. The HIV program was transferred to the CD program in March 2011. Three staff members were designated as STD/HIV surveillance specialists. Per the Illinois Department Public Health (IDPH). surveillance specialists who counsel clients should complete the CDC STD Employee Development Guide (EDG) and attend a HIV/STD Prevention Counselor Workshop.

The process to close an STD/HIV case has been cumbersome, and the HIV backlog cases or the Gonorrhea counseling cases seemed overwhelming to tackle with limited time and no extra staff. The group recognized that if the systems were improved in STD and CD programs, resources could be devoted to Gonorrhea counseling in STD program and HIV program activities.

#### 2. Assemble the Team

The team for this project included the Assistant Director for Communicable Disease. and three of Communicable Disease team members (One Epidemiologist, two Disease Intervention Specialists).

Initial Aim Statement: By December 31, 2011, the average timeline of Chlamydia cases completion will be reduced by 10 days in comparison with prior August 2011.

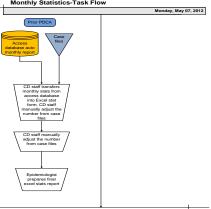
## 3. Examine the Current Approach

a. To allow staff time to work on counseling of Gonorrhea cases the workgroup developed flow chart of the current state of how cases in the STD program are investigated.

As a result of the flow chart development, it was recognized that there were several duplicative and timeconsuming steps, especially with case completion chlamydia for and gonorrhea.

b. The staff also analyzed CD program stats monthly collection data.

KCHD-Communicable Disease Program Monthly Statistics-Task Flow



The group identified that by utilizing **INEDSS** electronic automated reporting, CD staff time will be better utilized in STD/HIV case investigation and as well in Quality Assurance for monthly stats.

#### 4. Identify Potential Solutions

The group then met and, utilizing brainstorming identified potential solutions:

- Eliminate STD separate morbidity form, and use INEDSS printouts to indicate to providers exactly what information is needed.
- Eliminate time spent from a staff to collect CD monthly stats by replacing it with an INEDSS auto report.

## 5. Develop an Improvement Theory

The workgroup theorized that:

- By using printouts directly from INEDSS, the form could be marked to indicate only the needed information, which would be less overwhelming for providers, and would not require staff to complete the morbidity form. It was theorized that by doing so, it would save time for CD staff in preparation and decrease the amount of time waiting for providers to return the data to KCHD.
- Using the INEDSS auto monthly stats report would not only improve the accuracy in CD monthly stats, but also would eliminate duplication in the process.

#### DO

## Test the Theory for Improvement

#### 6. Test the Theory

The intervention began on August 15, 2011. The total number of monthly Chlamydia cases was tracked, along with the total number of days needed to complete each case.

The monthly CD statistics were collected directly from INEDSS by the Epidemiologist and the data were compared with the previous process

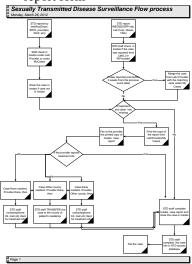
which involved another CD staff and some manual data collection. The new data collection process was more accurate and efficient, therefore utilizing more staff time for STD/HIV case investigation.

#### **CHECK**

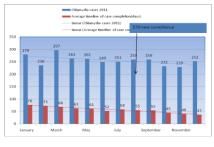
Use Data to Study Results of the Test

#### 7. Check the Results

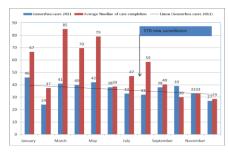
- a. In the STD program, through utilization of the new provider report from INEDSS, the workgroup was able to:
  - Eliminate development and dissemination of morbidity report form

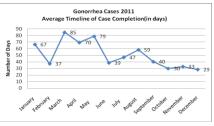


- Spend less time requesting information from providers (who respond more rapidly and more completely to INEDSS printouts).
- Allow time for Gonorrhea cases counseling.





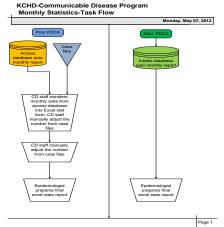




b. By replacing INEDSS auto monthly CD stats reports, the workgroup was able to:

- Eliminate staff time for collecting monthly statistics
- Improve the accuracy of monthly stats data

CD stats collection flow process after the new streamlined system.



c. In addition, an audit completed by the Assistant Director for Communicable Disease revealed a data collection error in the INEDSS system (the reporting mechanism for the baseline data), where case closure dates were not being captured for the report, incorrectly elevating the number of unclosed cases. This error has been reported to INEDSS, who is working on a correction. It is hoped that this will also improve case completion rates, or at the least show more accurate data.

Conclusion: After implementation of the new process, data showed that 100% of HIV backlog cases were able to be completed by December 31, 2011 because staff time was designated for HIV cases.

timeline The Chlamydia case completion results not only matched the theory for improvement, but the results exceeded the Aim Statement's projection. The average timeline of Chlamydia case completion reduced from 55 days in August 2011 to 37 days in December 2011. The average timeline for closing Gonorrhea cases was reduced as well even with time the staff spent for counseling. In addition, because of the new process, more staff time could be devoted to case closures for all CD/STD/HIV 2011 cases, and the deadline of February 2012 for closure of all 2011 cases was met by the end of January 2012.

#### ACT

Standardize the Improvement and Establish Future Plans

# 8. Standardize the Improvement or Develop New Theory

The Communicable Disease workgroup believes that this new system has simplified the process for them, as well as increased the engagement and participation on the part of the providers. Staff time can now be Gonorrhea focused on case management/counseling and closure of Chlamydia and Gonorrhea cases on time instead of following up with providers to obtain information necessary to close the case or time spent for collection of monthly CD stats. It is also hoped that the recommended (pending) improvement to the INEDSS system will be of benefit to other local health departments in their tracking and monitoring of STD cases in their jurisdiction.

The workgroup will continue to monitor the results of this process, to assure that the process continues to flow smoothly.

#### 9. Establish Future Plans

The KCHD will continue to sustain their efforts for additional improvement CD/STD/HIV program. Communicating project's the accomplishment in the KCHD all staff meeting and sharing at the Northern Consortium Public Health Committee (NIPHC) STI/HIV meeting was very important to the team. All accomplishments have been reported in detail to the rest of the CD team and the leadership group.

The program will continue with CD/STD/HIV audit (quarterly) and will review the data to determine focus area for improvement.