



Quality Improvement in Public Health Example: Early Syphilis Detection

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The tools and techniques of Quality Improvement (QI) can produce rapid results in improved operating efficiency. Properly applied, QI allows leaders and employees to choose an improvement plan which integrates smoothly with existing priorities. Effective use of data gathering and analysis, leadership, and communication tools maintain accountability as improvement tasks are conducted. Existing resources are coordinated with other priorities to maximize outcomes while eliminating waste. Proper documentation and performance management techniques ensure alignment with strategic objectives and transparency of operations.

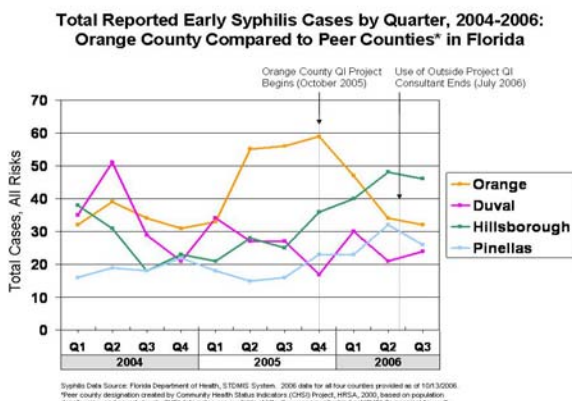
Between 2004 and 2005, the Orange County Health Department (OCHD) in Florida experienced a 45% increase in new early syphilis cases in its jurisdiction, from 136 cases to 195 cases per year. Surveillance data also showed significant increases in early syphilis over the previous four years. If not controlled, early syphilis could have become a larger epidemic, costing the community hundreds of thousands of dollars in health-related costs for early, late, and congenital syphilis cases in addition to potential costs resulting from syphilis-associated human immunodeficiency virus (HIV) transmission.

The QI team involved Disease Intervention Specialists (DIS) to improve the process for blood draws and instituted a tracking and measurement system to ensure that the department met federal standards for random testing of at-risk populations. The figures below show two run charts used by the QI team to compare the number of early syphilis cases with other Florida counties and conformance to standards for monthly blood draws.

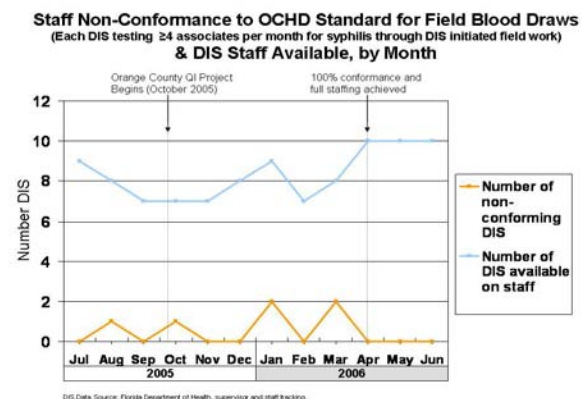
Accomplishments of this initiative include the following:

- By the end of the nine-month project, new early syphilis cases leveled off and began to decline. During the same period, syphilis increased in Florida peer counties.
- 100% of DIS conformed to minimum blood draw standards for the last two months.
- Cluster index above CDC standard was achieved for four consecutive quarters and was attributed by team members to better interviewing skills.
- Contact index target was improved but target not met, needing additional action.

Indicator #1: Trend is Optimistic
Early Syphilis Cases



Indicator #2: Non-conformance Eliminated
DIS Field Blood Draws



Refer to [The Public Health Quality Improvement Handbook](#), Chapter 24, for more information.