

Point of Care Testing Expansion in Public Health; One County's Experience



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Mission: We produce and share accurate and timely analytical data on personal and environmental health using cost-effective services.

Vision: We are a vital, dependable and integral component of the public health team in Marion County, Indiana supporting the mission of the Marion County Public

Increase QUALITY and QUANTITY of Public Health Testing

The Public Health Laboratory manages waived and moderate complexity testing in a similar manner. Competency is required initially after training, 6 months after and yearly after that as long as the person does the testing. For the POC testing that we currently manage (HIV 1/2-oral, UA pregnancy and urine chemistries, hemoglobin) it takes place on the first Wednesday of the month in a fixed location. Supervisors register their staff before their competency anniversary on the department intranet (Resource Central).

It is the Laboratory's responsibility to make sure the testing personnel know how to perform and record testing that is done. Furthermore the Lab audits the service location and practice records to make sure testing was done in accordance with guidelines. If gaps in skills or actions are observed, then the Lab makes sure training and resources are made available to correct deficiencies.

We don't currently manage glucose, cholesterol or A1c, and so no competency testing is being done for those tests.

2014 Test Tally and Training

Test	In Lab		Outside Lab	
	Count	Personnel trained	Count (abnormal*)	Personnel trained**
HIV screening	12,020	7	2948(21)	122
Urinalysis	905/10860 ^{&}		390/4680 ^{&} (264)	
Pregnancy	2004		127(7)	
Total test count	14,929		3501	

*Previously may not have been detected, because testing did not occur.

**Includes WIC staff that only provide hemoglobin testing, which is not included in the test tally totals.

[&]One test yields 12 results.

Abstract

Background

The Marion Co. Public Health Department Laboratory increased the quality and quantity of point of care (POCT) in health department clinics in 5 years. This mirrors a national trend to decentralize clinical testing, which has the potential to improve healthcare delivery, and public health in particular¹. Decentralized testing along with improved connectivity of information and more robust testing devices also supports a greater responsiveness to emergency response essential for public health².

Methods

We made the improvements through continuous quality improvement projects, Lean management practices and without increased staffing. Over 18-24 months, and through the Clinical Manager and Quality Manager staff turnover we implemented CLSI standards and put in to place CMS suggestions³ to assure the accuracy and reliability of POCT (waived) testing through implementation of structured staff training and competency assessment. Successes with this approach and expansion of the WIC and Refugee/Foreign Born (RFB) programs resulted in increased need for the expanded lab support of POCT.

Results

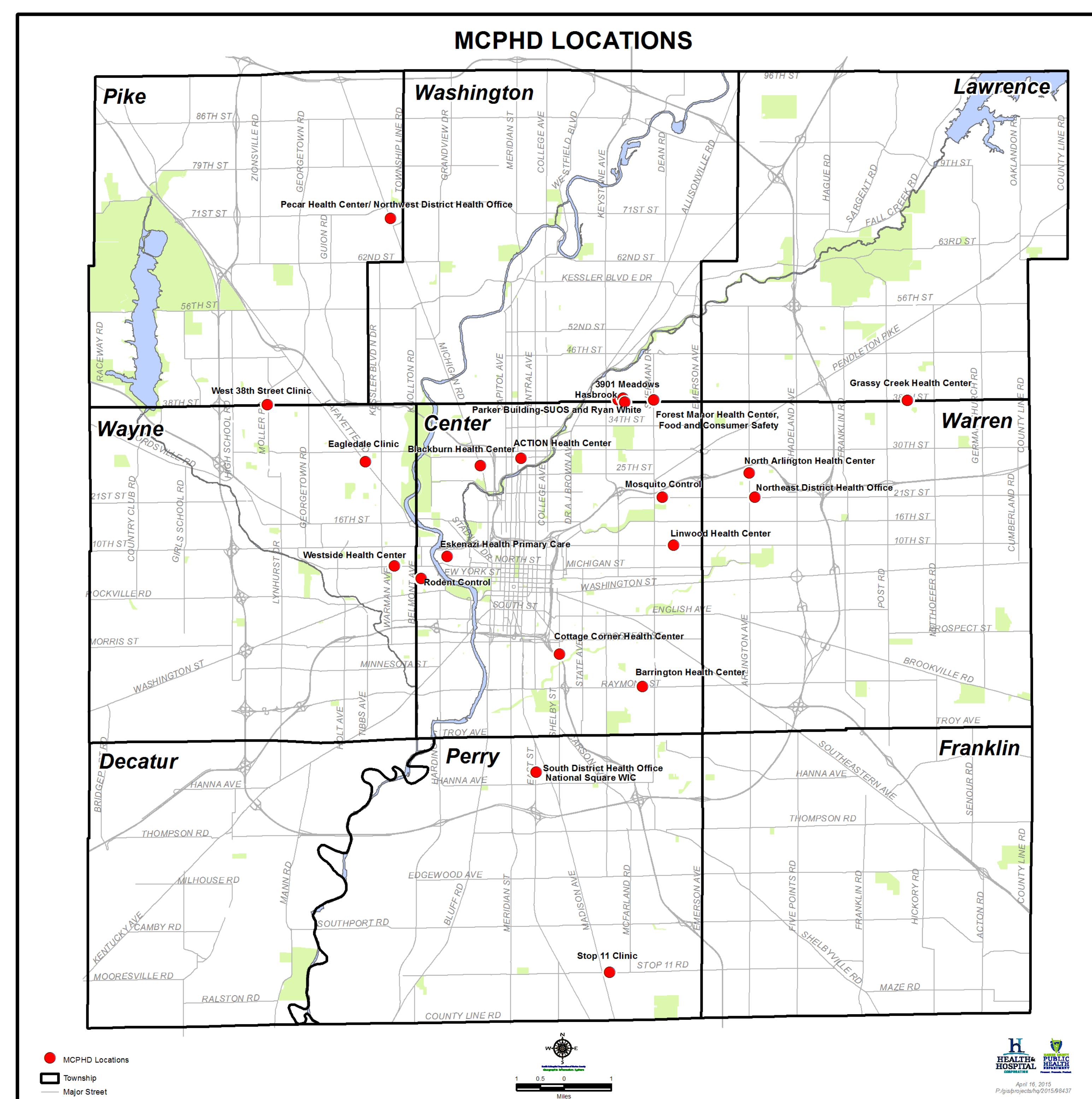
The number of WIC sites grew from 12 to 13, and the RFB programs began to offer POCT, including HIV screening, urinalysis and urine pregnancy tests. Substance Use Outreach Services department also began rapid HIV screening. Only the School-Based Clinic sites contracted from 4 to 1 sites in the same time. Overall the number of non-lab personnel using POCT rose in the past 3 years from 77 to 122, and the test count increased from 1 to 4, increasing the number and complexity of training and competency assessment materials needed for that training. By 2014 a large shift had occurred, nearly a quarter (23%) of the results from waived tests were produced outside the lab by staff who were trained and had competency assessed by the lab QA program. Improvement continues. In 2014 we created the Laboratory Support Division, managed by the QA Manager to better serve not only POCT, but also in-lab testing QA.

Conclusion

The Lab working together with clinical departments has been able to make great strides in improving the amount and quality of clinical testing that occurs near the public health client. This allows rapid clinical decision-making in a single patient visit, minimizing the impact of losing patients to follow-up while waiting for test results to be returned; a particular problem in economic challenge areas. This POCT-QI program has empowered more health department employees to gain competency in POCT. This in turn results in improving Analytical/Assessment Skills and Public Health Sciences Skills across the health department.

Training Registration

POCT Locations



Program Goals

Testing personnel for all point of care clinical tests (at health fairs and other locations) need to:

- ⇒ Collect specimens appropriately;
- ⇒ Label and store specimens appropriately;
- ⇒ Understand and then follow the manufacturer's instructions for each test performed;
- ⇒ Know how to perform the testing, including:
- ⇒ Collect a proper specimen
- ⇒ Positively identify the patient and specimen
- ⇒ Preserve the specimen appropriately (if applicable)
- ⇒ Understand and adhere to the transport requirements
- ⇒ Check for extreme changes in such things as humidity, temperature, or lighting; as these may affect test results.
- ⇒ Know how to document and communicate the test results, and enter the result in to the EMR (Insight);
- ⇒ Are able to identify inaccurate results or test system failures.

References

1. Trends Biotechnol. 2002 Jun;20(6):269-70.
2. Hale and Kost. Pieces of the POCT puzzle Point-of-care testing: changing the way patient care is delivered. Medical Laboratory Observer. June 2009. <http://www.mlo-online.com/articles/200906/pieces-of-the-poct-puzzle-point-of-care-testing-changing-the-way-patient-care-is-delivered.php>. Accessed 2/23/2015.
3. CMS.gov. Brochure #6 - How to Obtain a CLIA Certificate of Waiver. <http://www.cms.gov/Regulations-and-Guidance/Legislation/CLIA/downloads/HowObtainCertificateofWaiver.pdf>. Accessed on 2/23/2015.