Today’s integrated delivery networks (IDNs) all have one thing in common: they are in a constant state of transformation. From mergers and acquisitions to rapidly evolving quality standards and reimbursement models, every day is a struggle to stay ahead of the curve.

In addition to external pressures, IDNs are also facing mounting internal challenges. How should processes and protocols be standardized across the health system? Does the infrastructure of one institution integrate with another? What is the best way to coordinate patient care throughout the entire continuum?

As new challenges arise, IDNs are forced to adapt. This is a fact the CHI Franciscan Health Network knows all too well—especially across its 6 emergency departments (EDs), the door to nearly 50% of CHI Franciscan Health Network’s hospital admissions.

But these truly sick patients find themselves getting lost in the shuffle of overcrowded waiting rooms. The overuse of the ED is responsible for $38 billion in wasteful spending each year.¹

Faced with mounting pressure to move more patients through the ED faster, the Regional ED Medical Director began looking for ways to create efficiencies.

The results shown here are specific to one health care facility and may differ from those achieved by other institutions.
THE NEED FOR CHANGE
The Regional ED Medical Director was facing some major problems across his 6 EDs:
• ED census was increasing
• Patient wait times were increasing
• 6% of patients left without being seen (LWBS)
• Less time was being spent with each patient
• Delayed receipt of laboratory results was delaying clinical decisions
• Patient satisfaction scores were dropping

Improving these issues depended on identifying areas of concern to create operational efficiencies.

But, solving these problems could not happen in a silo and would require in-depth collaboration across multiple departments. A cross-functional team was assembled consisting of:
• Executive Director of Ancillary Services
• Regional ED Medical Director
• Regional Laboratory Services Medical Director
• Regional Regulatory Manager of Laboratory Services
• Nurse Managers
• ED Charge Nurse
• ED Pharmacy Manager

INSIGHT & OPPORTUNITY
This insight positioned diagnostic testing as a key area of opportunity to find efficiencies. After performing a rapid process improvement (RPI) analysis, the CHI Franciscan team found that the pre-analytical stage including blood draw and sample transport was a major bottleneck.

95% OF PATIENTS THAT ENTER THE FRANCISCAN ED REQUIRE SOME FORM OF DIAGNOSTIC TESTING.

The current door-to-result time for 95% of tests performed in the central lab was 37 minutes, but the team knew it needed to be better. The central lab was as lean as it could be, so if they were going to find a solution, it was time to look outside the lab. In order to find the best solution, the Regional ED Medical Director partnered with the Executive Director of Ancillary Services and the ED charge nurse.

“I felt we were already as lean as we could be, and there was just no way to physically reduce our turnaround times any further. We were being asked to shave off 12 minutes and the technology in the lab couldn’t physically go any faster. That’s when we really started exploring point-of-care testing.”

EXECUTIVE DIRECTOR OF ANCILLARY SERVICES

OVERCOMING BARRIERS
After agreeing that POC testing was the solution CHI Franciscan Health Network needed, the team realized there would be some barriers to overcome. Since IDNs are in a constant state of transformation, teams can often be resistant to more change. In addition, it is commonplace for departments to remain siloed with poor communication between the lab and ED.

To overcome these obstacles, the team took an approach consisting of 3 phases. This would guarantee buy-in from all necessary stakeholders and ensure adequate change management across the organization.
To get the initiative off the ground, there were 3 major milestones that needed to be accomplished.

**GETTING THE LAB ON BOARD**

The first milestone was achieving internal alignment between the lab and ED. The lab had concerns about the quality and accuracy of POC testing and was hesitant to give up control. It was imperative to demonstrate that POC delivered not only results, but quality results.

Lab staff only began to accept the idea when they realized the greater impact POC testing could provide, such as the ability to quickly discharge patients not in need of ED care, thus freeing resources to spend more time with those that required more time and attention. Once on board, the lab insisted they would take a leadership role in managing training, inventory monitoring, and competency assessments to safeguard quality standards.

“Point-of-care testing had failed in the past. We initially tried to pressure the lab to get on board. And that didn’t work. At that time, we recognized it would require cross-department collaboration. We also believed it had the potential to impact our entire network of care.”

REGIONAL ED MEDICAL DIRECTOR

**CREATING A PROJECT CHARTER**

The next milestone was to ensure everyone was on the same page and working toward a unified goal. This required the creation of a Project Charter. Crafting the charter required input from stakeholders across the organization. This included the Executive Director of Ancillary Services, the Regional ED Medical Director, the Regional Laboratory Services Medical Director, and the ED Charge Nurse. Together this team put together a document backed by clear, measurable data. Upon development of the charter, the full team was aligned on the path forward.

**CRAFTING A PROJECT CHARTER**

A Project Charter should be thorough in detailing the plans of the project. The CHI Franciscan POC testing charter included the following:

**THE HYPOTHESIS:**
Shortened door-to-result times for key diagnostic tests would translate to a reduction in ED LOS and disposition times for patients with chief complaints related to suspected acute coronary syndrome, abdominal pain, fever, neuro/transient ischemic attack, hemorrhage, and abnormal labs

**PROGRAM PARAMETERS:**
6 facilities participating in a Performance Assurance Program with the use of 5 i-STAT cartridges: troponin, CHEM8+, CG4+, PT/INR, and BNP

**KEY PERFORMANCE INDICATORS:**
Results to be benchmarked against central lab (prior 24 months) across 6 facilities

**DELIVERABLES:**
6 emergent protocols aligned to chief complaints
GETTING SENIOR LEADERSHIP SIGNOFF
The CHI Franciscan team knew getting buy-in from hospital leadership was essential and needed to be done early in the process. Once the charter was finalized, they were able to approach the C-suite with a formalized plan.

By demonstrating how i-STAT would improve outcomes, they got leadership to buy in. However, it wasn’t as easy to secure the financial investment. Implementing POC testing would mean a rise in testing costs in addition to the initial investment in capital.

Despite potential pitfalls, the team succeeded for 3 key reasons:

1. **They encouraged the C-suite to think holistically**
   While testing costs on a test per test basis would rise, the ED would realize revenue with the added capacity to serve more patients.

2. **They presented a bigger picture of how the initiative could impact the entire IDN**
   Standardized protocols throughout the IDN would streamline processes and increase cross-departmental collaboration.

3. **They took a unified, collaborative approach that aligned all departments**
   By making it more than just a lab initiative, the other departments were involved and held jointly accountable for the program’s success.

PHASE 2: ROLLING OUT THE PILOT

For a successful roll-out, the Franciscan team needed to start with a strong foundation. This meant solidifying the data, workflow, and knowledge base throughout the institution. The following steps were essential to laying the groundwork for launch:

| Establish Data | • Ensure everything is measurable  
|                | • Align metrics with key performance indicators (KPIs) outlined in charter  
|                | • Record baseline metrics for comparison before, during, and after launch  
| Redefine Workflows | • Assess current processes  
|                   | • Determine future needs and redesign accordingly (done with the help of Abbott POC)  
|                   | • Create order sets  
|                   | • Establish protocols with EPIC  
| Spread Knowledge | • Spread awareness early  
|                  | • Explain the reasons behind the change  
|                 | • Reinforce rationale with each department  
|               | • Ensure the larger team is on board with the initiative  

“It took a lot of discussion to get nurses on board with the i-STAT, but now you couldn’t pry it out of our hands. A nurse doesn’t go into a room without i-STAT when we get an emergency. There’s always somebody coming in with 2 i-STATs.”

ED CHARGE NURSE
**TRAINING AND EDUCATION**

The Franciscan team quickly learned that to combat hesitation and pushback, proper training and education was critical. Abbott Point of Care assisted the team at every step to ensure proper training, familiarity, and a consistent comfort level across all departments.

The Abbott Point of Care team also helped create “super users” who were able to help train and assist their fellow team members. But the education didn’t stop there—efforts went beyond just the i-STAT System to include proper blood draw techniques. Led by pathologists, blood draw and documentation processes were updated and communicated to the rest of the team.

In addition to physical training, clinical awareness initiatives were performed with hospitalists, cardiologists, ED providers, lab personnel, and nurses. This in-depth education helped nurses feel prepared to handle their new tasks and eased the minds of laboratorians who still had lingering quality concerns.

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**LAUNCH AND BEYOND**

Launching a POC testing program was a major accomplishment. But the team at CHI Franciscan knew that the long-term success of their initiative relied on continued refinement in 4 key areas.

| COMMITMENT | • A person or team of people need to continue leading the charge • Routinely educate staff on an individual level • Hold team members personally accountable • Look for ways to overcome obstacles |
| REFINEMENT | • Identify and improve errors or problems as they arise • Collaborate with staff and use their knowledge as a resource to identify areas of improvement • Don't expect all problems to be rectified immediately |
| MONITORING | • Routinely pull metrics • Measure compliance • Let positive metrics validate your efforts and refine based on poor metrics |
| FEEDBACK | • Share metrics with the larger team • Share success stories with the key stakeholders • Share learnings and best practices |

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**PHASE 3: ED NETWORK ROLLOUT**

With the completion of a successful launch, the team had learnings that could be carried into their broader network rollout. However, it was critically important to treat the subsequent launches with just as much rigor.

**FINDING SUCCESS WITH AMBASSADORS**

The Franciscan team leveraged members who were part of the pilot launch to aid in further rollouts. These team members proved to be invaluable resources in subsequent launches.

Ambassadors were deployed to other ED sites and shared their experience to:
• Aid in awareness and training
• Help overcome skepticism and concerns
• Reinforce value and positive program impact
• Provide confidence and trust in POC testing
FINDING SUCCESS IN SUBSEQUENT LAUNCHES: KEY LEARNINGS FROM THE CHI FRANCISCAN TEAM

REPLICATE THE FOUNDATIONAL PROCESS
Take workflow and operational learnings from the pilot and determine if they apply in other cases. But keep in mind, teams and processes may be vastly different across the network and you will need to adjust accordingly.

REPLICATE TRAINING AND EDUCATION
It's imperative that you spend as much time and effort educating teams in each ED. Be present and on site as much as possible leading up to the launch. Teams at each site will likely have the same hesitations and concerns as the pilot team. Work with your Abbott Point of Care rep to spread awareness and build a knowledge base prior to the launch.

REPLICATE THE POST-LAUNCH STEPS
Each launch will have its own set of triumphs and challenges. It’s critical to monitor and refine on an individual basis. However, learnings from one may be applied to others. Keep the lines of communication open to share what works and what doesn’t.

MANAGE EXPECTATIONS
As with any new program, each launch will take time. Let anomalies in the metrics guide you to areas that need attention and rely on staff feedback to gauge comfort and satisfaction.

“I think 45 days is needed initially [for implementation], because you’re spending 2 weeks tweaking the process and then 30 days to stabilize. Thirty days of following the process as defined must be a non-negotiable. Then, you must move intentionally to each subsequent hospital with the same focus and resources available at each—don’t spread yourself or your resources too thin.”
EXECUTIVE DIRECTOR OF ANCILLARY SERVICES

THE PROOF IS IN THE POC
After implementing i-STAT at 1 ED, the POC testing initiative was successfully rolled out in 6 EDs across the network and continues to drive measurable results and impact ED capacity.

- **27 minute** REDUCTION IN AVERAGE LOS
- **72%** REDUCTION IN DOOR-TO-BASIC METABOLIC PANEL RESULT
- **65%** REDUCTION IN DOOR-TO-TROPOIN RESULT
- **68%** REDUCTION IN DOOR-TO-PT/INR RESULT
- **2%** REDUCTION IN LWBS
- **10%** INCREASE IN DISCHARGES WITH SERIAL TROPOIN

“Not just the lab and the ED. I watch all the departments, the NICU, the lab, the critical care, and the collaborative mentality or culture has expanded throughout the system. I think you’ve changed the system.”
EXECUTIVE DIRECTOR OF ANCILLARY SERVICES
BEYOND POC TESTING: THE IMPACT ON CULTURE

The impact of the POC testing within the CHI Franciscan network was felt far beyond the metrics. The intense collaboration needed to achieve success has left a lasting cultural impact throughout the organization.

POC TESTING IN ACTION

While everyone fully supported and embraced the new POC testing protocol, its benefit was truly proven one winter morning.

In December 2017, a train crash in Seattle resulted in dozens of people needing emergency care. CHI Franciscan found itself on the front lines of a disaster. With the use of i-STAT and a streamlined POC testing protocol, they were able to stratify patients to clear the waiting room and provide care to people in critical need.

“We were expecting 75 people in the ED. Having this process in place allowed us to help clear the waiting room and create the capacity we needed.”

CONCLUSION

The numbers are clear. This POC testing initiative delivered on key metrics that were highly important to the IDN. However, a closer look demonstrates that the benefits go far beyond wait times and throughput.

The team at CHI Franciscan now has a better culture thanks to greater collaboration and a deeper understanding of the big picture. The network has adopted a standardized approach to POC testing that extends outside the ED. They have demonstrated that with strong people and a strong plan, they can stay on the cutting edge of care to better serve their patients.


Case study data obtained from Franciscan Health Network.