DEDICATED POINT-OF-CARE TESTING IMPROVES PATIENT THROUGHPUT AND REDUCES ADMISSION RATES*

• 130,000 ED visits per year in a single hospital with two separate sites
• 5 ED consultants supported by a team of emergency Nurse Practitioners
• The most common test using the i-STAT® System is CHEM8+, for assessing renal function

* The information presented here is based on an actual facility, but the institution has requested anonymity in this promotional material. The results described here are specific to one healthcare facility and may differ from those achieved by other institutions.
BACKGROUND

The ED of this hospital is part of one of the top performing Trusts in the UK. As it approaches its 50th anniversary, it continues to modernise and invest in its health services to build on its strong reputation.

The primary challenge faced was slow patient throughput leading to overcrowding, delayed clinical decision-making and low staff morale.

GOALS

The overall goal was to speed up patient assessment and reduce the amount of time the patient spent in the ED. In order to achieve this, point-of-care testing protocol via the Emergency Department Intervention Team (EDIT) was introduced. This protocol included the use of i-STAT System CHEM8+ (basic metabolic panel) replacing the traditional blood testing by remote laboratory.

Specific goals were to:

- increase patient throughput
- improve clinical efficiency
- reduce re-attendance and admission rates

BUILDING THE CONFIDENCE TO CHANGE

Prior to implementing the i-STAT System in the ED, a performance verification was undertaken by the lab. This demonstrated lab quality results and ensured that the biochemistry department were happy with the performance of the i-STAT System prior to go-live.
POSITIVE IMPACT: Integration of the i-STAT® System in the patient care process

Incorporating i-STAT System CHEM8+ into a consultant-driven POC testing protocol has contributed to important and measurable advancements in department efficiency and improved clinical decision making and patient care.

Patient registration

Assessment by ED intervention team
- Consultant and senior nurse at the front door
- Blood taking at the very beginning of the patient’s journey

Diagnostic testing
Based on symptomatology:
- Nurse draws blood for analysis
- i-STAT System CHEM8+ testing conducted at bedside
- CHEM8+ included in all emergent protocols

Clinical intervention
The process improvements that were implemented helped the institution improve patient throughput, improve clinical efficiency, reduce re-attendance and admission rates, and improve staff morale.

UP TO 95%
QUICKER IN CLINICAL DECISION MAKING WITH i-STAT PROTOCOL
## POSITIVE IMPACT: Integration of the i-STAT® System - Results

<table>
<thead>
<tr>
<th>GOALS</th>
<th>RESULTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce the time patients spend in ED</td>
<td>46% reduction</td>
</tr>
<tr>
<td>Before: 2 hr 20 min</td>
<td>After: 1 hr 15 min</td>
</tr>
<tr>
<td>Reduce the number of patients in the ED at any one time</td>
<td>50% reduction</td>
</tr>
<tr>
<td>Before: 10 patients</td>
<td>After: 5 patients</td>
</tr>
<tr>
<td>Accelerate clinical decision making by reducing turnaround times for critical tests</td>
<td>95% reduction</td>
</tr>
<tr>
<td>Before: 63 min</td>
<td>After: 3 min</td>
</tr>
<tr>
<td>Increase the proportion of ED population processed in 30 mins</td>
<td>233% increase</td>
</tr>
<tr>
<td>Before: 3%</td>
<td>After: 10%</td>
</tr>
<tr>
<td>Reduce the 7-day re-attendance rate</td>
<td>18% reduction</td>
</tr>
<tr>
<td>Before: 11%</td>
<td>After: 9%</td>
</tr>
<tr>
<td>Reduce the number of admissions from the ED</td>
<td>14% reduction</td>
</tr>
<tr>
<td>Before: 22%</td>
<td>After: 19%</td>
</tr>
</tbody>
</table>

“As a senior ED clinician, the biggest improvement in the care that we delivered was in the turnaround time from the laboratories. I was able to make a decision based on clinical information within three minutes using the i-STAT System, compared to 63 minutes with our remote laboratory. These improvements have led to great excitement amongst our staff, primarily around looking at the additional tests we can add to our POC testing, such as troponin and BNP, that will improve the care of even more patients.”

**CHOOSE TRANSFORMATION™**

For in vitro diagnostics use only.

© Abbott Point of Care Inc. | Abbott House, Vanwall Business Park, Vanwall Rd, Maidenhead, Berkshire SL6 4XF | Tel: +44(0) 1628 589971 | www.pointofcare.abbott

i-STAT is a registered trademark of the Abbott Group of Companies in various jurisdictions.

032092 REV C 0117