

Harnessing **navify**<sup>®</sup> Analytics for Core Lab to drive continuous improvement and monitor quality indicators

Bioliance has implemented navify
Analytics to enable comprehensive
quality indicator monitoring, measuring
both laboratory activity and performance.
This tool not only provides valuable
insights into the lab's operations but also
identifies improvement opportunities to
optimize the achieved results



- Private laboratory integrated into PolyClinique
- 430 beds
- 219,700 unique samples monthly
- 33 instruments (under MPL scope)
- Accredited NF ISO15189

### **Situation**

In order to effectively track quality indicators, the IT team faced the arduous task of monthly data extraction (from MPL and the LIS) and manual updates to tables before disseminating them to the respective teams.

This time-consuming process only focused on the essential indicators, limiting the scope to contractual obligations rather than encompassing the implementation of action plans or identifying the root causes behind any potential performance decline.

### **Solution**

With the utilization of **navify**® Analytics, we have revolutionized our approach by configuring tailored dashboards for every specific use case discussed during our routine interactions with the laboratory teams. These dashboards are conveniently shared on a monthly basis, providing invaluable support to all laboratory stakeholders.

Whenever an opportunity for improvement arises, our teams can now dive into these customized dashboards to explore potential action plans in greater detail and closely monitor their evolution over time.





### Contract Review: Monthly statistics for the **Emergency Department CMSI**

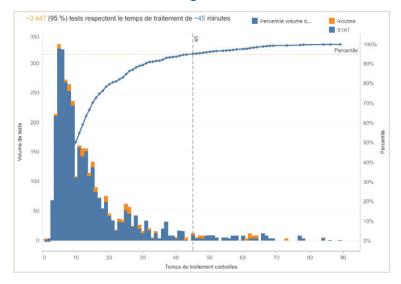
• To ensure efficient operations, we have introduced an indicator that tracks the processing time for tubes received from our emergency departments.

Illustrated in the provided example, our dashboard enables us to conduct monthly evaluations based on the predefined criteria outlined in our contracts with healthcare facilities. By doing so, we substantiate our dedication to delivering tubes within a 60-minute timeframe, reinforcing our commitment to timely and reliable service.

# Dr. Christophe Richard

Medical Biologist

### **Distribution of Processing Time**



"Monthly verification of our time commitments is now streamlined, resulting in a substantial reduction in preparation time."

## Continuous performance improvement plan

• During our assessment of the blood gas turnaround time indicator, we identified delays that surpassed the laboratory's set objectives. Upon analyzing the sequential steps involved, it became apparent that the result validation process experienced a significant delay (46 minutes) following test transportation and analysis. To rectify this issue, we proactively implemented an alert system that promptly notifies the biologist whenever a result awaits validation.



The implementation of this alert system yielded remarkable results, as we successfully reduced the waiting time by an impressive 60%. This improvement not only ensures timely validation but also enhances overall efficiency and workflow in our laboratory operations.

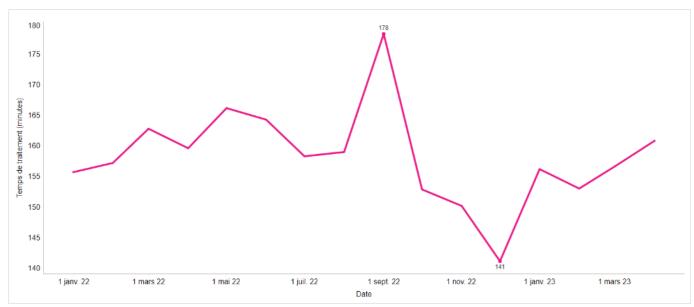
### **Expertise Rule Control**

• We closely monitor the retesting rate to continually reassess our expertise rules. Additionally, we conduct annual reviews of the self-validation rules to ensure their ongoing relevance and alignment with current industry standards.

It has come to our attention that the manual validation rate in hemostasis significantly exceeded the team's expectations, with nearly all tests being manually validated. This high rate can be attributed to the absence of a defined automatic validation flowchart, collaboratively developed with the biologists from the hemostasis working group.

"In case a tube surpasses the target threshold, we have the capability to promptly identify and investigate the cause of the delay, allowing us to take necessary actions to rectify the situation."

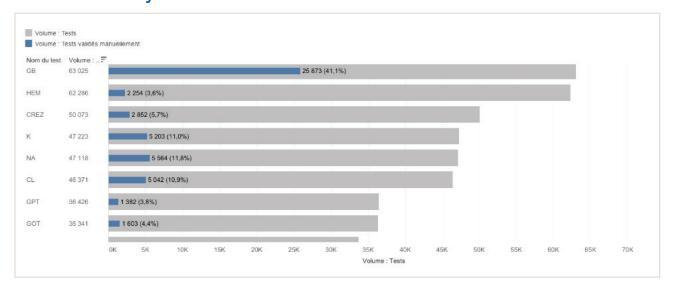
### **Average Processing Time Trend by Segment**





• To address this issue, we decided to automate the validation process for a portion of these tests once the defined rule is established. This strategic approach will optimize efficiency, reduce manual workload, and enhance overall quality assurance in our hemostasis operations.

### **Volume of Manually Validated Tests**



### Conclusion

**navify**® Analytics for Core Lab has brought about a remarkable reduction in data extraction time, allowing us to conduct a more thorough analysis of the root causes and achieve precise interpretation of the results.

"By analyzing our retrospective data, we can regularly update expertise rules to align with the evolving demands of our operations."

