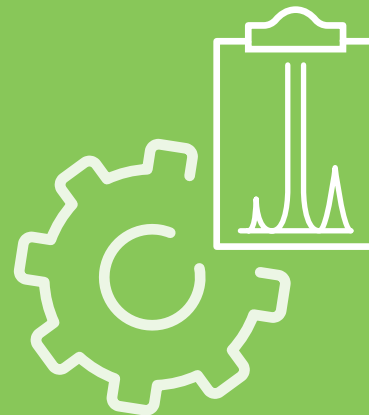


A1c Efficiency and Productivity

A Case Study



Introduction

Workflow analysis of six A1c analyzers was performed by reviewing the instructions for use and operation manuals of the instrumentation. Using a hypothetical workload of 2,000 A1c samples, the analyzers were evaluated for sample throughput and the operator interventions required to process the samples. This comparative model provides insight into the relative efficiency and productivity of the lab using each instrument.

The Challenge

Clinical labs are under pressure to increase efficiency and reduce waste. Selecting an A1c analyzer that improves productivity is key.

But how can labs know which A1c analyzers are the most efficient?

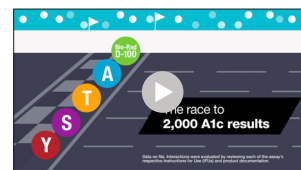
By comparing the number of operator interventions required to complete 2,000 A1c tests, labs can get a clearer picture of how an analyzer will impact their lab staff on a daily basis.

The Solution

With an onboard reagent capacity of 2,000 samples, the D-100 System can run continuously without operator intervention. When reagents need to be changed, they can be loaded “on-the-fly” without stopping the run.

The D-100 System improves efficiency and productivity compared to other HPLC A1c systems by eliminating redundant, low-value tasks and reducing labor hours.

View the Race to 2,000 HbA1c Results video



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Operator Interventions Over 2,000 Tests

The chart below illustrates the operator interventions required to complete 2,000 A1c tests. Most A1c analyzers require reagent changes and prefilter replacements; some even require calibration and cleaning steps. These frequent stops slow down productivity and require significant hands-on time to complete.

Only the D-100 System can run up to 2,000 A1c tests continuously without operator intervention.

D-100 System On-the-fly buffer change		Analyzer T1 8 Interventions		Analyzer T2 17 Interventions		Analyzer A 15 Interventions		Analyzer S 24 Interventions		Analyzer Y 77 Interventions	
Injections	Task	Injections	Task	Injections	Task	Injections	Task	Injections	Task	Injections	Task
0	Start	0	Start	0	Start	0	Start	0	Start	0	Start
2000	Finish	600	Prefilter	400	Prefilter	500	Prefilter	200	Prefilter	100	Calibrate
		900	Reagent	500	Reagent	500	Reagent	300	Reagent	125	Reagent
		1000	Reagent	600	Reagent	500	Reagent	400	Prefilter	166	Reagent
		1000	Reagent	600	Reagent	500	Reagent	500	Clean/Flush	166	Reagent
		1200	Prefilter	600	Reagent	500	Reagent	600	Prefilters	200	Calibrate
		1600	Reagent	800	Prefilter	1000	Prefilter	600	Reagent	250	Reagent
		1800	Prefilter	1000	Calibrate	1000	Reagent	600	Reagent	250	Reagent
		1800	Reagent	1000	Reagent	1000	Reagent	600	Calibrate	250	Cartridge
		2000	Finish	1200	Prefilter	1000	Reagent	800	Prefilter	250	Prefilter
				1200	Reagent	1000	Reagent	900	Reagent	300	Calibrate
				1200	Reagent	1200	Reagent	1000	Prefilter	333	Reagent
				1200	Reagent	1500	Prefilter	1000	Clean/Flush	333	Reagent
				1500	Reagent	1500	Reagent	1200	Reagent	375	Reagent
				1600	Prefilter	1500	Reagent	1200	Reagent	400	Calibrate
				1800	Reagent	1500	Reagent	1200	Prefilter	500	Calibrate
				1800	Reagent	1800	Reagent	1200	Calibrate	500	Reagent
				1800	Reagent	2000	Finish	1400	Prefilter	500	Reagent
				2000	Finish			1500	Reagent	500	Reagent
								1500	Clean/Flush	500	Reagent
								1600	Prefilter	500	Cartridge
								1800	Reagent	500	Prefilter
								1800	Reagent	600	Calibrate
								1800	Prefilter	625	Reagent
								1800	Calibrate	666	Reagent
								2000	Finish	666	Reagent
										700	Calibrate
										750	Reagent
										750	Reagent
										750	Cartridge
										750	Prefilter
										800	Calibrate
										1875	Reagent
										1900	Calibrate
										2000	Finish

Data on file. Interactions were evaluated by reviewing each of the assays' respective Instructions for Use and product documentation. For informational purposes only and not intended to provide medical advice or diagnosis.

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