

PharmAlytics™



Intelligence for Pharmacies



PharmAlytics™: The business intelligence application to help you increase your pharmacy's efficiency and optimize inventory, on-site or remotely

PharmAlytics Provides

- ▶ Optimized inventory management
- ▶ Increase automation productivity
- ▶ Enhanced automation quality
- ▶ Improve labor productivity

Gain insight into your business' production capacity: when are additional resources needed?

Results are:

- **Lower operating costs**
- **Improved productivity**



PharmAlytics, TCGRx's business intelligence web-based application, provides actionable information to increase the pharmacy's productivity and optimize inventory with TCGRx systems

PharmAlytics, TCGRx's web based business intelligence, provides actionable information to increase the pharmacy's productivity and optimize inventory with TCGRx's ATP and Beacon solutions.

- ▶ Access to vital system performance parameters, wherever you are.
- ▶ Pro-active email notifications if system parameters exceed the alert threshold
- ▶ Adjustable thresholds based on business requirements
- ▶ View the performance of multiple sites on one screen
- ▶ Set various permission levels for users



Use PharmAlytics anywhere you have access to a wi-fi connection. PharmAlytics is browser-based, so you can use it on any computer.

HeartBeat Overview

PharmAlytics provides an overview of the TCGRx solutions of a single pharmacy location or multiple pharmacy systems.

Heartbeat Monitor for: Pharmacy A

Milwaukee		
ATP	ATP	BEACON
ATP#2BOB	ATP480 BOB	MKEBEA01

Single location with multiple systems at the site

Heartbeat Monitor for: Pharmacy B

Chicago	Chicago	Oak Park
ATP	BEACON	ATP
ATP384 #3	CHIBEA01	ATP384 #2

Multiple locations and multiple systems

- Green = Meets or exceeds goals
- Red = Exceeds alert thresholds
- Yellow = Between goal and alert threshold

HeartBeat Monitor

At-a-glance view of all automation performance (ATP and Beacon), based on custom goal and alert thresholds.

- ▶ Quickly identify which system(s) requires attention
- ▶ Automatic email alerts sent if alert threshold is exceeded
- ▶ Thresholds pre-populated based on best practices

-----Original Message-----

From: tcgrx_notifier@tcgrx.com [mailto:tcgrx_notifier@tcgrx.com]
 Sent: Thursday, April 05, 2018 10:30 AM
 To: Steve Christenson <schristenson@tcgrx.com>
 Subject: TCGRx Business Intelligence Alert Message
 Importance: High

schristenson,

Facility: Chicago; Site: ATP#1; For Apr 23 2018
 Daily bag production is at or below the threshold limit.
 Hourly bag production is at or below the threshold limit.
 Idle time percent is at or above the threshold limit.
 Canister utilization percent is at or below the threshold limit.
 Canisters have expired meds.

Facility: Chicago; Site: ATP#2; For Apr 23 2018
 Hourly bag production is at or below the threshold limit.
 Canisters have expired meds.

Facility: Chicago; Site: ATP480; For Apr 23 2018
 Canisters have expired meds.

Email alerts for under-performing systems or solutions/locations

Heartbeat Monitor for: Pharmacy A

ATP - ATP#2BOB		
Productivity	Utilization	Quality

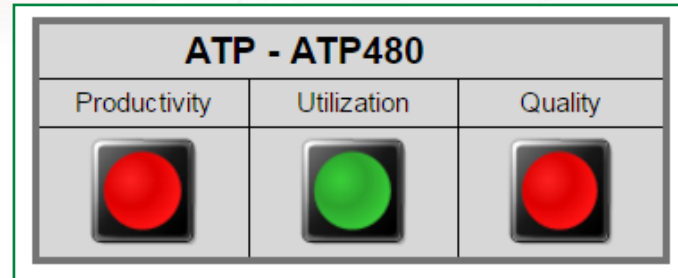
Heartbeat Monitor for: Pharmacy B

Beacon - MKEBEA01			
Shorts	Expired	Soon to Expire	Excess Meds

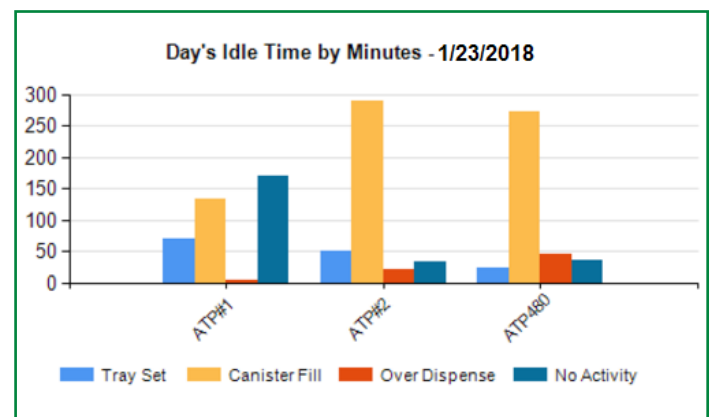
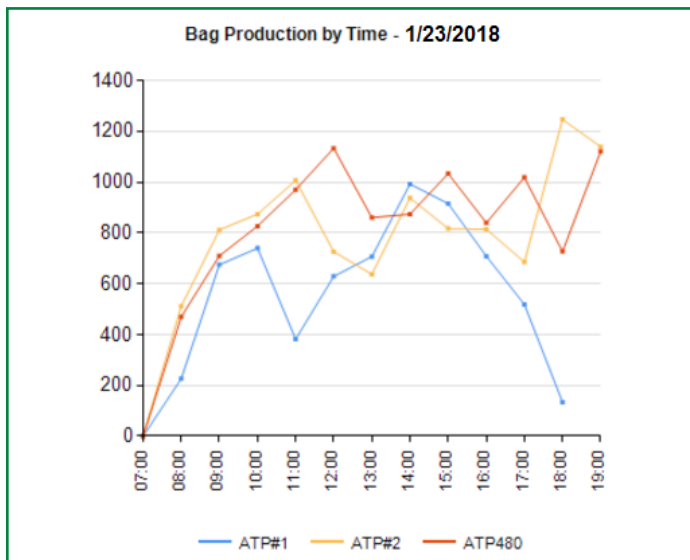
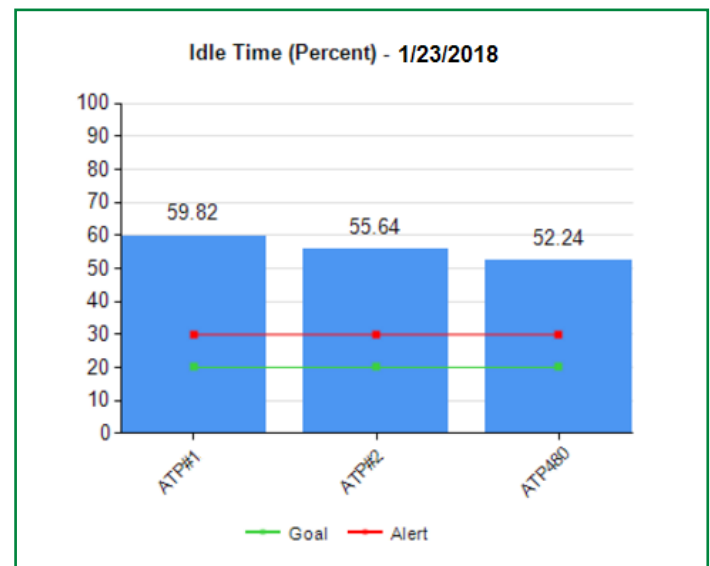
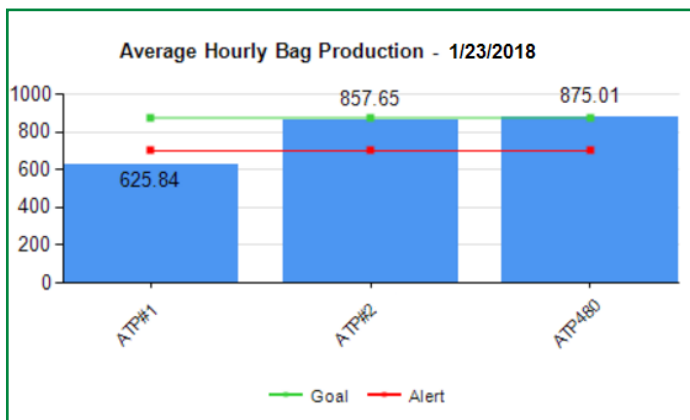
Increase Productivity

Monitoring productivity and idle time is key to continuous productivity improvement. Identifying the leading causes of lost productivity leads to improved automation utilization. Indicators of productivity are:

- ▶ Bag Production Time (per hour)
- ▶ Idle Time (per day) — factors that feed into this metric include tray setting, canister filling, over-dispense alarms, and no activity.



Three parameters define the performance of the ATP machines: productivity, utilization, and quality. Each of these heartbeat parameters provide at-a-glance indication of the ATP's performance.

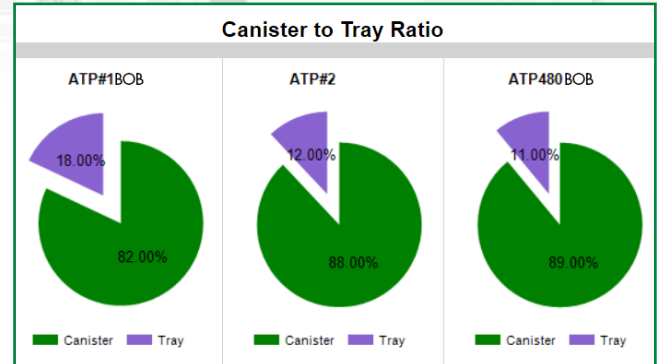




Utilization Optimization

Calculated based on a user-defined period, PharmAlytics™ recommends changes for which medication to put into canisters or trays and the canister placement in the ATP®. Maximize canister usage by:

- ▶ Relocating the fastest-moving medication canisters for minimal drop time into pouches
- ▶ Move low volume medications to trays and higher-used meds to canisters to reduce labor
- ▶ Grouping canisters of high usage, large pills to reduce canister fills and lessen down time



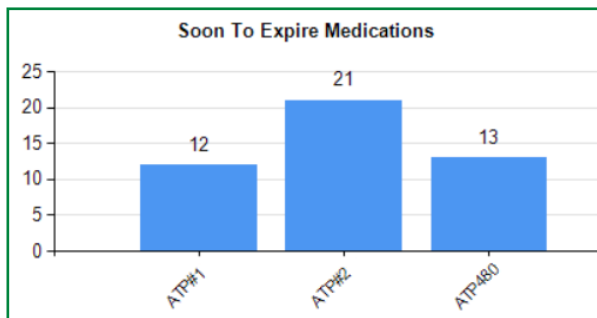
Minimize tray fills and increase productivity by using the Optimized Canister Report

ATP#1 Optimized Canister Report									Suggestions		
Rank	Can #	Loc Type	Loc #	NDC	Generic Name	Strength	Qty Dispensed	Canister Quantity	Remove	Slot	Move To Row
1	353	Can	353	0009377205	cloZAPine	100 MG	6630	323			1
2	383	Can	383	00904198280	ACETAMINOPHEN	325 MG	3813	118			1
3	009	Can	009	00904198880	ACETAMINOPHEN	500 MG	3617	0			

Quality Assurance

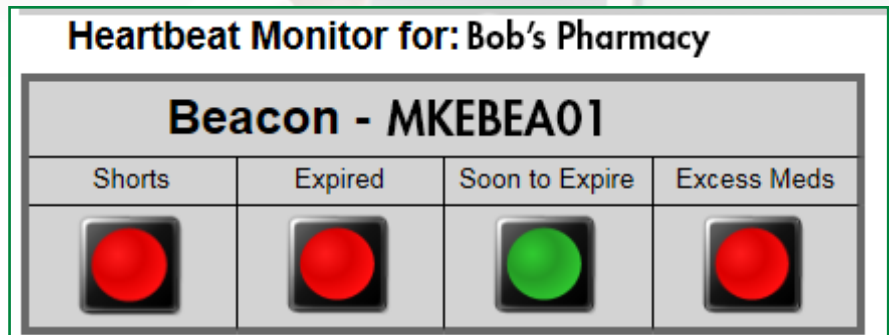
PharmAlytics provides the ability to audit canister quality trends for continuous improvement. The three quality metrics analyzed:

- ▶ Expired Meds – visibility to meds that are expired so they are not dispensed.
- ▶ Soon to Expire Meds (within 30 days)
- ▶ Over-dispensing – several factors affect over-dispensing including: the canister needing replacement, canister recalibration, or the med should be trayed versus placed in canisters



Over Dispense Detail Report (past 30 days): ATP480							
Rank	Can #	NDC	Generic Name	Strength	Qty Dispensed	Over Dispense Instances	% Over Dispense
5	015	51645082810	CALCIUM W VIT/D	500MG/200MG	511	16	3.13
10	215	00536344238	CEROVITE TB	18 MG-0.4	210	6	2.86
29	310	00093220305	METOCLOPRAMIDE HCL	10 MG	56	1	1.79
11	085	49483062350	METFORMIN HCL ER	500 mg	420	6	1.43

Inventory management is a delicate balancing act. If the pharmacy does not have sufficient inventory to fill most of the patient's prescriptions, this can affect adherence as well as fulfilling a patient's medications in a timely manner. If the pharmacy has excess inventory, valuable capital is tied up and the pharmacy may experience higher levels of outdated medication.

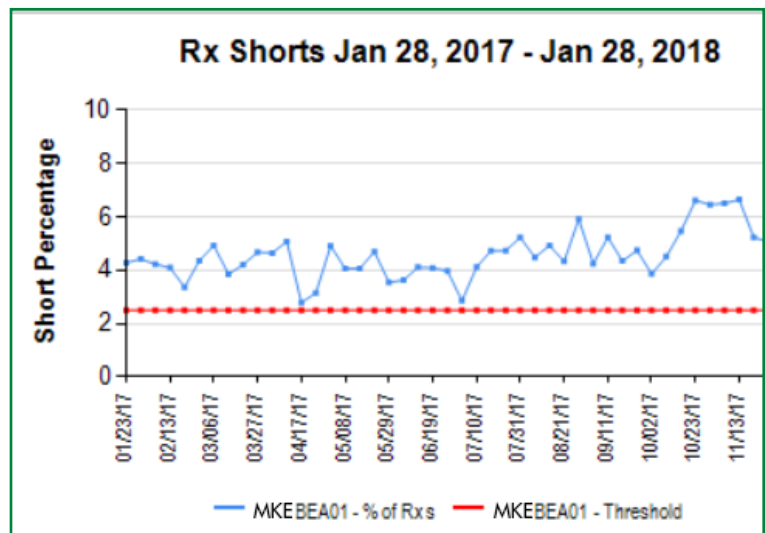


Four parameters define the performance of the Beacon system: shorts, expired, soon-to-expire, and excess meds. These heartbeats are designed to optimize inventory and maximize the usage of the Beacon® system.

Minimize Shorts

Updated daily, this metric will display how many scripts were partial fills or not filled due to insufficient inventory:

- ▶ Help your pharmacy order the inventory required to completely fill scripts
- ▶ List of short Rx's including medication information and quantity short



Rx Weekly Shorts: BEA01 - 1/22/2018

NDC	Generic Name	Brand Name	Strength	Rx Filled	No Fills	Partial Fills	Qty Short	Short Date
69097081212	GABAPENTIN *ZC	GABAPENTIN	600 mg	1	0	1	0.00	01/22/2018
68682065220	DIAZEPAM *ZB	DIAZEPAM	5 mg-7.5 mg-10 mg	1	1	0	1.00	01/22/2018
68546031730	GLATIRAMER ACETATE *ZB	COPAXONE	20 mg/mL	0	1	0	30.00	01/22/2018
68382011714	RISPERIDONE *ZC	RISPERIDONE	4 mg	1	0	1	5.00	01/22/2018
68180031902	BUPROPION HCL XL *ZC	BUPROPION HCL XL	150MG	0	1	0	28.00	01/22/2018
67877019890	AMLODIPINE BESYLATE *ZC	AMLODIPINE BESYLATE	5 mg	0	3	0	98.00	01/23/2018
67877019805	AMLODIPINE BESYLATE *ZC	AMLODIPINE BESYLATE	5 mg	2	0	1	0.00	01/23/2018
65862083030	PRASUGREL *ZT	PRASUGREL	10MG	1	0	1	5.00	01/22/2018
65862020390	LOSARTAN POTASSIUM *ZC	LOSARTAN POTASSIUM	100 mg	4	0	1	0.00	01/22/2018

Identify Expired Meds

PharmAlytics™ tracks and identifies medications that are expired and needing removal for return to the reverse distributor.

Monitor Soon-to-Expire Meds

Visibility to soon-to-expire meds provides information for which meds to use or return for credit.


Cust. NDC	NDC	Manufacturer	Generic/Brand Name	Strength	Exp. Date	Qty	Stock Date	Days To Exp.
59011075204	59011075204	PURDUE PHARM L	BUTRANS	20 mcg/hour	3/31/2018	4.00	7/11/2016	60 - 99
00067811991	00067811991	Novartis Consum	EXCEDRIN TENSION HEADACHE	500 mg-65 mg	3/31/2018	100.00	1/26/2017	60 - 99
00093308701	00093308701	TEVA	CLOZAPINE CDT	200MG	3/31/2018	100.00	11/29/2016	60 - 99
00115123213	00115123213	Global Pharm	OXYMORPHONE HCL ER	10 mg	3/31/2018	60.00	9/29/2016	60 - 99
00074707090	00074707090	ABBVIE US LLC	SYNTHROID	175 mcg	4/13/2018	90.00	5/15/2017	60 - 99
00024596903	00024596903	Sandoz-Aventis	TOLUENO SOLOSTAR	300 unit/mL (1.5 mL)	3/31/2018	1.50	7/19/2017	60 - 99

PharmAlytics identifies the exact bottle that can be returned to the distributor for full credit, based on usage, unopened inventory, and wholesaler terms.

Receive Credit for Excess Meds

Reduce on-hand carrying inventory by reducing excess medications.

- PharmAlytics calculates excess inventory by factoring usage, inventory levels and wholesaler return policy. It then identifies what packages can be returned for full or partial credit.
- Return unopened bottles for credit to wholesaler

Cust. NDC	NDC	Manufacturer	Brand Name	Strength	Exp. Date	Curr. Qty On Hand	Calc. Min	Pkg Qty	Stock Date	Days From Stock	Item ID	Barcode
68180015001	68180015001	LUPIN PHARMACEU	FAMOTIDINE	40 mg/5 mL	9/30/2019	200.000	75.000	50.00	3/13/2018	69	654281	
68180015001	68180015001	LUPIN PHARMACEU	FAMOTIDINE	40 mg/5 mL	9/30/2019	200.000	75.000	50.00	3/13/2018	69	654282	
68180015001	68180015001	LUPIN PHARMACEU	FAMOTIDINE	40 mg/5 mL	9/30/2019	200.000	75.000	50.00	3/13/2018	69	654283	
68382079401	68382079401	ZYDUS PHARMACEU	OXYCODONE HCL	10 mg	12/31/2020	297.000	55.000	100.00	3/13/2018	69	654488	
68382079401	68382079401	ZYDUS PHARMACEU	OXYCODONE HCL	10 mg	12/31/2020	297.000	55.000	100.00	3/13/2018	69	654489	

