

# Small Batch/Single Piece Work Flow in Lab Billing and Collections

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## Pathology Associates Medical Laboratories



- **Part of the Providence Health System**
- **Among the top seven laboratories in the country, based on annual revenues**
- **A history of forging successful partnerships and alliances with hospitals**
- **Billing and collections includes services for 12 hospitals and 13 tax IDs, averaging 350,000 requisitions per month (~16,600/day).**

## PAML's LEAN History

- ✍ Introduced to RPI in January, 2002.
- ✍ Trained first RPI “Power Team” in Spring of 2003.
- ✍ Before the end of 2003, at least four successful RPIs completed by newly trained team members.
- ✍ By early 2004, a new vocabulary took hold (*gemba, muda, kaizen, takt* time, cycle time, etc.)



## The RPI Workshop

- ✍ **Day One** – Train team, observe and measure work process. Plan new process.
- ✍ **Day Two** – Plan new process and implement
- ✍ **Day Three** – Measure and improve new process, report out to management team

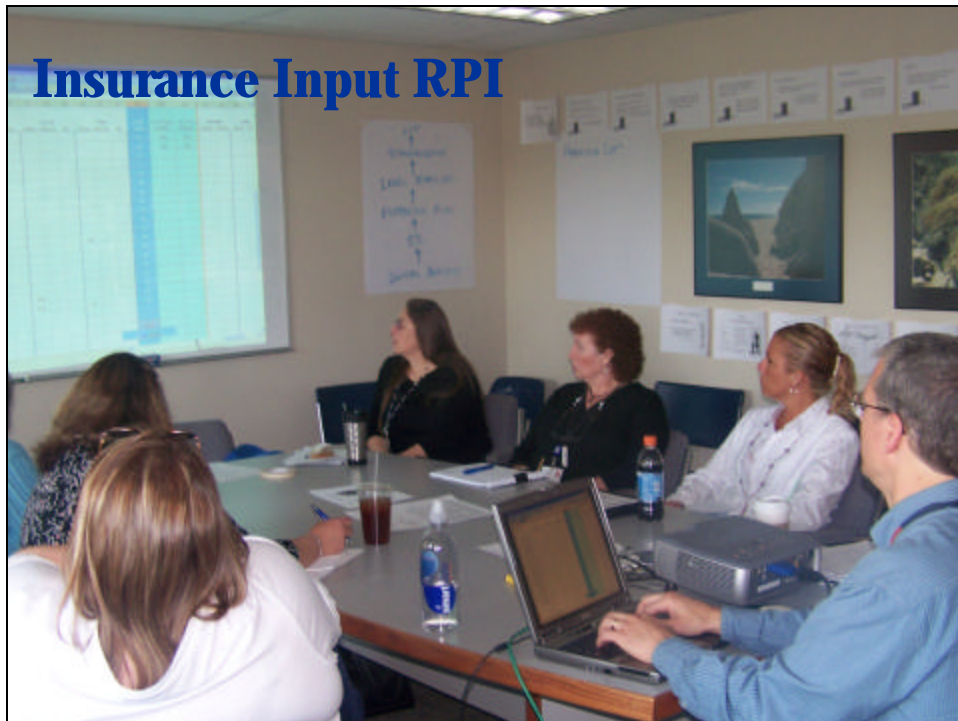


## Steps in Establishing a Lean Process



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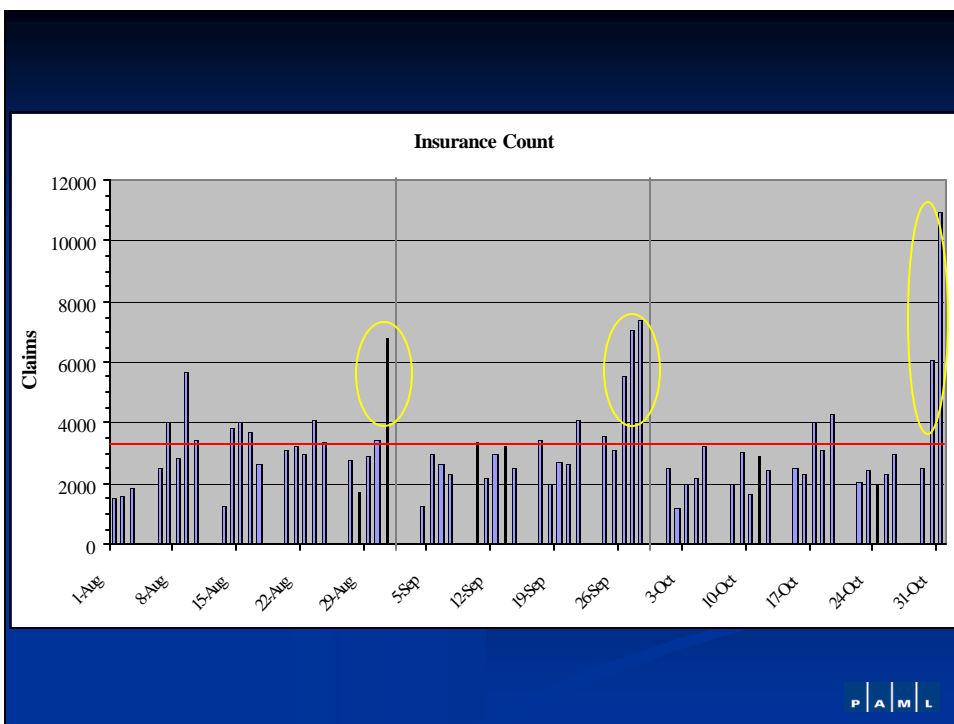
## Insurance Input RPI

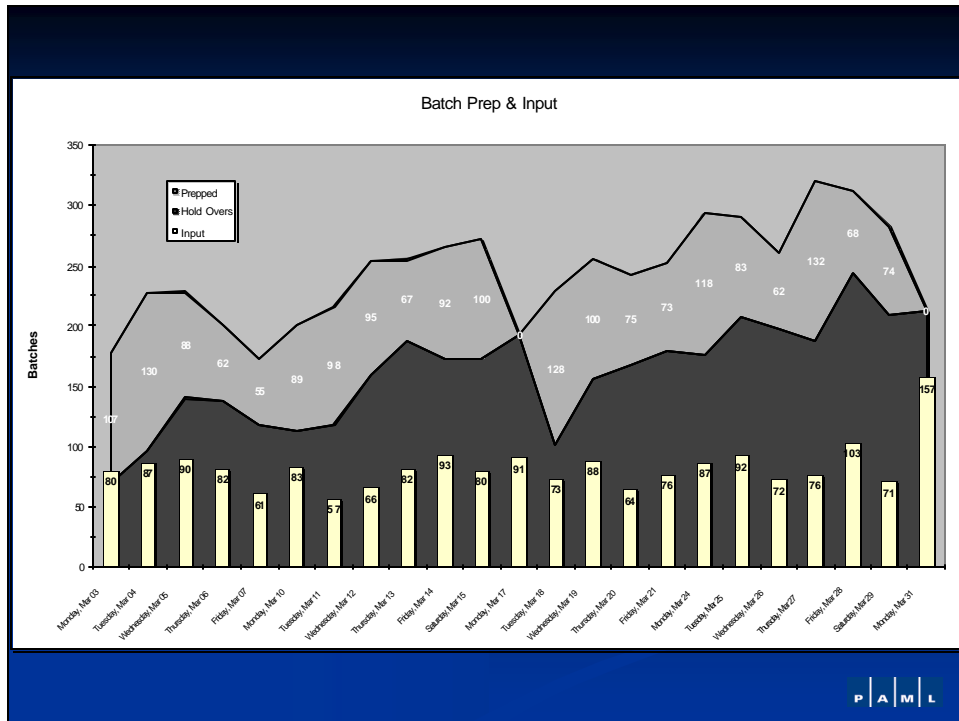


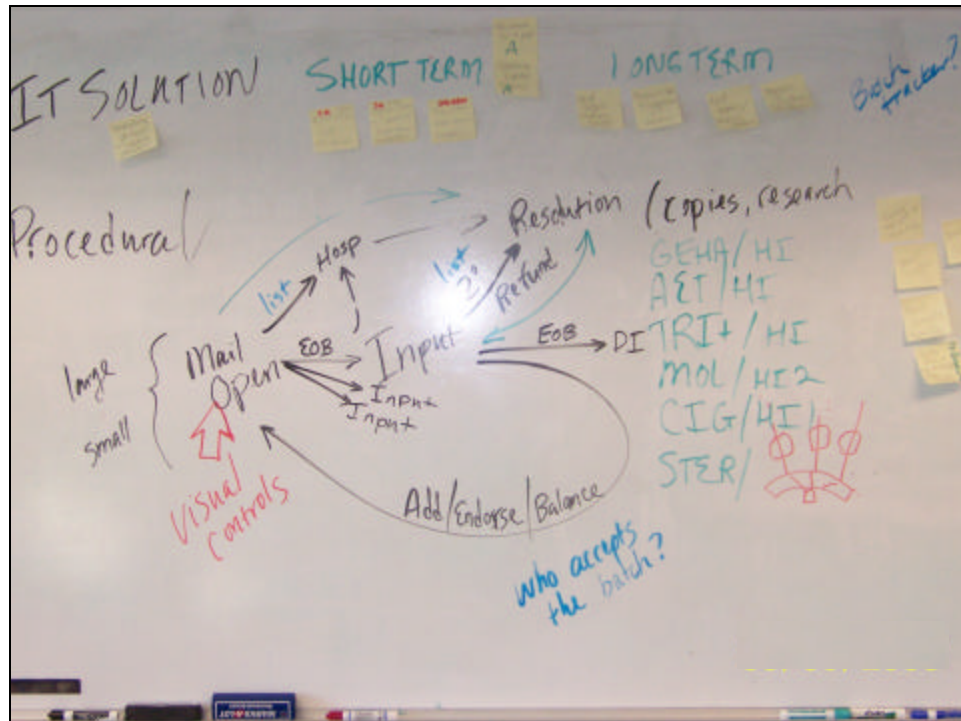
## Insurance Input: Initial Assessment

- Mail volume exceeded input by 10% on average resulting in significant holdovers, overtime demands (avg. 58hrs/month), increased stress, and low morale.
- Pressure upon input served to decrease accuracy resulting in an increase in rework.
- Business impact: Holdover for April for our hospital partners on the west side of the state – nearly \$400K.

P A M L







**Goal: Eliminate holdovers – all mail received to be input on same day**  
**... without an increase in the workforce.**

05/09/2008



## How we did it:

- Established one-piece, “pull” workflow, from mail prep through claim input.
- Reallocated existing resources to create a “Resolution Specialist” position to address all tasks interrupting input.
- Changed the physical layout, removing partitions between workstations.

05/09/2008



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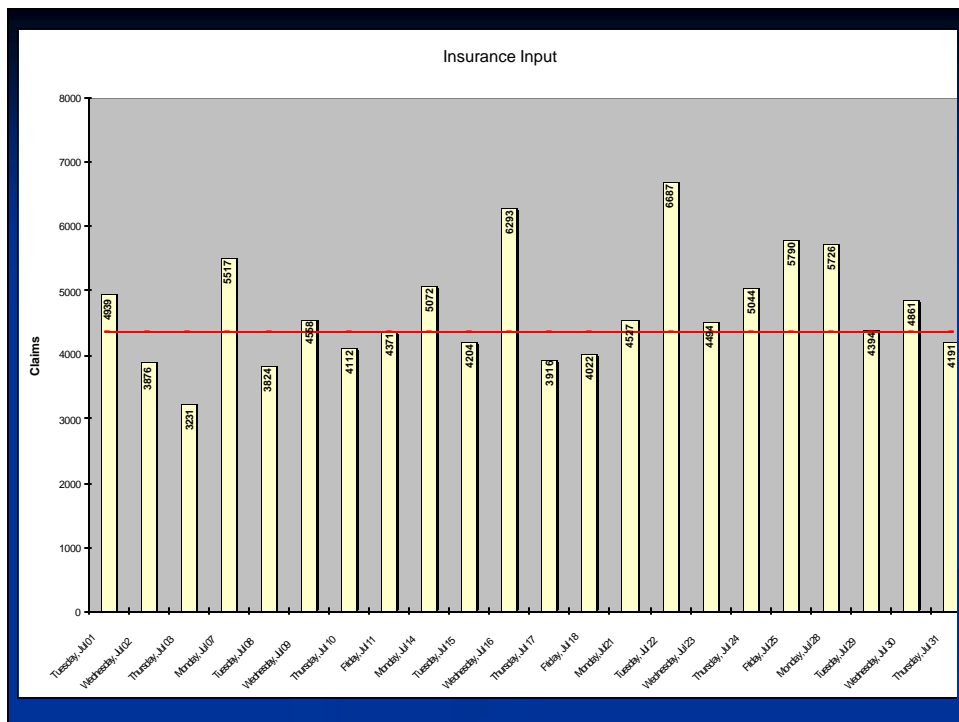
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# Outcomes

✍ Insurance mail now posted on date of arrival.



## Outcomes

- ✍ Insurance mail now posted on date of arrival.
- ✍ Overtime utilization dropped significantly.
- ✍ The mail cart is our visual control.
- ✍ The insurance input team is working like a *team*!
- ✍ Team members remain motivated change agents!

## More Outcomes

- ✍ Checks consistently balance with EOBs.
- ✍ “No-check” batches have gone the way of the dinosaur.
- ✍ Fully focused input stations.
- ✍ Ability to break during the day from the routine.
- ✍ Significantly improved morale!

# Lessons Learned

- ✍ Don't overlook your front-line workers.
- ✍ Provide sufficient resources to eliminate backlog.
- ✍ Don't shy away from self-reporting on a shared file.

Insurance												Total Ins Claims
	Christy B	Dawn	Heather	Jamie	Jeff	Laura	Rhonda	Tina	Diane	Jody B	Lisa	
Tuesday, Jul 15		268	642	871		90	170	608	496	0		4204
Wednesday, Jul 16	51	492	481	544	17	1334	144	635	294	744		6293
Thursday, Jul 17	272	316	246	389	47	332	40	318	208	0		3916
Friday, Jul 18	561	269	322	654	126	293	160	18	253	0		4022
Monday, Jul 21	332	138	313	565	PTO	454	PTO	442	381	424		4527
Tuesday, Jul 22	438	433	867	1100	209	733	300	680	VAC	813		6687
Wednesday, Jul 23	372	214	628	123	219	276	24	431	226	792		4494
Thursday, Jul 24	308	219	571	972	399	312	71	351	335	433		5044
Friday, Jul 25	315	457	796	628	RSB	PTO	260	386	VAC	664		5790
Monday, Jul 28	352	PTO	640	1034	122	547	82	745	210	637		5726
Tuesday, Jul 29	434	PTO	RSB	519	221	405	171	510	197	564		4394
Wednesday, Jul 30	226	PTO	643	445	106	369	124	887	119	591		4861
Thursday, Jul 31	433	273	640	654	286	512	49	281	171	741		4191
Friday, Aug 1	426	276	PTO	PTO	33	346	130	405	66	0	15	4014
Monday, Aug 04	473	322	540	966	165	741	52	435	322	0	5	4683
Tuesday, Aug 5	469	257	280	435	497	424	70	303	231	0	15	3547
Wednesday, Aug 06	323	RSB	731	223	178	412	17	RSB	267	0	4	3099
Thursday, Aug 07	235	299	0	467	358	146	22	RSB	170	0	5	2908
Friday, Aug 08	322	363	485	531	306	428	48	RSB		0	15	2782
Monday, Aug 11	350	225	1482	548	32	349	88	385	492	0	9	4738
Tuesday, Aug 12	454	275	826	463	365	443	41	251	155	580	6	4550
Wednesday, Aug 13	389	252	178	PTO	158	396	16	351		0	9	2390
Thursday, Aug 14	339	326	PTO	571	RSB	368	34	297		356	15	3468
Friday, Aug 15	751	310	PTO	613	RSB	153	61	258		0	22	4048
Monday, Aug 18	374	476	PTO	321	273	659	63	230	207	0	28	4407
Tuesday, Aug 19	442	411	347	468	222	371	47	338	413	231	5	4089
Wednesday, Aug 20	339	372	754	572	269	468	17	344	256	779	15	5347
Thursday, Aug 21	420	480	450	206	314	322	40	402	208	0	5	3330
Friday, Aug 22	378	343	RSB	498	203	530	565	411	308	0	15	3787
Monday, Aug 25	469	514	RSB	596	PTO	606	98	458	149	484	54	4398

## Lessons Learned

- ✍ Don't overlook your front-line workers.
- ✍ Provide sufficient resources to eliminate backlog.
- ✍ Don't shy away from self-reporting on a shared document.
- ✍ You don't need a process that fits on a conveyer belt to carry out a LEAN event.
- ✍ These events must be scheduled and then vigorously protected.

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## Questions?

