

**A Pharmacy Pilot or Demonstration Research Project for a  
New Practice Model for Community Pharmacy**

A Demonstration Project to Study the Effects of Implementing Tech-Check-Tech Programs in  
Community Practice to Engage Community Pharmacists in Clinical Pharmacy Services in Iowa

PHASE ONE  
QUARTER SIX REPORT

Iowa Pharmacy Association &  
Drake University College of Pharmacy and Health Sciences

Primary Contact:

Megan Myers, PharmD.  
New Practice Model Program Manager  
Iowa Pharmacy Association  
8515 Douglas Avenue, Suite 16  
Des Moines, IA 50322  
515-270-0713 (office)  
[mmyers@iarx.org](mailto:mmyers@iarx.org)

Secondary Contact:

Anthony Pudlo, PharmD, MBA, BCACP  
Vice President of Professional Affairs  
Iowa Pharmacy Association  
8515 Douglas Avenue, Suite 16  
Des Moines, IA 50322  
515-270-0713 (office)  
630-816-5716 (cell)  
[apudlo@iarx.org](mailto:apudlo@iarx.org)

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## **LEADERSHIP TEAM MEMBERS**

Megan Myers, PharmD, will serve as Project Coordinator. She will oversee the project, conduct regular on-site visits with each site, coordinate the study activities, chair the regular team meetings, and lead the writing of the study reports to the Board of Pharmacy.

Michael Andreski, RPh, MBA, PhD, Assistant Professor of Social and Administrative Pharmacy, Drake University College of Pharmacy and Health Sciences serves as research consultant and principal investigator, participates in regular team meetings, and participates in the writing of the study report.

T.J. Johnsrud, NuCara Health Management, Inc., provides a pharmacy management perspective for coordinating the community pharmacy clinical services and Tech-Check-Tech programs within the community pharmacy sites. He participates in regular team meetings.

Anthony Pudlo, PharmD, MBA, BCACP, Vice-President of Professional Affairs, and Kate Gainer, PharmD, Executive Vice President/CEO, Iowa Pharmacy Association, will oversee coordination of clinical pharmacy services available to community pharmacy sites in this study.

## **PHARMACY SITE-SPECIFIC INFORMATION**

### ***Pharmacy Site #1:***

Towncrest Pharmacy  
2306 Muscatine Avenue  
Iowa City, IA 52240  
319.337.3526  
License #838  
Mike Deninger, Pharmacist-In-Charge  
License #17620  
Randy McDonough, On-Site Responsible Pharmacist  
License #16918

### ***Pharmacy Site #2:***

Mercy Family Pharmacy  
1111 3<sup>rd</sup> Street SW  
Dyersville, IA 52040  
563.875.7624  
License #129  
Julie Panosh, Pharmacist-In-Charge  
License #19527

### ***Pharmacy Site #3:***

Medicap Pharmacy #8003  
105 Lincoln Way  
Ames, IA 50010  
515.232.1653  
License #123  
Stephanie McCollom, Pharmacist-In-Charge  
License #21189

**Pharmacy Site #4:**

NuCara Pharmacy #11  
120 E. Madison Street  
Washington, IA 52353  
319.653.5404  
License #342  
Rachel Clemens, Pharmacist-In-Charge

**Pharmacy Site #5:**

NuCara Pharmacy #30  
107 N Main Street  
Lenox, IA 50851  
641.333.2260  
License #1454  
Alicia Lynn, Pharmacist-In-Charge  
License #21963

**Pharmacy Site #6:**

NuCara Pharmacy #12  
500 2<sup>nd</sup> Street  
Traer, IA 50675  
319.478.8711  
License #467  
Phyllis A. McKee, Pharmacist-In-Charge  
License #13929

**Pharmacy Site #7:**

NuCara Pharmacy #10  
621 Broad Street  
Story City, IA 50248  
515.733.2233  
License #78  
Betty Grinde, Pharmacist-In-Charge  
License #15568

**IPA'S NPM GOALS:**

- 1) Sites are using Tech-Check-Tech (TCT) at least 75% of business days (M-F).
- 2) Sites to submit data collected for both research aims within 7 days of the end of the month.
- 3) Sites to increase time spent counseling patients on both new and refilled prescriptions.
- 4) Pharmacists are providing expanded patient care services including increasing volume of established services and successful implementation of new services.

**Aim 1: Implement and assess the impact of a Tech-Check-Tech program in community pharmacies in Iowa on patient safety measures.** “50 refills per month for the remainder of the project will be double checked for errors.”

<b><u>Aggregate Data from Technician checked prescriptions collected 6/2/14 –11/30/15:</u></b>		<b><u>Aggregate data from Baseline collection (Pharmacist-checked prescriptions):</u></b>	
	<b>Aug- Nov. 2015:</b>		
Total Rx Refills Checked	1,217	Total Prescription Refills Checked	5,565
Wrong Drug	0	Wrong Drug	1
Wrong Strength	0	Wrong Strength	0
Safety Cap Error	0	Safety Cap Error	8
Wrong Amount	0	Wrong Amount	2
Other Errors	0	Other Errors	4
		Wrong Data Entry =1	
		Wrong Days Supply=1	
		NA=1	
		Wrong Place in Cassette=1	
<i>Patient-Safety errors</i>			
<i>For Patient-Safety Errors:</i>		<i>Patient-Safety errors</i>	2
<i>Error rate</i>	0%	<i>(1 wrong drug, 1 wrong data entry)</i>	
<i>Mean</i>	0%		
<i>p-value*</i>	(p=0.191)	<i>Patient-Safety error rate</i>	0.036%
<i>Range</i>	0% - 0%		
<i>Administrative errors</i>	0	<i>Administrative errors</i>	13
<i>For Administrative Errors:</i>		<i>Administrative error rate</i>	0.23%
<i>Error rate</i>	0%		
<i>Mean</i>	0%	<b>Total Errors</b>	<b>15</b>
<i>p-value*</i>	<b>(p=0.031)</b>	<b>Overall Error Rate</b>	<b>0.2695%</b>
<i>Range</i>	0-0%		
<b>Total Errors</b>	<b>0</b>	<b>Mean Error Rate</b>	<b>0.27% (±0.229%)</b>
<b>Overall Error Rate</b>	<b>0%</b>	<b>Range</b>	<b>0.00% to 0.585%</b>
<b>Mean Error Rate</b>	<b>0%</b>		
<b>p-value*</b>	<b>(p=0.02)</b>		
<b>Range</b>	<b>0 - 0%</b>		

**Conclusion:**

No errors were reported this quarter for technician-verified refills. The overall error rate (p=0.002) and administrative error rate (p=0.031) were significantly lower than pharmacist-verified refills at baseline. There was no statistical change in administrative errors (p=0.191).

\*Please see appendix A for individual site data.

**Aim 2: Implement and assess the impact of a Tech-Check-Tech program in community pharmacies in Iowa and in facilitating the provision of community pharmacist-provided medication therapy management.**

“The primary data sources will be self-reported pharmacist daily activity logs and numbers of both compensated and identified opportunities for MTM and other patient care services. Once the Tech-Check-Tech procedures have been initiated and are performing adequately as defined above, the pharmacist(s) at the participating pharmacies will begin to focus on increasing the amount of MTM services provided.”

**Aggregate data: Composition of Pharmacist Day**

	<b><u>Baseline</u></b>	<b><u>TCT 8/1/15 – 11/30/15</u></b>	<b><u>p-value compared to baseline</u></b>
<b>Time Spent in Dispensing</b>	67.3% Range = 38.73% -- 80.81%	45.73% Range = 24.15% -- 72.62%	<b>p=0.029</b>
<b>Time Spent in Management</b>	9.2% Range = 5.81% -- 12.79%	7.22% Range = 2.79% -- 10.72%	p=0.221
<b>Time Spent in Patient Care</b>	15.9% Range = 11.03% -- 19.39%	38.54% Range = 20.40% -- 54.45%	<b>p=0.001</b>
<b>Time Spent in Practice Development</b>	3.5% Range = 0.25% -- 14.43%	6.60% Range = 0.89% -- 13.59%	p=0.303
<b>Time Spent in Other Activities</b>	4.1% Range = 0% -- 14.66%	1.92% Range = 0% -- 4.31%	p=0.364

**Conclusion:**

The amount of time pharmacists spend in dispensing has gone down with a corresponding increase in patient care activities and no significant change in other categories. The amount of pharmacist time spent in patient care has increased significantly, increasing from 15.9% to 38.54% (p=0.001). The amount of pharmacist time spent in dispensing decreased significantly, from 67.3% or 45.73% (p=0.029). The average pharmacist spent 22% more time in patient care and 21% less time in dispensing compared to baseline.

\*Please see appendix A for individual site data.

**Aggregate data: Number of Services Provided**

<b><u>Number of services provided from 8/1/15 – 11/30/15:</u></b>			<b><u>Number of service provided during baseline collection:</u></b>	
Reimbursed Patient Care Services per Pharmacist Hour			Reimbursed Patient Care Services per Pharmacist Hour	
Average	0.60 ± 0.40	<b>(p=0.028)*</b>	Average	0.1101 ± 0.184
Range	0.024 to 1.09		Range	0 to 0.51
Non-Reimbursed Patient Services Care per Pharmacist Hour			Non-Reimbursed Patient Services Care per Pharmacist Hour	
Average	5.37 ± 2.15	(p=0.167)	Average	2.7705 ± 3.79673
Range	2.77 to 9.35		Range	0.13 to 11.24
Total Patient Care Services per Pharmacist Hour			Total Patient Care Services per Pharmacist Hour	
Average	5.97 ± 2.45	(p=0.127)	Average	2.8806 ± 3.96796
Range	3.01 to 10.44		Range	0.14 to 11.75
*p value comparison with baseline				

**Conclusion:**

The overall amount of both reimbursed and non-reimbursed patient care services per pharmacist per hour have increased compared to baseline. This quarter, the increase in reimbursed patient care services was statistically significant. Over an average 8-hour shift, the pharmacist at baseline performed approximately 1 reimbursed service and 22 non-reimbursed services. This quarter, over an average 8-hour shift, the pharmacist performed approximately 5 reimbursed services and 43 non-reimbursed services.

\*Please see appendix A for individual site data.

**Aggregate Data: Number of services per hour:**

<u>Service Type</u>	<u>Baseline</u>	<u>TCT (8/1/15 – 11/30/15)</u>	<u>p-value compared to baseline</u>
<b>Prescription Counseling</b> Reimbursed	Avg. = 0.0735 Range= 0 – 0.51 2/7 Pharmacies Provided	Avg. = 0 Range = 0 0/6 pharmacies provided	p=0.35
<b>Prescription Counseling</b> Non-Reimbursed	Avg. = 2.3780 Range= 0.0304 – 10.45 7/7 Pharmacies Provided	Avg. = 4.37 Range= 1.60 – 9.13 6/6 pharmacies provided	p=0.29
<b>Drug Therapy Problems Identified Through Dispensing DUR</b> Reimbursed	Avg. = 0.0014 Range= 0 – 0.01 1/7 Pharmacies Provided	Avg. = 0 Range = 0 0/6 pharmacies provided	p=0.36
<b>Drug Therapy Problems Identified Through Dispensing DUR</b> Non-Reimbursed	Avg. = 0.1333 Range= 0.3 – 0.47 7/7 Pharmacies Provided	Avg. = 0.72 Range = 0.05 – 3.3 6/6 pharmacies provided	p=0.32
<b>Drug Information Request</b> Reimbursed	Avg. = 0.0003 Range= 0 – 0.002 1/7 Pharmacies Provided	Avg. = 0 Range = 0 0/6 pharmacies provided	p=0.36
<b>Drug Information Request</b> Non-Reimbursed	Avg. = 0.6995 Range= 0.012 – 0.1724 7/7 Pharmacies Provided	Avg. = 0.09 Range = 0.01 – 0.21 6/6 pharmacies provided	p=0.56
<b>Patient Education</b> Reimbursed	Avg. = 0.0031 Range= 0 – 0.02 2 1/7 Pharmacies Provided	Avg. = 0.01 Range = 0 – 0.05 1/6 pharmacies provided	p=0.55
<b>Patient Education</b> Non-Reimbursed	Avg. = 0.0899 Range= 0.021 – 0.192 7/7 Pharmacies Provided	Avg. = 0.06 Range = 0.01 – 0.1 6/6 pharmacies provided	p=0.46
<b>Immunizations</b> Reimbursed	Avg. = 0.005 Range= 0 – 0.013 1/7 Pharmacies Provided	Avg. = 0.44 Range = 0.1 – 0.84 6/6 pharmacies provided	<b>p=0.01</b>
<b>Immunizations</b> Non-Reimbursed	Avg. = 0.0034 Range= 0 – 0.019 2/7 Pharmacies Provided	Avg. = 0.0 Range = 0 0/6 pharmacies provided	p=0.25
<b>Injection Administration</b> Reimbursed	Avg. = 0.0032 Range= 0 – 0.0086 4/7 Pharmacies Provided	Avg. = 0.10 Range = 0 – 0.54 3/6 pharmacies Provided	p=0.33
<b>Injection Administration</b> Non-Reimbursed	Avg. = 0.00 Range= 0 0/7 Pharmacies Provided	Avg. = 0.0 Range = 0 0/6 pharmacies Provided	p=n/a (the same result)

**Aggregate Data: Number of services per hour (continued):**

<b>Service Type</b>	<b>Baseline</b>	<b>TCT (8/1/15 – 11/30/15)</b>	<b>p-value compared to baseline</b>
<b>Patient Screening/Testing</b> Reimbursed	Avg. = 0.0018 Range = 0 – 0.013 1/7 Pharmacies Provided	Avg. = 0.01 Range = 0 – 0.04 1/6 pharmacies provided	p=0.47
<b>Patient Screening/Testing</b> Non-Reimbursed	Avg. = 0.0018 Range= 0 – 0.105 5/7 Pharmacies Provided	Avg. = 0.03 Range = 0.0 – 0.08 4/6 pharmacies provided	p=0.48
<b>MTM Current Medication List/History</b> Reimbursed	Avg. = 0.0047 Range= 0 – 0.02 0 2/7 Pharmacies Provided	Avg. = 0.01 Range = 0 – 0.06 2/6 pharmacies provided	p=0.42
<b>MTM Current Medication List/History</b> Non-Reimbursed	Avg. = 0.0066 Range= 0 – 0.022 3/7 Pharmacies Provided	Avg. = 0.02 Range = 0 – 0.08 2/6 pharmacies provided	p=0.51
<b>MTM Medication Reconciliation</b> Reimbursed	Avg. = 0.0078 Range= 0 – 0.042 2/7 Pharmacies Provided	Avg. = 0.01 Range = 0 – 0.04 2/6 pharmacies provided	p=0.93
<b>MTM Medication Reconciliation</b> Non-Reimbursed	Avg. = 0.0226 Range= 0 – 0.076 3/7 Pharmacies Provided	Avg. = 0.01 Range = 0 – 0.04 3/6 pharmacies provided	p=0.43
<b>MTM Patient Follow-up</b> Reimbursed	Avg. = 0.0025 Range= 0 – 0.017 1/7 Pharmacies Provided	Avg. = 0.01 Range = 0 – 0.02 2/6 pharmacies provided	p=0.58
<b>MTM Patient Follow-up</b> Non-Reimbursed	Avg. = 0.0133 Range= 0 – 0.084 2/7 Pharmacies Provided	Avg. = 0.02 Range = 0 – 0.10 3/6 pharmacies provided	p=0.72
<b>MTM Patient Interview</b> Reimbursed	Avg. = 0.0012 Range= 0 – 0.086 1/7 Pharmacies Provided	Avg. = 0.02 Range = 0 – 0.05 3/6 pharmacies provided	p=0.09
<b>MTM Patient Interview</b> Non-Reimbursed	Avg. = 0.0061 Range= 0 – 0.035 2/7 Pharmacies Provided	Avg. = 0.02 Range = 0 – 0.09 2/6 pharmacies provided	p=0.52
<b>MTM Provider Consult</b> Reimbursed	Avg. = 0.0003 Range= 0 – 0.002 1/7 Pharmacies Provided	Avg. = 0.0 Range = 0 -0.01 2/6 pharmacies provided	p=0.25
<b>MTM Provider Consult</b> Non-Reimbursed	Avg. = 0.0190 Range= 0 – 0.133 1/7 Pharmacies Provided	Avg. = 0.02 Range = 0 – 0.05 3/6 pharmacies provided	p=0.93
<b>MTM Other Services</b> Reimbursed	Avg. = 0.0051 Range= 0 – 0.036 1/7 Pharmacies Provided	Avg. = 0.00 Range = 0 0/6 pharmacies provided	p=0.36
<b>MTM Other Services</b> Non-Reimbursed	Avg. = 0.0172 Range= 0 – 0.089 2/7 Pharmacies Provided	Avg. = 0.01 Range = 0 – 0.06 1/6 pharmacies provided	p=0.68



**Conclusion:**

There appears to be an increase in *patient counseling, addressing DURs, and immunizations*. Anecdotally, pharmacists have reported having more time with each patient, providing a better quality service than prior to TCT.

\*Please see appendix A for individual site data.

**SUMMARY**

- Tech-Check-Tech portion of the study in Phase I sites went live on June 2, 2014.
  - On average, Phase I sites used the Tech-Check-Tech model approximately **61%** of the time, not including weekends and holidays. This was below the initial goal of 75%.

Month	Average # full TCT Days	Average # half TCT days	% of time doing TCT
August	10.33	1.33	55%
September	9.17	6.17	61%
October	9.5	5.17	60%
November	12	3.83	70%
<b>Overall Quarter</b>	<b>41</b> <i>Range: 0 – 70*</i> <i>*Excluding site that had zero: 43 - 70</i>	<b>16.17</b> <i>Range: 3 - 39</i>	<b>61%</b>

- Adequate staffing continued to be the biggest challenge to the TCT model in Phase I sites. The sites report that TCT process is smooth when adequately staffed.
  - There may be a certain level of baseline staffing or volume that would allow for TCT to be implemented without adding staff. Six of the seven sites added either clerk or additional technician help at some point during the project. Many of the sites just need to add one part-time person, varying between 10-20 hours per week. Some sites were able to increase the amount of revenue through MTM claims and immunizations which helped to cover the cost of the additional staff.
- A small group from the NPM task force met on December 22, 2014 to establish guidelines on when to consider discontinuation of the project due to a site’s inability to fully participate in the NPM project requirements (see Appendix B). The group recognized the importance of reviewing each site on a case-by-case basis. Action plans were created for two of the seven sites over the course of the project and both sites were able to successfully address issues set forth in the plan. One site struggled throughout but never met the requirements to need a formal action plan. One site dropped out of the pilot due to closing the pharmacy. **The remaining six sites were able to successfully complete the requirements for this pilot.**
- Creating a new workflow, establishing roles and job redistribution was a challenge initially.
- Any tech-check-tech workflow can increase the amount of pharmacist time spent on patient care compared with the traditional model.

- IPA supported the sites throughout the pilot with multiple live meetings and frequent site visits.
  - The IPA project manager visited each site every 2-3 months for the duration of the 18 month pilot.
  - The next live meeting will be in March or April of 2016.

#### **EXPANDING PHARMACIST-PROVIDED PATIENT CARE SERVICES**

- Sites are discussing and integrating the Pharmacists' Patient Care Process, a nationally endorsed method for incorporating patient care into pharmacies.
- Sites have reported they have more time for counseling, adherence monitoring, and immunizations.
- Sites have also reported an increase in non-influenza immunizations (primarily, pneumococcal, herpes zoster, and tetanus, diphtheria, acellular pertussis).
  - Some sites have implemented a screening tool used to assess vaccine needs while patients are waiting to pick up medications or started calling lists to call eligible patients in free time.
- Sites were able to:
  - Expand MTM opportunities
  - Expand Med Sync, compliance packaging and adherence programs
    - Site 5: Implemented a Med Sync program; Site 3: Implemented a formal adherence program through Prescribe Wellness
    - 6 of the 7 sites have implemented or expanded Med Sync compared to 2 sites prior to TCT
  - Establish collaborative practice agreements
  - Reaching out to other providers to let them know about pharmacy services

#### **PHARMACIST AND TECHNICIAN TRAINING**

- No pharmacists or technicians have joined the project since August 2015.
- Revised CEI modules are available for future staff additions. Modules are being used for phase I and phase II sites. The modules are on-demand and accredited for C.P.E.
  - Modules were available starting September 9, 2014.

## CONCLUSION

The technician error rate has been lower or not statistically different for Phase I sites with Tech-Check-Tech compared to the traditional Pharmacist-Check-Tech model. The Tech-Check-Tech intervention was a successful approach to increasing the amount of time pharmacists spent in patient care at all sites.

## FUTURE DIRECTION/GOALS

We aim to continue studying Tech-Check-Tech for refill prescriptions in these sites through July 2016 to determine if further amount of time in this model will further increase benefits seen.

## PHASE ONE PROJECT TIMELINE

Month 1-3	Project start-up; Finalize procedures for MTM service delivery and data collection
Month 2	Submit proposal to Iowa Board of Pharmacy for pilot/demonstration project – <i>Approved March 12, 2014</i>
Month 5	Community pharmacies implement Tech-Check-Tech programs; pharmacists engage in collaborative practice agreements for patient care delivery – <i>Implemented TCT June 2, 2014</i>
Month 23	Pilot project authority expires for Tech-Check-Tech <i>Pilot ends December 2, 2015</i> <i>Approved September 2, 2015 to renew pilot through Aug 2, 2016</i>
Month 22-24	Data analyses and report writing

## PHASE TWO PROJECT TIMELINE

Month 1-3	Project start-up; Identify sites
Month 2	Submit proposal to Iowa Board of Pharmacy for pilot/demonstration project – <i>Approved November 19, 2014</i>
Month 5	Community pharmacies implement Tech-Check-Tech programs; pharmacists engage in collaborative practice agreements for patient care delivery – <i>Implemented TCT February 2, 2015</i>
Month 23	Pilot project authority expires for Tech-Check-Tech <i>Pilot ends August 2, 2016</i>
Month 22-24	Data analyses and report writing

**APPENDIX A**

In order to protect the confidentiality of each site, there is no correlation between the order of the individual site reports A-G and the numerical designation on pages 2 - 3 of this report.

**Individual Site Data for *Site A*: Percent of time utilizing TCT = 65.29%**

<b><u>Site A Data from Technician checked prescriptions collected (8/1/15 – 11/30/15):</u></b>		<b><u>Site A data from Baseline collection (Pharmacist-checked prescriptions):</u></b>	
Total Rx Refills Checked	202	Total Prescription Refills Checked	752
Wrong Drug	0	Wrong Drug	1
Wrong Strength	0	Wrong Strength	0
Safety Cap Error	0	Safety Cap Error	0
Wrong Amount	0	Wrong Amount	0
Other Errors	0	Other Errors	0
Total Errors	0	Total Errors	1
Overall Error Rate	0.0%	Overall Error Rate	0.13%

**Composition of Pharmacist Day**

	<b><u>Baseline</u></b>	<b><u>TCT (8/1/15 – 11/30/15)</u></b>
<b>Time Spent in Dispensing</b>	71.02%	45%
<b>Time Spent in Management</b>	10.25%	7.5%
<b>Time Spent in Patient Care</b>	16.60%	38.75%
<b>Time Spent in Practice Development</b>	0.62%	8.75%
<b>Time Spent in Other Activities</b>	1.50%	0.0%

**Number of Services Provided per Pharmacist Hour**

	<b><u>Baseline</u></b>	<b><u>TCT (8/1/15 – 11/30/15)</u></b>
<b>Reimbursed Patient Care Services</b>	0.000	0.68
<b>Non-Reimbursed Patient Services Care</b>	1.9938	5.04
<b>Total Patient Care Services</b>	1.9938	5.73

**Individual Site Data for Site B: Percent of time utilizing TCT = 54.12%**

<b>Site B Data from Technician checked prescriptions collected (8/1/15 – 11/30/15):</b>		<b>Site B data from Baseline collection (Pharmacist-checked prescriptions):</b>	
Total Rx Refills Checked	200	Total Prescription Refills Checked	758
Wrong Drug	0	Wrong Drug	0
Wrong Strength	0	Wrong Strength	0
Safety Cap Error	0	Safety Cap Error	3
Wrong Amount	0	Wrong Amount	0
Other Errors	0	Other Errors	0
Total Errors	0	Total Errors	3
Overall Error Rate	0%	Overall Error Rate	0.396%

**Composition of Pharmacist Day**

	<b>Baseline</b>	<b>TCT (8/1/15 – 11/30/15)</b>
<b>Time Spent in Dispensing</b>	69.56%	44.10%
<b>Time Spent in Management</b>	9.17%	4.30%
<b>Time Spent in Patient Care</b>	17.44%	47.03%
<b>Time Spent in Practice Development</b>	0.71%	5.57%
<b>Time Spent in Other Activities</b>	3.11%	1.01%

**Number of Services Provided per Pharmacist Hour**

	<b>Baseline</b>	<b>TCT (8/1/15 – 11/30/15)</b>
<b>Reimbursed Patient Care Services</b>	0.0862	1.05
<b>Non-Reimbursed Patient Services Care</b>	1.8405	5.08
<b>Total Patient Care Services</b>	1.9267	6.13

**Individual Site Data for Site C: Percent of time utilizing TCT = 71.76%**

<b>Site C Data from Technician checked prescriptions collected (8/1/15 – 11/30/15):</b>		<b>Site C data from Baseline collection (Pharmacist-checked prescriptions):</b>	
Total Rx Refills Checked	215	Total Prescription Refills Checked	752
Wrong Drug	0	Wrong Drug	0
Wrong Strength	0	Wrong Strength	0
Safety Cap Error	0	Safety Cap Error	0
Wrong Amount	0	Wrong Amount	0
Other Errors	0	Other Errors	1
		Days' Supply =1	
Total Errors	0	Total Errors	1
Overall Error Rate	0.0%	Overall Error Rate	0.13%

**Composition of Pharmacist Day**

	<b>Baseline</b>	<b>TCT (8/1/15 – 11/30/15)</b>
<b>Time Spent in Dispensing</b>	74.47%	57.05%
<b>Time Spent in Management</b>	9.26%	10.36%
<b>Time Spent in Patient Care</b>	14.95%	30.67%
<b>Time Spent in Practice Development</b>	1.32%	0.89%
<b>Time Spent in Other Activities</b>	0.00%	1.04%

**Number of Services Provided per Pharmacist Hour**

	<b>Baseline</b>	<b>TCT (8/1/15 – 11/30/15)</b>
<b>Reimbursed Patient Care Services</b>	0.00	0.24
<b>Non-Reimbursed Patient Services Care</b>	1.9857	2.77
<b>Total Patient Care Services</b>	1.9857	3.01

**Individual Site Data for Site D: Percent of time utilizing TCT – 22.94%**

<b>Site D Data from Technician checked prescriptions collected (8/1/15 – 11/30/15):</b>		<b>Site D data from Baseline collection (Pharmacist-checked prescriptions):</b>	
Total Rx Refills Checked	200	Total Prescription Refills Checked	750
Wrong Drug	0	Wrong Drug	0
Wrong Strength	0	Wrong Strength	0
Safety Cap Error	0	Safety Cap Error	4
Wrong Amount	0	Wrong Amount	0
Other Errors	0	Other Errors	0
Total Errors	0	Total Errors	4
Overall Error Rate	0.0%	Overall Error Rate	0.53%

**Composition of Pharmacist Day**

	<b>Baseline</b>	<b>TCT (8/1/15 – 11/30/15)</b>
<b>Time Spent in Dispensing</b>	80.81%	72.62%
<b>Time Spent in Management</b>	5.81%	2.80%
<b>Time Spent in Patient Care</b>	13.13%	20.40%
<b>Time Spent in Practice Development</b>	0.25%	1.34%
<b>Time Spent in Other Activities</b>	0.00%	2.85%

**Number of Services Provided per Pharmacist Hour**

	<b>Baseline</b>	<b>TCT (8/1/15 – 11/30/15)</b>
<b>Reimbursed Patient Care Services</b>	0.0152	0.26
<b>Non-Reimbursed Patient Services Care</b>	0.1266	4.73
<b>Total Patient Care Services</b>	0.1418	4.99

**Site E is no longer in the pilot.**



**Individual Site Data for Site F: Percent of time utilizing TCT = 57.06%**

<b><u>Site F Data from Technician checked prescriptions collected (8/1/15 – 11-30/15):</u></b>	<b><u>Site F data from Baseline collection (Pharmacist-checked prescriptions):</u></b>
Total Rx Refills Checked 200	Total Prescription Refills Checked 854
Wrong Drug 0	Wrong Drug 0
Wrong Strength 0	Wrong Strength 0
Safety Cap Error 0	Safety Cap Error 0
Wrong Amount 0	Wrong Amount 2
Other Errors 0	Other Errors 3
Total Errors 0	Wrong Data Entry =1 Wrong Place in Cassette=2 Total Errors 5
Overall Error Rate 0.0%	Overall Error Rate 0.5854%

**Composition of Pharmacist Day**

	<b><u>Baseline</u></b>	<b><u>TCT (8/1/15 – 11/30/15)</u></b>
<b>Time Spent in Dispensing</b>	38.73%	31.45%
<b>Time Spent in Management</b>	12.79%	10.72%
<b>Time Spent in Patient Care</b>	19.39%	39.95%
<b>Time Spent in Practice Development</b>	14.43%	13.59%
<b>Time Spent in Other Activities</b>	14.66%	4.31%

**Number of Services Provided per Pharmacist Hour**

	<b><u>Baseline</u></b>	<b><u>TCT (8/1/15 – 11/30/15)</u></b>
<b>Reimbursed Patient Care Services</b>	0.15	0.29
<b>Non-Reimbursed Patient Services Care</b>	0.85	5.26
<b>Total Patient Care Services</b>	0.99	5.55

**Individual Site Data for Site G: Percent of time utilizing TCT – 79.29%**

<b><u>Site G Data from Technician checked prescriptions collected (8/1/15 – 11/30/15):</u></b>		<b><u>Site G data from Baseline collection (Pharmacist-checked prescriptions):</u></b>	
Total Rx Refills Checked	200	Total Prescription Refills Checked	926
Wrong Drug	0	Wrong Drug	0
Wrong Strength	0	Wrong Strength	0
Safety Cap Error	0	Safety Cap Error	0
Wrong Amount	0	Wrong Amount	0
Other Errors	0	Other Errors	0
Total Errors	0	Total Errors	0
Overall Error Rate	0.0%	Overall Error Rate	0.00%

**Composition of Pharmacist Day**

	<b><u>Baseline</u></b>	<b><u>TCT (8/1/15 – 11/30/15)</u></b>
<b>Time Spent in Dispensing</b>	71.39%	24.15%
<b>Time Spent in Management</b>	6.93%	7.65%
<b>Time Spent in Patient Care</b>	19.20%	54.45%
<b>Time Spent in Practice Development</b>	2.33%	11.46%
<b>Time Spent in Other Activities</b>	0.15%	2.29%

**Number of Services Provided per Pharmacist Hour**

	<b><u>Baseline</u></b>	<b><u>TCT (8/1/15 – 11/30/15)</u></b>
<b>Reimbursed Patient Care Services</b>	0.5088	1.09
<b>Non-Reimbursed Patient Services Care</b>	11.2398	9.35
<b>Total Patient Care Services</b>	11.7485	10.44

## APPENDIX B

### Site Requirements for New Practice Model (NPM) Project

The following is a guideline of requirements asked of sites in the NPM project. If a site struggles to meet the requirements, members from the NPM task force will review the site's progress and develop a plan of action to help the site succeed. If the site continues to be unable to meet the requirements, the members from the task force will provide a recommendation to the board of pharmacy to consider withdrawing the site from the study.

Sites that consistently struggle with:

- 1) Submitting data on time
- 2) Changing workflow to incorporate Tech-Check-Tech
- 3) Ongoing staffing issues including low number of hours doing Tech-Check-Tech
- 4) Using freed up time to reduce pharmacist hours or engage in non-patient care activities