#### PROJECT SUMMARY

Participating pharmacies were identified to be New Practice Model (NPM) participant sites using criteria defined by the NPMTF. In the phase III NPM pharmacies, the pharmacist(s) will work collaboratively with prescribers and other care providers in their community to optimize the medication use process. This process may involve the appropriate choice of medication as the therapy modality, initial selection of appropriate therapy to minimize drug therapy problems, assisting the patient in the acquisition and use of the medication, appropriate monitoring and adjustment of the medication therapy, and withdrawal or changing of medication therapy as appropriate, among others. This ongoing effort is coordinated amongst providers, with the pharmacist actively engaged in the process.

Community pharmacies will enhance previously implemented "Tech-Check-Tech" programs to include new prescriptions and additional staff (pharmacist-interns) in order to further increase the availability of the community pharmacist for direct patient care. New prescriptions will include prescriptions for a medication that is new to the patient or renewed medication orders for previously established medication. Pharmacists will continue to have ultimate authority over the dispensing process in this model. However, that does not mean the pharmacist will have hands-on direct supervision over every non-judgmental aspects of dispensing medications. The pharmacist's time will be concentrated on those aspects of dispensing that require the expertise of the pharmacist to assure safe and accurate dispensing.

The following is a detailed description of what our practice currently looks like with the TCT program:

- The pharmacist is physically located on the premises of the pharmacy in an environment and location that is comfortable and efficient for direct patient interaction. Refer to **Appendix B** for a photo of this space.
- The prescription department is fully staffed by TWO nationally certified technicians and ONE pharmacy technician in training. The pharmacist-technician relationship has become more important as the pharmacist relies on new technologies and the leadership of all technicians to maintain the highest safety to patients. Refer to **Appendix B** for photos of the technician filling and checking stations.
- The pharmacist will review accuracy of the order and appropriateness of therapy for all new prescriptions, as well as complete Drug Utilization Reviews (DURs) or other necessary clinical reviews tied to prescription dispensing for all prescriptions.
- Trained technicians will make sure the medication and quantity is correct, it is billed accurately, and the correct patient receives the medication. These non-judgmental tasks of the prescription dispensing process can be entirely technician driven. When an error is found, it can be logged in NuCara's electronic Continuous Quality Improvement (CQI) system, <a href="www.nucaracqi.com">www.nucaracqi.com</a>. Refer to **Appendix B** for a screenshot of this system.
- The "final check" technician works closely with the pharmacist. This relationship is important as the pharmacist will often rely on the technician to request appropriate interaction and/or intervention. The "final check" technician has received advanced training. This standardized training was developed by the NPMTF in collaboration with the lowa Pharmacy Association Foundation with approval by the Board of Pharmacy in 2014. The Board of Pharmacy ultimately approves each pharmacy site's involvement in this initiative.

- Many of the prescriptions filled in the pharmacy are refill prescriptions. With no changes in therapy, the most significant criteria is to make sure the medication and quantity is correct, it is billed accurately, and the correct patient receives the medication. These non-judgmental tasks of the process can be entirely technician driven.
- Medication counseling and responding to patient questions may be completed in association with the distribution of the medication to the patient, but it may also occur outside of dispensing. Pharmacists would be available for consultation with patients, prescribers and other care providers as an integral member of the team. Overall, this model will enable pharmacists to provide direct patient care services.
- In return, we hope to find that this will allow the pharmacist to offer additional clinical services to benefit our patients, including, but not limited to: MTM, Medicaid Pharmaceutical Case Management (PCM), additional immunization services, additional disease state monitoring and associated clinical screenings as well as the opportunity to provide additional home medical equipment.

The medication distribution process will be under the control of a pharmacist, but only in that a pharmacist will be responsible for developing, implementing, and providing Continuous Quality Improvement for a system where the majority of activity will be completed by nationally-certified pharmacy technicians. Use of appropriate technologies (e.g., image verification, barcode scanning, filling machines) will be utilized when appropriate to assure the medication is made available to the patient. See **Appendix B** for current workflow map of the pharmacy, photos of pharmacy, and screen shots of the online CQI system and pharmacy computer system, ComputerRx.

## Board of Pharmacy Rules Needed to be Waived

In order for implementation of this pilot project, it is requested that the Iowa Board of Pharmacy waive three regulations.

657—3.21(1) Technical dispensing functions. By waiving rule 657—3.21(1), the Board of Pharmacy would allow for a certified pharmacy technician to conduct final verification of the patient's prescription or medication order as is the current exception in an approved tech-check-tech program pursuant to 657—Chapter 40, as well as when the initial prescription or medication order is filled by a registered pharmacist-intern.

657—3.23(155A) Tasks a pharmacy technician shall not perform. By waiving rule 657—3.23(155A) specifically point number one, the Board of Pharmacy would allow for a certified pharmacy technician to provide the final verification of a filled prescription or medication order.

657—8.3 (4) Pharmacist-documented verification. By waiving rule 657—8.3(4), the Board of Pharmacy would remove the responsibility of the pharmacist to provide and document the final verification of the patient's prescription medication in order to pilot a tech-check-tech program in community practice settings.

## Identification of Patients Needing MTM Services

Patients currently utilizing the community pharmacy will be provided the additional clinical pharmacy services that community pharmacies are available to provide. Patients who would be eligible for commercial and/or governmental MTM services will be identified through pharmacy records. If the patient is not a subscriber to insurance coverage providing payment for pharmacist provided MTM services, these services will be provided when possible. The

community pharmacists will also work closely with their physicians in their community to identify key patients in the medical practice that would benefit from medication management services. The physician and pharmacist will be provided the tools to establish a collaborative practice agreement to address these key health care needs in the community.

## Services Provided by Pharmacy

Services provided by our pharmacy prior to tech-check-tech included:

- 1. Immunization services, primarily influenza
- 2. Home Medical Equipment: Daily Living Aids (e.g. canes, bed rails, ramps, etc.)

Services that were expanded or added during the pilot period include:

- 1. MTM as described in the *Core Elements of MTM Service Model* document produced as a joint initiative of the American Pharmacists Association and the NACDS Foundation<sup>1</sup> utilizing the OutcomesMTM platform
- 2. PCM for qualified Medicaid patients
- 3. Additional immunization services: Pneumococcal & Zostavax injections
- 4. Formalized disease state monitoring programs & associated clinical screenings: Hyperlipidemia, Hypertension, Diabetes, Blood Clotting Disorders
- 5. Additional Home Medical Services such as nebulizers, walkers, mastectomy fittings, etc.

## Plans for expansion include:

- 1. Enrollment in Wellmark's Value Based Network
- 2. Enrollment in the Iowa Community Pharmacy Enhanced Services Network
- 3. Further implementation of NuFill, the appointment based model, and other adherence programs
- 4. Maximize all MTM opportunities

<sup>&</sup>lt;sup>1</sup> American Pharmacists Association, National Association of Chain Drug Stores Foundation. *Medication Therapy Management in Pharmacy Practice: Core Elements of MTM Service Model*. Washington, DC: American Pharmacists Association; March 2008.

#### **METHODS**

#### Measures

Aim 1: Implement and assess the impact of adding new prescriptions and utilization of pharmacist-interns to a Tech-Check-Tech program in community pharmacies in Iowa on patient safety measures.

For the assessment of this Aim, information will be gathered to ensure dispensing accuracy of new prescriptions. Each pharmacy will act as its own control, with baseline measurement of dispensing errors being determined for 50 new prescriptions per day, on days when TCT for refills is being done, for 15 weekdays before initiation of the Tech-Check-Tech procedures for new prescriptions. For the first week after the new procedures have been initiated, the pharmacist will double check all technician-verified prescriptions to ensure accuracy and to gather information on the efficacy of the procedures. If the error rate is equal to or lesser than the baseline measurement, 30-50 new prescriptions as well as 30-50 refill per month will be double checked for errors and those measurements recorded for the reminder of the project. If the error rate is greater than baseline measurement, additional training will be given and procedures reviewed, after which a second assessment will be performed. Length of any second assessment will be determined by the researcher. The research consultant will review these results on an ongoing basis and quarterly reports made to the Board of Pharmacy as necessary during the 18 month study period.

Aim 2: Implement and assess the impact of adding new prescriptions and utilization of pharmacist-interns to a Tech-Check-Tech program in community pharmacies in Iowa and in facilitating the provision of community pharmacist-provided medication therapy management.

For the assessment of this Aim, information will be gathered regarding the amount of pharmacist time that is made available for other duties as a result of the implementing Tech-Check-Tech for new prescriptions and utilizing pharmacist-interns for TCT on the provision of MTM services by the pharmacist(s) at the subject pharmacies. Each pharmacy will again act as its own control, with baseline measurements consisting of the last quarter of results from the previous pilot program of Tech-Check-Tech for refill prescriptions. 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 for new prescriptions 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.

#### Other Measures:

## Job Satisfaction Survey

A job satisfaction survey will be conducted prior to, and one year after implementation of utilizing TCT for new prescriptions. All technicians, pharmacists and employed pharmacist-interns will be asked to complete the survey.

## Amount of time spent utilizing TCT (# of TCT days)

The amount of time utilizing TCT will continue to be monitored and will be compared to the previous pilot in order to determine whether or not allowing technicians the ability to check prescriptions filled by employed pharmacist-interns impacted the ability to use TCT.

**Analysis** 

Error rates during the 18 month study period will be compared to those found at baseline by means of Chi-squared testing and matched samples t-tests. Specific errors tracked will include wrong drug, wrong strength, wrong quantity, and wrong cap (safety-cap vs. non-safety cap). Comparisons of pharmacist task composition will be compared to those found at baseline by means of Chi-squared testing matched samples t-tests. The services provided data gathered during the study period will be compared to those found at baseline in terms of the overall number of services provided.

#### STUDY PARTNERS

## **Drake University**

Drake University will oversee the research component of this project, by working with the pharmacy partners to assure that study activities are conducted in a timely and coordinated manner. Dr. Andreski will design data collection procedures, supervise data collection, manage and analyze study data, and assist in writing the study reports.

Iowa Pharmacy Association

The Iowa Pharmacy Association (IPA) will assist in preparing the community pharmacy sites to deliver the MTM services. They have experience in helping pharmacy practices adjust to providing services such as MTM. IPA will help the practices adjust staffing, workflow, and service delivery issues with the participating community pharmacies

Local Community Pharmacies in the New Practice Model Initiative

Community pharmacies across the state of Iowa will initially participate in the study by working to transform their current patient care delivery model to enhance their Tech-Check-Tech program and further engage pharmacists in clinical programs that follow the JCPP's Pharmacists' Patient Care Process to improve patient safety and provide enhanced patient care. Pharmacists in these pharmacies will deliver the clinical services as described in this study proposal and subsequent service descriptions.

#### PROJECT TIMELINE

Month 18-19

| Month 1-2  | Project start-up; Baseline data collection; transition workflow to include TCT for new medications  |
|------------|---|
| Month 2 -3 | Community pharmacies begin enhanced Tech-Check-Tech programs; pharmacists engage in collaborative practice agreements for patient care delivery |
| Month 18   | Pilot project authority expires for Tech-Check-Tech   |

Data analyses and report writing

8

## Appendix A NuCara Pharmacy #12 Traer

#### SITE DESCRIPTION

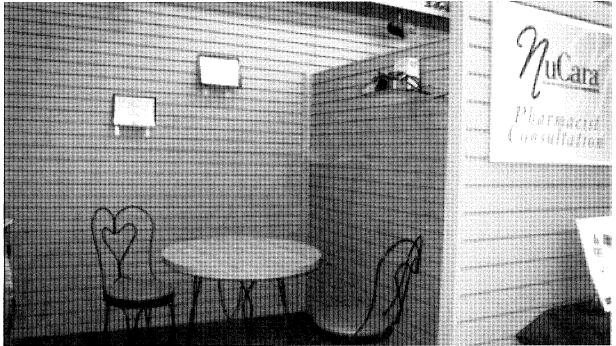
## Tech-Check-Tech:

- Physical layout Free Standing Pharmacy, conducive to:
  - o Direct technician supervision
  - o Questions from techs
  - o Follow-up from pharmacists
  - Direct observation of work flow
- Staffing:
  - o 1:2 Pharmacist/Technician Ratio
  - Experienced Pharmacists (Since 1971)
  - o Experienced Technicians (primary checking tech Since 1994)
- Existing Clinical
  - Want to expand services offered as listed in project summary
  - Want to expand patients reached
- Have done some trial runs of TCT (with RPh final check) to determine most efficient flow process
- Technicians have completed Tech-Check-Tech training provided by the Iowa Pharmacy Association and CEI
- Pamela Wong Wiltfang, our Director of Clinical Services & Innovative Practice has shared input on developing this proposal, and will continue to be engaged with training and support of our technicians as well as myself through this pilot.
- Our technicians have actively embraced this opportunity to further their careers and be even more actively involved in serving our patients as a member of the pharmacy team.

Appendix B

Clinical Pharmacist Stations for Private Patient Consultations





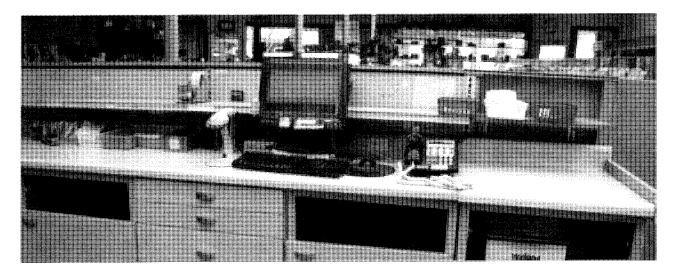
## **Entering Technician Stations (Barcode Scanning Technology)**



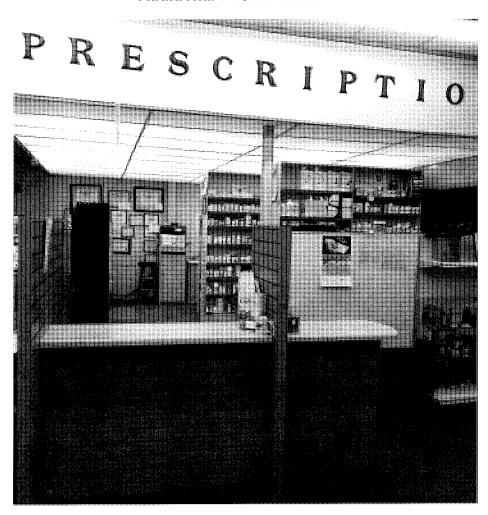
Filling (& Entering) Technician Stations (Barcode Scanning Technology)



## **Checking Technician Station (Barcode Scanning Technology)**



**Additional Photos of the Site** 



# NuCara's Electronic CQI System (<u>www.nucaracqi.com</u>)

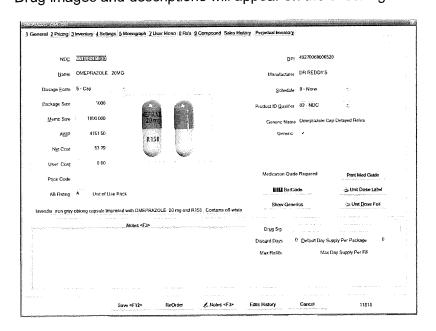
| Micros (                  | Dassinuata        | lu Committed                       |            |                                       |       |
|---------------------------|-------------------|------------------------------------|------------|---------------------------------------|-------|
|                           | Home              | ly Committed Quality Related Event | Setup      | Reports                               | Users |
| NuCara Pharmacy           | NuCara 25 - Marsh | ialitown North 💠                   |            |                                       |       |
| Date                      | 12/20/2013        | <u></u>                            |            |                                       |       |
| Prescription Type         | - +               |                                    |            |                                       |       |
| rescription #             |                   |                                    |            |                                       |       |
| What type of error?       |                   | \$                                 |            |                                       |       |
| Where was the error made? |                   |                                    | <b>†</b> ! | · · · · · · · · · · · · · · · · · · · |       |
| Patient Outcome           | -                 |                                    |            | •                                     |       |
| Action Plan               |                   | <b>†</b>                           |            |                                       |       |
| Pharmacy Notes            |                   |                                    |            |                                       |       |
|                           |                   |                                    |            |                                       |       |
| rescribed Drug            |                   |                                    |            |                                       |       |

## FILLING Technician ComputerRx Screen



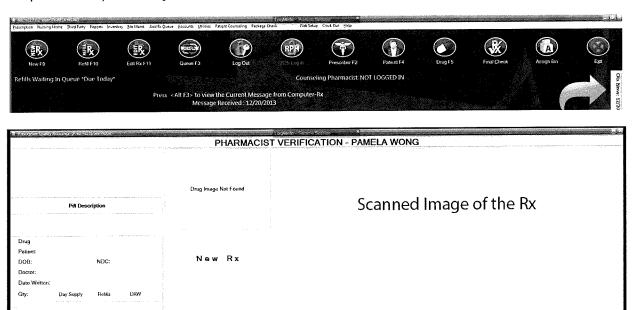
| PHARMAC                                  | Y TECH VERIFICATION - | SAMPLE TECHNICIAN       |
|--|-----------------------|-------------------------|
| Pill Description                         | Drug Image Not Found  | Scanned Image of the Rx |
| Drug                                     | New Rx                | ,                       |
| Patient DOB: NDC Doctor                  |                       |                         |
| Date Writlen  Ory Dey Supply Refills DAW |                       |                         |
|  | Adherence %           | <u>]</u> .              |
| Cost Total Pd Net Fee :<br>abel Nate     |                       |                         |
| <b>R</b> x <sup>1</sup> Input By.        |                       |                         |
| DC                                       | Edit Rx <f7></f7>     |                         |
| Check Fail                               | <b>Q</b> 59*          |                         |

\*\*Drug images and descriptions will appear on the checking screen

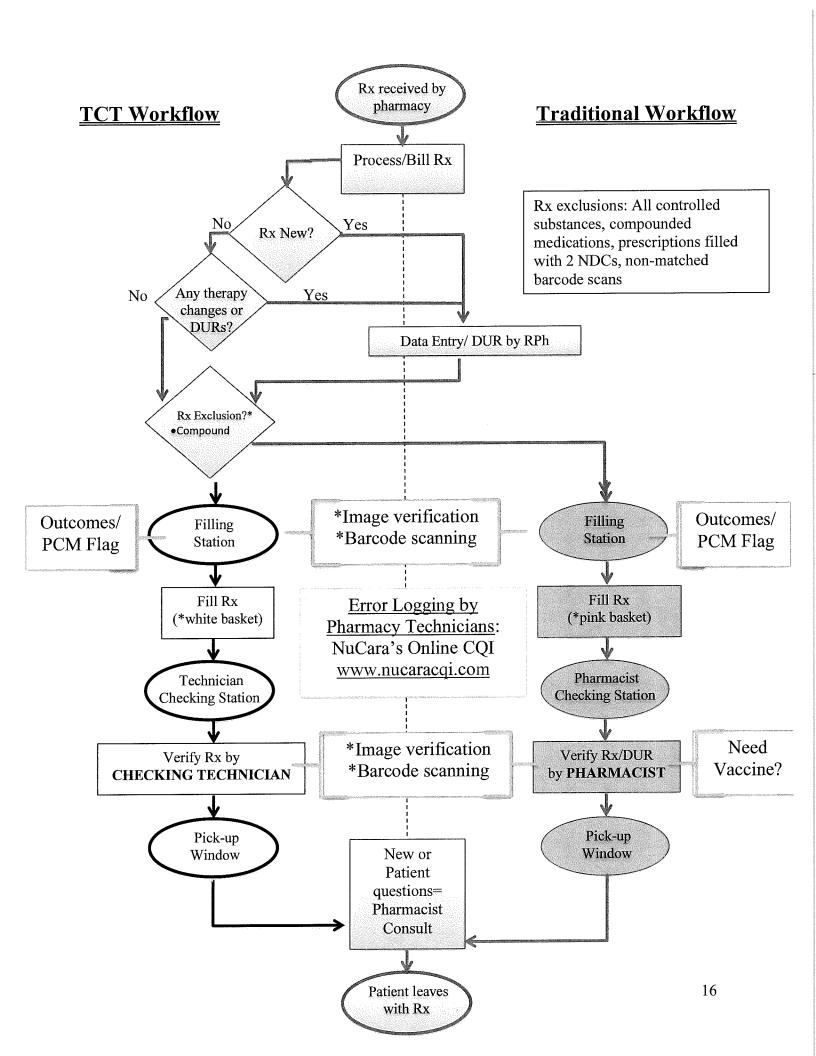


## CHECKING Technican ComputerRx Screen

\*\*Working with ComputerRx to create new "role" for "Checking Technician Verification (under pharmacist)" in the system, but for now in the screenshot it says "Pharmacist Verification"



NDC



## Appendix C

# Certified Pharmacy Technician Training Requirements & Checklist

## Pharmacy Staff Training Requirements

#### Technician Utilization & Authorized Checking Functions

Each technician specifically authorized to participate in TCT at the participating pharmacy will be identified in their personnel file and an added designation to their posted registrations. A certified pharmacy technician authorized to participate in TCT will be trained in and maintain all the duties, activities, and work of registered and certified technicians. Additionally, the Checking Technician may be allowed to check medication orders filled by other certified technicians, limited to the following patient care situations:

- Refill medications, in which DUR has already occurred by a pharmacist
- New medications, in which DUR and data entry review has already occurred by a pharmacist

Each technician certified to check will have documented training and evaluation of necessary training. Each pharmacy location will determine examples of medications that will NOT be checked by technicians. This could include:

- Controlled substances,
- Compounded medications, and
- Others as designated by PIC or staff pharmacists.

## "Filling" Technician or Pharmacist-Intern

- Certified technicians filling prescriptions for the TCT program must be nationally certified and passed an audit of accurately filling prescriptions as established by a site's policy and procedures.
- Employed student interns must have at least 300 hours of experience working as a technician or intern, and at least 100 of the 300 hours must be at the current TCT location.
   Interns must pass an audit of accurately filling prescriptions as established by a site's policy and procedures.

## "Checking" Technician Participation & Training

All of the following shall apply to a certified pharmacy technician authorized to be a "Checking Technician" at the participating pharmacy:

- · National Certification: current and in good standing
- Iowa Registration: current and in good standing, and not currently subject to disciplinary charges or sanctions.
- Prior Experience: The checking technician shall work at the participating pharmacy full or part time and:
  - Shall have at least 1,000 hours <u>prior technician work experience at the TCT site</u> and at least 1,000 hours of prior technician work experience at the current or previous pharmacy, successfully complete their necessary location-specific training, and then complete the TCT training (see below).
  - o If the technician has no prior technician work experience in a pharmacy, they shall work at least 2,000 hours at the pharmacy and successfully complete their necessary location-specific training, and then complete the TCT training (see below).

#### IPA/CEI Tech-Check-Tech CPE Modules

If a pharmacy will be implementing a Tech-Check-Tech program, the certified pharmacy technicians, pharmacist-interns and the pharmacists, shall receive specialized and advanced training as provided in policies and procedures, including training in the prevention, identification, and classification of medication errors. The training program for a certified pharmacy technician shall be didactic in nature and shall include successful completion (80%) of a competency test for each module.

- Pharmacists will be required to complete the first two modules listed, filling technicians
  and pharmacist-interns will complete the first three modules listed, and checking
  technicians will complete all the modules listed.
  - a. Thinking about Tech-Check-Tech?
    - i. State the need in the profession for a technician-managed distribution process
    - ii. Describe the opportunities for pharmacists to provide clinical services
    - iii. Review current regulations that govern Tech-Check-Tech programs
    - iv. Review the principles of ASHP's New Practice Model Initiative and an example of state implementation
    - v. Illustrate the case to pharmacy staff, upper management, and the Board of Pharmacy
  - b. Tech-Check-Tech: A Step-by-Step Guide for Outpatient Pharmacy
    - i. Illustrate the case to pharmacy staff, management, and Board of Pharmacy for Tech-Check-Tech
    - ii. Recognize the steps needed to prepare and implement a Tech-Check-Tech program
    - iii. Outline how a pharmacy monitors for quality assurance in a Tech-Check-Tech program
    - iv. Formulate a sample job description for a pharmacy technician engaged in a Tech-Check-Tech program
    - v. Review liability issues in a Tech-Check-Tech program
  - c. Accuracy in the Outpatient Pharmacy: Preventing, Identifying and Classifying Medication Errors
    - i. Recognize and classify common medication errors
    - ii. Recognize the causes of medication errors
    - iii. List ways to prevent medication errors
    - iv. Recognize the importance of continuous quality improvement (CQI) in the pharmacy distribution process
    - v. Describe the technician's role in CQI in the pharmacy
  - d. Dosage Forms
    - i. Identify the most common medication dosage forms
    - ii. Describe the advantages and disadvantages of different medication dosage forms
    - iii. Recognize the different routes of administration and the advantages of each
    - iv. List ways to recognize and prevent dosage form dispensing errors
  - e. Calculations Review
    - i. Describe examples of common systems of measurement
    - ii. Demonstrate the ability to convert units of measurement
    - iii. Appropriately calculate the day's supply from a prescription order
    - iv. Use percentages, ratios, and proportions to make accurate pharmaceutical calculations using mathematical skills reviewed in the activity

- v. Solve common pharmacy calculations using mathematical skills reviewed in this activity
- vi. Master specific math functions appropriate to practice setting
- f. Advanced Review of Common Medications
  - i. Group medications by pathophysiologic class using established stems (prefixes, infixes, & suffixes)
  - ii. List common adverse effects and drug interactions
  - iii. List common adherence challenges
  - iv. Distinguish medications with similar generic names
  - v. Recognize medications with multiple formulations

#### Responsible Individual

The "Pharmacist in Charge" or Pharmacy Manager at each participating pharmacy shall be ultimately responsible for the TCT program activities (unless otherwise noted). The PIC will be responsible for meeting TCT program training and validation requirements. The PIC will designate the staff pharmacists to supervise the activities of Checking Technicians. The entire staff, pharmacists and technicians, will be involved in collection of data for the program evaluation on a regular basis, reporting information to the PIC for analysis.

#### Staffing

Pharmacy staffing shall be adequate to ensure consistent and safe implementation and usage of the TCT program and will optimize pharmacist patient care services, which will have data collected and analyzed through the pharmacy's existing CQI process with variations as requested or demeaned necessary by the research team.

#### Records

The pharmacist in charge shall maintain in the pharmacy department records for each certified pharmacy technician authorized by the pharmacist in charge or responsible pharmacist to participate in the TCT program. The records shall be available for inspection and copying by the Board or its representatives and any other authorized agencies for two years beyond the term of the certified pharmacy technician's employment. The record summary (Technician Function Levels) shall include:

- a. The name of the certified pharmacy technician.
- b. The date the certified pharmacy technician completed the standardized training and sitespecific evaluation for participation in the TCT program.
- c. The date the certified pharmacy technician was authorized to participate in the TCT program and the specific TCT program functions and tasks the certified pharmacy technician is authorized to perform.
- d. When the certified pharmacy technician is authorized to check the work of other certified pharmacy technicians, the date the checking technician completed the specialized and advanced training.
  - e. The dates and results of all competency evaluations.
- f. The dates of and reasons for any suspension or revocation of the certified pharmacy technician's TCT program authorization, identification of corrective action or retraining completed, and date of subsequent reinstatement of the certified pharmacy technician's TCT program authorization.
- g. The dates of and reasons for any disciplinary action taken against the certified pharmacy technician in connection with the certified pharmacy technician's performance of duties relating to the TCT program.

**Evaluation of Program and Technicians:** 

Technician filling and checking responsibilities will be monitored daily. Errors will be documented for both filling and checking, and review of all errors will also be documented on this sheet by the PIC or responsible staff pharmacist. These sheets will be collected and data entered for bi-weekly review. The records will be maintained in the pharmacy for a minimum of two years.

The implementation of the TCT program shall result in the redirection of pharmacists from distributive tasks to cognitive and patient care activities. The participating pharmacy will document these clinical activities and will collect and maintain these records for no less than two years following the date of the record. These records shall be updated at least semiannually.

- 1. The PIC shall conduct continuous monitoring and evaluation of each Checking Technician to ensure the continued competency of the TCT program and the safety of the patients. Errors will be identified and records maintained following the pharmacy's quality measures, including variance tracking and reports, event analysis, follow up and education.
- 2. Specific evaluation of the TCT program will incorporate three measures:
  - a. **Filling**: Review of errors identified by a Checking Technician or Pharmacist. The responsible staff pharmacist shall review with all certified pharmacy technicians involved with any errors identified during the evaluation of the <u>filling process</u> and shall discuss procedure and document the review on the daily monitoring sheet to ensure the errors are not repeated.
  - b. **Checking**: Periodic review and checking by the pharmacist of work <u>checked</u> (monthly to quarterly as designated) by the Checking Technician and identification and documentation of all errors not identified and corrected by the checking technician and shall discuss procedure and document the review on the daily monitoring sheet to ensure the errors are not repeated.
  - c. **Review of errors** identified following <u>release</u> by Checking Technician or Pharmacist. The responsible staff pharmacist shall receive, evaluate, and review with all certified pharmacy technicians involved with any errors identified by a health care professional, a patient, or any individual following release of a drug by the checking technician. All such errors will be documented on the daily form AND recorded via the pharmacy's CQI program.
- 3. Periodic review and monitoring will be recorded on our Ongoing TCT Competency Evaluation Record.
- 4. Benchmarks will be identified by compiling and evaluating of the <u>Technician QA Monitoring Daily Reports</u>. <u>Bi-weekly reports</u> will be used to evaluate ongoing competencies, identify possible system modifications, provide data for continuing site specific education, and to establish need for any retraining.
- 5. Retraining will occur when a Technician or Checking Technician has an error rate significantly above the average for participating pharmacy's technicians. Error rate "outliers" will be determined by an excessive error rate in filling or checking over two consecutive bi-weekly periods OR if the technician's cumulative error rate significantly exceeds the average cumulative error rate. During the retraining period (of not less than two bi-weekly periods) a technician's work will be checked by a pharmacist nor will the technician be allowed to check other technicians. Retraining will consist of a repeat competency evaluation in the area/s where excessive errors have occurred and potential repeat of didactic modules as appropriate. The PIC, with the input of staff pharmacists, will determine which sections, or all, of the training modules must be repeated.

## Letter of Commitment by Pharmacy Owner or Regional Supervisor

| I understand that my role as a New Practice Model Participating Pharmacist is a significant responsibility and will make it a priority. I look forward to working with this team and, like the others, I, |
|---|
|   |

- Support the Mission, Vision, Values and Goals of the initiative.
- Offer my expertise to help ensure the health and success of the initiative.
- Work with the rest of the pharmacy team to communicate the initiative to our most important audiences.
- Attend in person, by phone, or send a designee, to at least two-thirds of the
  meetings held each year I serve and, whether I attend or not, will continually
  communicate with the team and the main coordinator to ensure I understand all
  current affairs.
- Provide support for all data collection procedures. All data for each month will be
  electronically submitted within 10 days of the end of the month. Those
  pharmacies who are unable to meet this standard will be reviewed quarterly for
  assessment of continuation in the pilot study.
- Provide adequate staffing as required to support the New Practice Model procedures. Those pharmacies who are unable to implement the procedures at least 60% of the time will be reviewed quarterly for assessment of continuation in the pilot study.
- Actively participate in all requests for my assistance and response.

| I have rethe lower | ead and fully agree to this Letter of Commitment and look<br>a Pharmacy Association Foundation in this initiative. | forward to assisting |
|--------------------|--|----------------------|
| Signed             |  | Date 5/8/16          |
| Title              | Pres Na CARA Pharmero!   | <u>=</u> S           |

## Letter of Commitment by Pharmacy Owner or Regional Supervisor

| I understand that my role as a No    | ew Practice Model Participating Pharmacist is a significant                    |
|--------------------------------------|--|
| responsibility and will, make it a p | riority. I look forward to working with this team and, like the<br>, agree to: |
| others, I, break by leac             | , agree to:  |
| Di Ji                                |  |

- Support the Mission, Vision, Values and Goals of the initiative.
- Offer my expertise to help ensure the health and success of the initiative.
- Work with the rest of the pharmacy team to communicate the initiative to our most important audiences.
- Attend in person, by phone, or send a designee, to at least two-thirds of the meetings held each year I serve and, whether I attend or not, will continually communicate with the team and the main coordinator to ensure I understand all current affairs.
- Provide support for all data collection procedures. All data for each month will be
  electronically submitted within 10 days of the end of the month. Those pharmacies who
  are unable to meet this standard will be reviewed quarterly for assessment of
  continuation in the pilot study.
- Provide adequate staffing as required to support the New Practice Model procedures.
   Those pharmacies who are unable to implement the procedures at least 60% of the time will be reviewed quarterly for assessment of continuation in the pilot study.
- Actively participate in all requests for my assistance and response.

|   | 0  |
|---|----|
| Pharmacy Association Foundation in this initiative. |    |
| Signed Date 5707                                    | 16 |
| Signed 12 - VVVV                                    |    |
| Title UP of Operations                              |    |

I have read and fully agree to this/I etter of Commitment and look forward to assisting the lowa

## Letter of Commitment by Licensed Pharmacist

I understand that my role as a New Practice Model Participating Pharmacist is a significant responsibility and will make it a priority. I look forward to working with this team and, like the others, I, \_\_\_\_\_\_\_\_\_\_, agree to:

- Support the Mission, Vision, Values and Goals of the initiative.
- Offer my expertise to help ensure the health and success of the initiative.
- Work with the rest of the pharmacy team to communicate the initiative to our most important audiences.
- Attend in person, by phone, or send a designee, to at least two-thirds of the meetings held each year I serve and, whether I attend or not, will continually communicate with the team and the main coordinator to ensure I understand all current affairs.
- Complete all necessary training and education as required.
- Provide support for all data collection procedures. All data for each month will be electronically submitted within 10 days of the end of the month.

I have read and fully agree to this Letter of Commitment and look forward to assisting the loward

Actively participate in all requests for my assistance and response.

## **Letter of Commitment by Licensed Pharmacist**

| I understand that my role as a New Practice Model Participating Pharmacist is a significant responsibility and will make it a priority. I look forward to working with this team and, like the others, I,, agree to:  |
|---|
| Support the Mission, Vision, Values and Goals of the initiative.  |
| Offer my expertise to help ensure the health and success of the initiative.   |
| <ul> <li>Work with the rest of the pharmacy team to communicate the initiative to our most<br/>important audiences.</li> </ul>  |
| <ul> <li>Attend in person, by phone, or send a designee, to at least two-thirds of the meetings<br/>held each year I serve and, whether I attend or not, will continually communicate with the<br/>team and the main coordinator to ensure I understand all current affairs.</li> </ul> |
| Complete all necessary training and education as required.  |
| <ul> <li>Provide support for all data collection procedures. All data for each month will be<br/>electronically submitted within 10 days of the end of the month.</li> </ul>  |
| Actively participate in all requests for my assistance and response.  |
| I have read and fully agree to this Letter of Commitment and look forward to assisting the Iowa Pharmacy Association Foundation in this initiative.   |
| Signed Shyllus Myllus Date 5-10-16  |
| Title PIC   |

## **Letter of Commitment by Licensed Pharmacist**

| I understand that my role as a New Pra  | actice Model Participating | Pharmacist is  | a significant   |
|---|----------------------------|----------------|-----------------|
| responsibility and will make it a priority.<br>others, I, <u>Stevey W. Mit Your</u> | I look forward to working  | with this team | ı and, like the |
| others, I, Steven W. Markens  | , agree to:                |                |                 |

- Support the Mission, Vision, Values and Goals of the initiative.
- Offer my expertise to help ensure the health and success of the initiative.
- Work with the rest of the pharmacy team to communicate the initiative to our most important audiences.
- Attend in person, by phone, or send a designee, to at least two-thirds of the meetings held each year I serve and, whether I attend or not, will continually communicate with the team and the main coordinator to ensure I understand all current affairs.
- Complete all necessary training and education as required.
- Provide support for all data collection procedures. All data for each month will be electronically submitted within 10 days of the end of the month.
- Actively participate in all requests for my assistance and response.

I have read and fully agree to this Letter of Commitment and look forward to assisting the Iowa Pharmacy Association Foundation in this initiative.

Title VP Palessamm Affron - NuCara Pharmaeres

## Letter of Commitment by Certified Pharmacy Technician

I understand that my role as a New Practice Model Participating Pharmacy Technician is a significant responsibility and will make it a priority. I look forward to working with this team and, like the others, I, Macey L. Caldentill, agree to:

- Support the Mission, Vision, Values and Goals of the initiative.
- Offer our expertise to help ensure the health and success of the initiative.
- Work with the rest of the pharmacy team to communicate the initiative to our most important audiences.
- Attend in person, by phone, or send a designee, to at least two-thirds of the meetings held each year I serve and, whether I attend or not, will continually communicate with the team and the main coordinator to ensure I understand all current affairs.
- Complete all necessary training and education as required.
- Provide support for all data collection procedures. All data for each month will be electronically submitted within 10 days of the end of the month.
- Actively participate in all requests for our assistance and response.

I have read and fully agree to this Letter of Commitment and look forward to assisting the Iowa Pharmacy Association Foundation in this initiative.

| Signed Macy 4    | Caldenwell        | Date _ | 5-10-14 |
|------------------|-------------------|--------|---------|
| Title Certica Pl | naemacy Technicia |        |         |

## Letter of Commitment by Certified Pharmacy Technician

I understand that my role as a New Practice Model Participating Pharmacy Technician is a significant responsibility and will make it a priority. I look forward to working with this team and, like the others, I, Weredith Espenscheid, agree to:

- Support the Mission, Vision, Values and Goals of the initiative.
- Offer our expertise to help ensure the health and success of the initiative.
- Work with the rest of the pharmacy team to communicate the initiative to our most important audiences.
- Attend in person, by phone, or send a designee, to at least two-thirds of the meetings held each year I serve and, whether I attend or not, will continually communicate with the team and the main coordinator to ensure I understand all current affairs.
- Complete all necessary training and education as required.
- Provide support for all data collection procedures. All data for each month will be electronically submitted within 10 days of the end of the month.
- Actively participate in all requests for our assistance and response.

I have read and fully agree to this Letter of Commitment and look forward to assisting the Iowa Pharmacy Association Foundation in this initiative.

| Signed Merioluh   | Espenscheid | _ Date <u>5-10-16</u> |
|-------------------|-------------|-----------------------|
| Title <u>CPKT</u> |             | -                     |

From: Megan Myers

To: Funk, Andrew [IBPE]

Cc: Jorgenson, Debbie [IBPE]

Subject: FW: New Practice Model Phase 3

Date: Tuesday, June 14, 2016 3:33:16 PM

Attachments: NPM Phase 3 proposal - site 8.pdf

NPM Phase 3 proposal - site 9.pdf

This contains site 8 and 9.

From: Megan Myers

Sent: Tuesday, June 14, 2016 3:01 PM

To: Funk, Andrew [IBPE] <Andrew.Funk@iowa.gov>

Cc: 'Jorgenson, Debbie [IBPE]' < Debbie. Jorgenson@iowa.gov>; Anthony Pudlo (apudlo@iarx.org)

<apudlo@iarx.org>; Kate Gainer <kgainer@iarx.org>; Michael Andreski

<Michael.Andreski@drake.edu>

**Subject:** New Practice Model Phase 3

Dear Andrew,

Thirteen NPM pharmacies are seeking approval to join NPM Phase 3. We would like to present their site specific proposals (need to send in multiple emails due to size of attachments) at the upcoming board meeting.

Similar to Phase 4, I have included the overall IPA document as background of our guiding principles for this pilot, and have highlighted what was changed based on board feedback in May. We continue to welcome feedback on this initiative.

Thank you! Sincerely, Megan

# A Pharmacy Pilot or Demonstration Research Project for a New Practice Model for Community Pharmacy Phase 3

In Collaboration with the Iowa Pharmacy Association & Drake University College of Pharmacy and Health Sciences

Site Specific Application for Thrifty White Pharmacy #42

**Primary Contact:** 

Amy Fitch, RPh
Pharmacy Manager
Pharmacist License #17211
400 Grand Ave
Spencer, IA 51301
Pharmacy License #504
712-262-1523 (p)
712-262-1244 (f)
P042@thriftywhite.com

Submitted to the Iowa Board of Pharmacy

June 10, 2016

## BACKGROUND

Since 2013, members of Thrifty White have been involved within IPA's New Practice Model Task Force (NPMTF). The NPMTF had been charged with the creation and oversight of a pilot program to implement a new workflow and business model for community pharmacy. Since the initial work of the NPMTF, there have been other mechanisms that would help prove a successful impact of community pharmacist-provided medication management.

As a current participant of Phase II of the New Practice Model pilot, our site has demonstrated safety utilizing Tech-Check-Tech (TCT) for refilled prescriptions. Utilizing TCT has allowed growth of patient care services such as a 9% increase in enrollment for Medication Synchronization, 168% increase in the administration of the Influenza vaccine, 1240% increase in the administration of the Pneumovax vaccine, and a 550% increase in billing for CMRs and Targeted Interventions. In addition, utilizing TCT has enabled the establishment of medication reconciliation services with local LTC facilities and the establishment of collaborative practice agreements with local providers. Future plans for expansion of clinical services may include participation in the new lowa Community Pharmacy Enhanced Services Network, development of a Coumadin clinic, and development of disease management programs. Furthermore, our site looks forward to the expansion of collaborative practice agreements and expansion of specialty pharmacy services.

Our pharmacy has agreed to submit this application and collaborate on the specific aims of this pilot project, which include:

- 1. Implement and assess the impact of adding new prescriptions and utilization of pharmacist-interns to Tech-Check-Tech programs in community pharmacies in lowa on patient safety measures, and
- 2. Implement and assess the impact of adding new prescriptions and utilization of pharmacist-interns to Tech-Check-Tech programs in community pharmacies in lowa in facilitating the provision of community pharmacist-provided services.

## **NEW PRACTICE MODEL 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, Associate Professor of Social and Administrative Pharmacy, Drake University College of Pharmacy and Health Sciences serve as research consultant and principal investigator, will participate in regular team meetings, and will participate in the writing of the study report.

T.J. Johnsrud, NuCara Health Management, Inc., will provide a pharmacy management perspective for coordinating the community pharmacy clinical services and Tech Check Tech programs within the community pharmacy sites. He will participate 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

## Pharmacist-In-Charge:

Amy Fitch License #17211

SDSU, 1988

Number of Years Licensed: 26

Years at Site:26

Other certifications/training: immunizations, CPR, CLIA

#### Staff Pharmacist:

Micaela Maeyaert License #22205 NDSU, 2014

Number of Years Licensed: 1

Years at Site:1

Other certifications/training: immunizations, CPR, CLIA

#### Staff Pharmacist:

Dave Schlichtemeier License # 17018 Drake, 1988

Number of Years Licensed: 27

Years at Site: 25

Other certifications/training: immunizations, CPR, CLIA

## Certified Pharmacy Technician:

Michelle Olson

Registration # 16229

Certification# 520107010090564

Associates of Art, 2012

Number of Years Registered as Tech: 6

Years at Site: 14

Other certifications/training: N/A

## Certified Pharmacy Technician:

Shelly Johnson

Registration #1529

Certification# 020102067991263

High School, 1984

Number of Years Registered as Tech:16

Years at Site:27

Other certifications/training: N/A

## Certified Pharmacy Technician:

Sherry Amendt

Registration # 1724

Certification # 520107010097316

School of Cosmetology 1969

Number of years registered as certified tech: 7

Number of years at site: 21 Other certifications/training: N/A

## Certified Pharmacy Technician:

Rachel Moran

Registration # 19829

Certification # 10059092

High School 2011

Number of years registered as certified tech: 3

Number of years at site: 6

Other certification/training: N/A

Please see attached letters of commitment from each participant listed.

## PROJECT SUMMARY

Participating pharmacies were identified to be New Practice Model (NPM) participant sites using criteria defined by the NPMTF. In the phase III NPM pharmacies, the pharmacist(s) will work collaboratively with prescribers and other care providers in their community to optimize the medication use process. This process may involve the appropriate choice of medication as the therapy modality, initial selection of appropriate therapy to minimize drug therapy problems, assisting the patient in the acquisition and use of the medication, appropriate monitoring and adjustment of the medication therapy, and withdrawal or changing of medication therapy as appropriate, among others. This ongoing effort is coordinated amongst providers, with the pharmacist actively engaged in the process.

Community pharmacies will enhance previously implemented "Tech-Check-Tech" programs to include new prescriptions and additional staff (pharmacist-interns) in order to further increase the availability of the community pharmacist for direct patient care. New prescriptions will include prescriptions for a medication that is new to the patient or renewed medication orders for previously established medication. Pharmacists will continue to have ultimate authority over the dispensing process in this model. However, that does not mean the pharmacist will have hands-on direct supervision over every non-judgmental aspects of dispensing medications. The pharmacist's time will be concentrated on those aspects of dispensing that require the expertise of the pharmacist to assure safe and accurate dispensing.

Following is a brief description of what this practice may look like:

- The pharmacist will be physically located on the premises of the pharmacy in an environment and location that is comfortable and efficient for direct patient interaction.
- The prescription department is staffed by nationally certified technicians or employed pharmacist-interns. The pharmacist-technician and pharmacist-pharmacist intern relationship will become more important as the pharmacist will rely on technology and the leadership of head technicians to maintain the highest safety to patients.
- For the prescription intake process, new paper hardcopies and E-Rxs will be processed by the data entry technician. The data entry technician will then utilize barcode scanning technology to ensure the correct product has been selected for the filling process.
- The pharmacist will then review accuracy of the order and appropriateness of therapy for all new prescriptions, as well as complete Drug Utilization Reviews (DURs) or other necessary clinical reviews tied to prescription dispensing for all prescriptions. Upon completion, the pharmacist will determine whether or not the prescription meets the TCT criteria and then the prescription bin will be passed to the Filling Station.

- For medications that meet the TCT criteria, a clip will be affixed to the prescription bin to indicate that the checking technician can verify the product.
- For medications that do not meet the TCT criteria, the prescription bin will remain unclipped and will be placed for RPH verification.
- All prescriptions will be filled by the technicians at the Filling Station. Trained technicians
  or employed pharmacist-interns will make sure the medication and quantity is correct, it
  is billed accurately, and the correct patient receives the medication. These nonjudgmental tasks of the prescription dispensing process can be entirely technician
  driven.
- Upon completion, they will be passed to the Check Station. Upon arrival at the Check Station, the Tech-Check-Tech technician will check prescription bins that have been affixed with a clip. Prescription bins that have not been affixed with a clip will be verified by a pharmacist. Upon completion, the finished prescriptions will be placed into the Will-Call staging area so that a clerk can place the scripts into Will-Call.
  - The "final check" technician works closely with the pharmacist. This relationship is important as the pharmacist will often rely on the technician to request appropriate interaction and/or intervention. The "final check" technician has received advanced training. This standardized training was developed by the NPMTF in collaboration with the Iowa Pharmacy Association Foundation with approval by the Board of Pharmacy in 2014. The Board of Pharmacy ultimately approves each pharmacy site's involvement in this initiative.
- Medication counseling and responding to patient questions may be completed in association with the distribution of the medication to the patient, but it may also occur outside of dispensing. Pharmacists would be easily accessible to patients and more available for consultation with patients, prescribers and other care providers as an integral member of the team. Overall, this model will enable pharmacists to provide direct patient care services.
  - When counseling patients on new prescriptions, pharmacists may use methods such as "show and tell" where applicable to augment the consultation process.

The medication distribution process will be under the control of a pharmacist, but only in that a pharmacist will be responsible for developing, implementing, and providing Continuous Quality Improvement for a system where the majority of activity will be completed by nationally-certified pharmacy technicians or employed pharmacist-interns. Use of appropriate technologies (e.g., image verification, barcode scanning, filling machines) will be utilized when appropriate to assure the medication is made available to the patient.

## Board of Pharmacy Rules Needed to be Waived

In order for implementation of this pilot project, it is requested that the Iowa Board of Pharmacy waive three regulations.

657—3.21(1) Technical dispensing functions. By waiving rule 657—3.21(1), the Board of Pharmacy would allow for a certified pharmacy technician to conduct final verification of the patient's prescription or medication order as is the current exception in an approved tech-check-

tech program pursuant to 657—Chapter 40, as well as when the initial prescription or medication order is filled by a registered pharmacist-intern.

657—3.23(155A) Tasks a pharmacy technician shall not perform. By waiving rule 657—3.23(155A) specifically point number one, the Board of Pharmacy would allow for a certified pharmacy technician to provide the final verification of a filled prescription or medication order.

657—8.3 (4) Pharmacist-documented verification. By waiving rule 657—8.3(4), the Board of Pharmacy would remove the responsibility of the pharmacist to provide and document the final verification of the patient's prescription medication in order to pilot a tech-check-tech program in community practice settings.

## Identification of Patients Needing MTM Services

Patients currently utilizing the community pharmacy will be provided the additional clinical pharmacy services that community pharmacies are available to provide. Patients who would be eligible for commercial and/or governmental MTM services will be identified through pharmacy records. If the patient is not a subscriber to insurance coverage providing payment for pharmacist provided MTM services, these services will be provided when possible. The community pharmacists will also work closely with their physicians in their community to identify key patients in the medical practice that would benefit from medication management services. The physician and pharmacist will be provided the tools to establish a collaborative practice agreement to address these key health care needs in the community.

## Services Provided by Pharmacy

Examples specific to this location are:

- 1. Comprehensive immunization program
  - a. 2015 Results
    - i. 1858 Flu
    - ii. 94 Zostavax
    - iii. 268 Pneumovax
- 2. Point-of-care testing:

Pharmacists have been trained to provide the following health screenings:

- a. Blood Pressure
- b. Cholesterol
- c. Blood Glucose
- d. A₁C
- e. POC testing is new for this location, so we do not have historical results
- 3. Ready Refill Program
  - a. 70.6% of our maintenance medications are filled centrally, vastly reducing the amount of workload in our stores
- 4. Medication Synchronization
  - a. Over 925 patients are enrolled in this program
    - i. These patients are achieving compliance rates of over 11 fills per calendar year
  - b. We are able to layer the above clinical services to this "sync date"
- 5. Comprehensive Medication Reviews
  - a. Pharmacists have been trained to use Outcomes and Mirixa platforms
  - b. We perform the CMR when the patient comes to the pharmacy on their "sync date"
- 6. Targeted Interventions

- Our pharmacists currently use Outcomes to document their interventions for Outcomes eligible patients
- b. We intend documenting interventions for non-Outcomes eligible patients through the platform provided by Outcomes for pharmacies included in the pilot.
  - i. Number of CMRs/Targeted Interventions billed in 2015 by RPhs: 170

#### **METHODS**

#### Measures

Aim 1: Implement and assess the impact of adding new prescriptions and utilization of pharmacist-interns to a Tech-Check-Tech program in community pharmacies in Iowa on patient safety measures.

For the assessment of this Aim, information will be gathered to ensure dispensing accuracy of new prescriptions. Each pharmacy will act as its own control, with baseline measurement of dispensing errors being determined for 50 new prescriptions per day, on days when TCT for refills is being done, for 15 weekdays before initiation of the Tech-Check-Tech procedures for new prescriptions. For the first week after the new procedures have been initiated, the pharmacist will double check all technician-verified prescriptions to ensure accuracy and to gather information on the efficacy of the procedures. If the error rate is equal to or lesser than the baseline measurement, 30-50 new prescriptions as well as 30-50 refill per month will be double checked for errors and those measurement recorded for the reminder of the project. If the error rate is greater than baseline measurement, additional training will be given and procedures reviewed, after which a second assessment will be performed. Length of any second assessment will be determined by the researcher. The research consultant will review these results on an ongoing basis and quarterly reports made to the Board of Pharmacy as necessary during the 18 month study period.

Aim 2: Implement and assess the impact of adding new prescriptions and utilization of pharmacist-interns to a Tech-Check-Tech program in community pharmacies in Iowa and in facilitating the provision of community pharmacist-provided medication therapy management.

For the assessment of this Aim, information will be gathered regarding the amount of pharmacist time that is made available for other duties as a result of the implementing Tech-Check-Tech for new prescriptions and utilizing pharmacist-interns for TCT on the provision of MTM services by the pharmacist(s) at the subject pharmacies. Each pharmacy will again act as its own control, with baseline measurements consisting of the last quarter of results from the previous pilot program of Tech-Check-Tech for refill prescriptions. 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 for new prescriptions 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.

## Other Measures:

## Job Satisfaction Survey

A job satisfaction survey will be conducted prior to, and one year after implementation of utilizing TCT for new prescriptions. All technicians, pharmacists and employed pharmacist-interns will be asked to complete the survey.

# Amount of time spent utilizing TCT (# of TCT days)

The amount of time utilizing TCT will continue to be monitored and will be compared to the previous pilot in order to determine whether or not allowing technicians the ability to check prescriptions filled by employed pharmacist-interns impacted the ability to use TCT.

## **Analysis**

Error rates during the 18 month study period will be compared to those found at baseline by means of Chi-squared testing and matched samples t-tests. Specific errors tracked will include wrong drug, wrong strength, wrong quantity, and wrong cap (safety-cap vs. non-safety cap). Comparisons of pharmacist task composition will be compared to those found at baseline by means of Chi-squared testing matched samples t-tests. The services provided data gathered during the study period will be compared to those found at baseline in terms of the overall number of services provided.

## STUDY PARTNERS

## Drake University

Drake University will oversee the research component of this project, by working with the pharmacy partners to assure that study activities are conducted in a timely and coordinated manner. Dr. Andreski will design data collection procedures, supervise data collection, manage and analyze study data, and assist in writing the study reports.

## Iowa Pharmacy Association

The lowa Pharmacy Association (IPA) will assist in preparing the community pharmacy sites to deliver the MTM services. They have experience in helping pharmacy practices adjust to providing services such as MTM. IPA will help the practices adjust staffing, workflow, and service delivery issues with the participating community pharmacies

# Local Community Pharmacies in the New Practice Model Initiative

Data analyses and report writing

Community pharmacies across the state of Iowa will initially participate in the study by working to transform their current patient care delivery model to enhance their Tech-Check-Tech program and further engage pharmacists in clinical programs that follow the JCPP's Pharmacists' Patient Care Process to improve patient safety and provide enhanced patient care. Pharmacists in these pharmacies will deliver the clinical services as described in this study proposal and subsequent service descriptions.

#### PROJECT TIMELINE

Month 18-19

| Month 1-2  | Project start-up; Baseline data collection; transition workflow to include TCT for new medications  |
|------------|---|
| Month 2 -3 | Community pharmacies begin enhanced Tech-Check-Tech programs; pharmacists engage in collaborative practice agreements for patient care delivery |
| Month 18   | Pilot project authority expires for Tech-Check-Tech   |

## Appendix A

## Description of Thrifty White Pharmacy #42

Thrifty White Pharmacy has positioned our pharmacists to promote healthy outcomes for our patients. We are committed to innovating the practice of pharmacy. We believe the role of a pharmacist is to help patients manage their medications so they can achieve their health goals. This is accomplished through a combination of centralized processes which create in-store capacity, our Medication Synchronization program, and innovative clinical services. The result is optimized medication regimens, improved compliance, and ultimately healthier patients. In the future, we intend on developing collaborative practice agreements, participating in ACOs, and expanding our pharmacy based health monitoring services. Tech-Check-Tech will support our pharmacists' involvement in these activities.

Store 42 in Spencer, IA fills between 2,000 to 3,000 prescriptions a week. Pharmacist budgeted hours at this store allows for two pharmacists to be on staff during all hours of operation. This staffing currently allows for ample time to conduct clinical services, as outlined in the "Services Provided by Pharmacy" section. Technician budgeted hours provide for between 3 and 4 technicians during all hours of operation. Based on this, we expect the vast majority of our day would operate under the Tech-Check-Tech process.

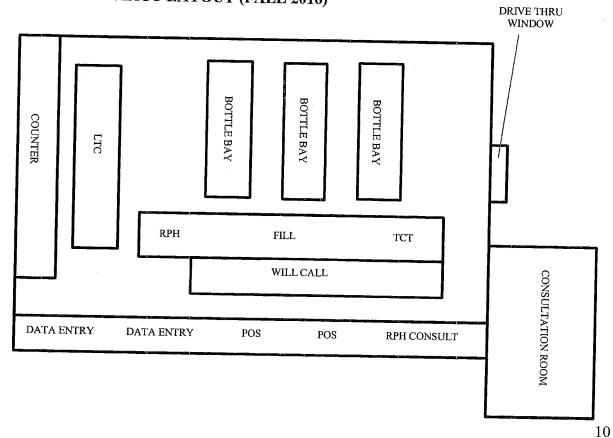
The pharmacists and technicians at this site are excited to be a part of the NPM project because they understand the impact this will have on their ability to provide additional care for their patients. This high functioning team has recently been recognized as the "Best of the Best" at our company meeting, the highest honor our company bestows on a store. This distinction was earned based on their aggressive adoption and implementation of our company's patient care programs.

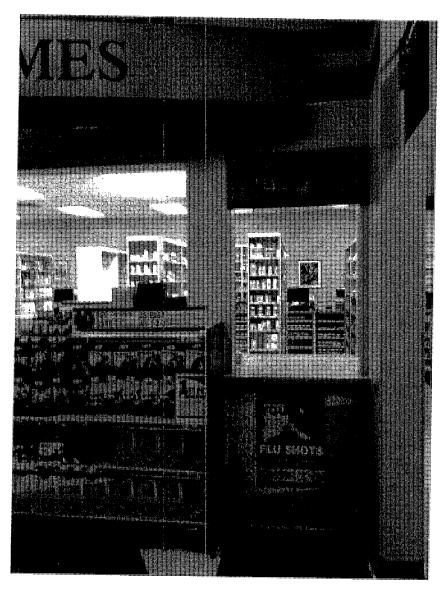
## Appendix B Pharmacy Layout and Workflow

## **CURRENT PHARMACY LAYOUT**

|                   | Offic      | ce         |            |
|-------------------|------------|------------|------------|
|                   | Counter    |            |            |
| Counter           |            | Bottle Bay | Data Entry |
|                   | Bottle Bay |            | ntry       |
|                   |            | Bottle Bay | Ħ          |
|                   |            | Will Call  | Check      |
| Consultation Room |            | Pick Up    |            |
|                   |            | l          |            |

# **FUTURE PHARMACY LAYOUT (FALL 2016)**





Data entry from a patient's perspective.



Data entry from the pharmacy's perspective. Filling and verification are to the right of this photo.



Filling and verification counter. Workflow proceeds from left to right.

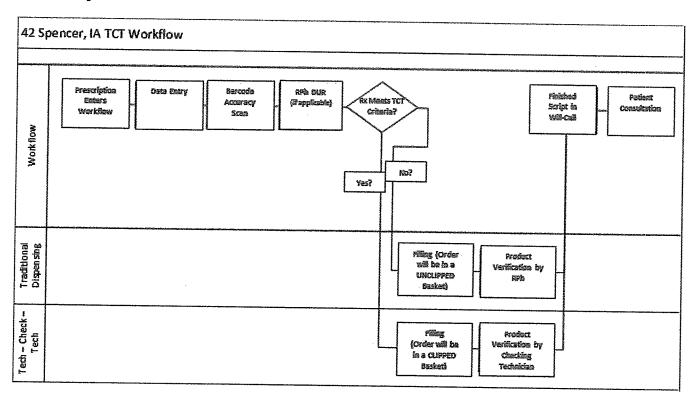


Pick up area from a patient's perspective. The patient's consultation room entrance is just to the left of this picture.



Consultation room where clinical services are performed.

# **Pharmacy Workflow**



#### Appendix C

# Certified Pharmacy Technician Training Requirements & Checklist

#### Pharmacy Staff Training Requirements

#### Technician Utilization & Authorized Checking Functions

Each technician specifically authorized to participate in TCT at the participating pharmacy will be identified in their personnel file and an added designation to their posted registrations. A certified pharmacy technician authorized to participate in TCT will be trained in and maintain all the duties, activities, and work of registered and certified technicians. Additionally the Checking Technician may be allowed to check medication orders filled by other certified technicians, limited to the following patient care situations:

- New prescriptions, in which DUR and data entry review has already occurred by a pharmacist
- Refill medications, in which DUR has already occurred by a pharmacist

Each technician certified to check will have documented training and evaluation of necessary training. Each pharmacy location will determine examples of medications that will NOT be checked by technicians. This could include:

- Controlled substances,
- · Compounded medications, and
- Others as designated by PIC or staff pharmacists.

#### "Filling" Technician or Pharmacist-Intern

- Certified technicians filling prescriptions for the TCT program must be nationally certified and passed an audit of accurately filling prescriptions as established by a site's policy and procedures.
- Employed student interns must have at least 300 hours of experience working as a technician or intern, and at least 100 of the 300 hours must be at the current TCT location. Interns must pass an audit of accurately filling prescriptions as established by a site's policy and procedures.

#### "Checking" Technician Participation & Training

All of the following shall apply to a certified pharmacy technician authorized to be a "Checking Technician" at the participating pharmacy:

- National Certification: current and in good standing
- Iowa Registration: current and in good standing, and not currently subject to disciplinary charges or sanctions.
- Prior Experience: The checking technician shall work at the participating pharmacy full or part time and:
  - a) Shall have at least 1,000 hours <u>prior technician work experience at the TCT site</u> and at least 1,000 hours of prior technician work experience at the current or previous pharmacy, successfully complete their necessary location-specific training, and then complete the TCT training (see below).
  - b) If the technician has <u>no prior technician work experience in a pharmacy</u>, they shall work at least 2,000 hours at the pharmacy and successfully complete their necessary location-specific training, and then complete the TCT training (see below).

# IPA/CEI Tech-Check-Tech CPE Modules

If a pharmacy will be implementing a Tech-Check-Tech program, the certified pharmacy technicians, pharmacist-interns and the pharmacists, shall receive specialized and advanced training as provided in policies and procedures, including training in the prevention, identification, and classification of medication errors. The training program for a certified pharmacy technician shall be didactic in nature and shall include successful completion (80%) of a competency test for each module.

- Pharmacists will be required to complete the first two modules listed, filling technicians and pharmacist-interns will complete the first three modules listed, and checking technicians will complete all the modules listed.
  - a. Thinking about Tech-Check-Tech?
    - i. State the need in the profession for a technician-managed distribution process
    - ii. Describe the opportunities for pharmacists to provide clinical services
    - iii. Review current regulations that govern Tech-Check-Tech programs
    - iv. Review the principles of ASHP's New Practice Model Initiative and an example of state implementation
    - v. Illustrate the case to pharmacy staff, upper management, and the Board of Pharmacy
  - b. Tech-Check-Tech: A Step-by-Step Guide for Outpatient Pharmacy
    - i. Illustrate the case to pharmacy staff, management, and Board of Pharmacy for Tech-Check-Tech
    - ii. Recognize the steps needed to prepare and implement a Tech-Check-Tech program
    - iii. Outline how a pharmacy monitors for quality assurance in a Tech-Check-Tech program
    - iv. Formulate a sample job description for a pharmacy technician engaged in a Tech-Check-Tech program
    - v. Review liability issues in a Tech-Check-Tech program
  - Accuracy in the Outpatient Pharmacy: Preventing, Identifying and Classifying Medication Errors
    - i. Recognize and classify common medication errors
    - ii. Recognize the causes of medication errors
    - iii. List ways to prevent medication errors
    - iv. Recognize the importance of continuous quality improvement (CQI) in the pharmacy distribution process
    - v. Describe the technician's role in CQI in the pharmacy
  - d. Dosage Forms
    - i. Identify the most common medication dosage forms
    - ii. Describe the advantages and disadvantages of different medication dosage forms
    - iii. Recognize the different routes of administration and the advantages of each
    - iv. List ways to recognize and prevent dosage form dispensing errors
  - e. Calculations Review
    - i. Describe examples of common systems of measurement
    - ii. Demonstrate the ability to convert units of measurement
    - iii. Appropriately calculate the day's supply from a prescription order
    - iv. Use percentages, ratios, and proportions to make accurate pharmaceutical calculations using mathematical skills reviewed in the activity

- v. Solve common pharmacy calculations using mathematical skills reviewed in this activity
- vi. Master specific math functions appropriate to practice setting
- f. Advanced Review of Common Medications
  - i. Group medications by pathophysiologic class using established stems (prefixes, infixes, & suffixes)
  - ii. List common adverse effects and drug interactions
  - iii. List common adherence challenges
  - iv. Distinguish medications with similar generic names
  - v. Recognize medications with multiple formulations

#### Responsible Individual

The "Pharmacist in Charge" or Pharmacy Manager at each participating pharmacy shall be ultimately responsible for the TCT program activities (unless otherwise noted). The PIC will be responsible for meeting TCT program training and validation requirements. The PIC will designate the staff pharmacists to supervise the activities of Checking Technicians. The entire staff, pharmacists and technicians, will be involved in collection of data for the program evaluation on a regular basis, reporting information to the PIC for analysis.

#### **Staffing**

Pharmacy staffing shall be adequate to ensure consistent and safe implementation and usage of the TCT program and will optimize pharmacist patient care services, which will have data collected and analyzed through the pharmacy's existing CQI process with variations as requested or demeaned necessary by the research team.

#### Records

The pharmacist in charge shall maintain in the pharmacy department records for each certified pharmacy technician authorized by the pharmacist in charge or responsible pharmacist to participate in the TCT program. The records shall be available for inspection and copying by the Board or its representatives and any other authorized agencies for two years beyond the term of the certified pharmacy technician's employment. The record summary (Technician Function Levels) shall include:

- a. The name of the certified pharmacy technician.
- b. The date the certified pharmacy technician completed the standardized training and site-specific evaluation for participation in the TCT program.
- c. The date the certified pharmacy technician was authorized to participate in the TCT program and the specific TCT program functions and tasks the certified pharmacy technician is authorized to perform.
- d. When the certified pharmacy technician is authorized to check the work of other certified pharmacy technicians, the date the checking technician completed the specialized and advanced training.
  - e. The dates and results of all competency evaluations.
- f. The dates of and reasons for any suspension or revocation of the certified pharmacy technician's TCT program authorization, identification of corrective action or retraining completed, and date of subsequent reinstatement of the certified pharmacy technician's TCT program authorization.
- g. The dates of and reasons for any disciplinary action taken against the certified pharmacy technician in connection with the certified pharmacy technician's performance of duties relating to the TCT program.

#### **Evaluation of Program and Technicians:**

Technician filling and checking responsibilities will be monitored daily. Errors will be documented for both filling and checking, and review of all errors will also be documented on this sheet by the PIC or responsible staff pharmacist. These sheets will be collected and data entered for bi-weekly review. The records will be maintained in the pharmacy for a minimum of two years.

The implementation of the TCT program shall result in the redirection of pharmacists from distributive tasks to cognitive and patient care activities. The participating pharmacy will document these clinical activities and will collect and maintain these records for no less than two years following the date of the record. These records shall be updated at least semiannually.

- 1. The PIC shall conduct continuous monitoring and evaluation of each Checking Technician to ensure the continued competency of the TCT program and the safety of the patients. Errors will be identified and records maintained following the pharmacy's quality measures, including variance tracking and reports, event analysis, follow up and education.
- 2. Specific evaluation of the TCT program will incorporate three measures:
  - a. Filling: Review of errors identified by a Checking Technician or Pharmacist. The responsible staff pharmacist shall review with all certified pharmacy technicians involved with any errors identified during the evaluation of the <u>filling process</u> and shall discuss procedure and document the review on the daily monitoring sheet to ensure the errors are not repeated.
  - b. **Checking**: Periodic review and checking by the pharmacist of work <u>checked</u> (monthly to quarterly as designated) by the Checking Technician and identification and documentation of all errors not identified and corrected by the checking technician and shall discuss procedure and document the review on the daily monitoring sheet to ensure the errors are not repeated.
  - c. Review of errors identified following release by Checking Technician or Pharmacist. The responsible staff pharmacist shall receive, evaluate, and review with all certified pharmacy technicians involved with any errors identified by a health care professional, a patient, or any individual following release of a drug by the checking technician. All such errors will be documented on the daily form AND recorded via the pharmacy's CQI program.
- 3. Periodic review and monitoring will be recorded on our Ongoing TCT Competency Evaluation Record.
- 4. Benchmarks will be identified by compiling and evaluating of the <u>Technician QA Monitoring Daily Reports</u>. <u>Bi-weekly reports</u> will be used to evaluate ongoing competencies, identify possible system modifications, provide data for continuing site specific education, and to establish need for any retraining.
- 5. Retraining will occur when a Technician or Checking Technician has an error rate significantly above the average for participating pharmacy's technicians. Error rate "outliers" will be determined by an excessive error rate in filling or checking over two consecutive bi-weekly periods OR if the technician's cumulative error rate significantly exceeds the average cumulative error rate. During the retraining period (of not less than two bi-weekly periods) a technician's work will be checked by a pharmacist nor will the technician be allowed to check other technicians. Retraining will consist of a repeat competency evaluation in the area/s where excessive errors have occurred and potential repeat of didactic modules as appropriate. The PIC, with the input of staff pharmacists, will determine which sections, or all, of the training modules must be repeated.

| I understand that my role as a New Pra         | ctice Model Participating Pharmacist is a significant responsibility | and |
|--|--|-----|
| will triake it a priority, I look forward to v | vorking with this team and, like the others, I,                      |     |
| Amy Fitch                                      | agree to:  |     |

- Support the Mission, Vision, Values and Goals of the initiative.
- Offer my expertise to help ensure the health and success of the initiative.
- Work with the rest of the pharmacy team to communicate the initiative to our most important audiences.
- Attend in person, by phone, or send a designee, to at least two-thirds of the meetings held each year I serve and, whether I attend or not, will continually communicate with the team and the main coordinator to ensure I understand all current affairs.
- Complete all necessary training and education as required.
- Provide support for all data collection procedures. All data for each month will be electronically submitted within 10 days of the end of the month.
- Actively participate in all requests for my assistance and response.

| Signed _ | Amy Fitch  |          | _ Date _ | 5/26/16 |
|----------|------------|----------|----------|---------|
| Title    | Pharmacist | InCharge | -        |         |

I understand that my role as a New Practice Model Participating Pharmacist is a significant responsibility and will make it a priority. I look forward to working with this team and, like the others, I,

Micacla Macyacut, agree to:

- Support the Mission, Vision, Values and Goals of the initiative.
- Offer my expertise to help ensure the health and success of the initiative.
- Work with the rest of the pharmacy team to communicate the initiative to our most important audiences.
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- Complete all necessary training and education as required.
- Provide support for all data collection procedures. All data for each month will be electronically submitted within 10 days of the end of the month.
- Actively participate in all requests for my assistance and response.

| , | 116 |   |
|---|-----|---|
| Title_Pharmacist                        |     | • |

I understand that my role as a New Practice Model Participating Pharmacist is a significant responsibility and will make it a priority. I look forward to working with this team and, like the others, I,

- Support the Mission, Vision, Values and Goals of the initiative.
- Offer my expertise to help ensure the health and success of the initiative.
- Work with the rest of the pharmacy team to communicate the initiative to our most important audiences.
- Attend in person, by phone, or send a designee, to at least two-thirds of the meetings held each year I serve and, whether I attend or not, will continually communicate with the team and the main coordinator to ensure I understand all current affairs.
- Complete all necessary training and education as required.
- Provide support for all data collection procedures. All data for each month will be electronically submitted within 10 days of the end of the month.
- Actively participate in all requests for my assistance and response.

| Signed | I delle frances | _ Date : | 576-66 |
|--------|-----------------|----------|--------|
| Title  | Pharmacist      |          |        |

I understand that my role as a New Practice Model Participating Pharmacy Technician is a significant responsibility and will make it a priority. I look forward to working with this team and, like the others, I, MICHCIC DISCH, agree to:

- Support the Mission, Vision, Values and Goals of the initiative.
- Offer our expertise to help ensure the health and success of the initiative.
- Work with the rest of the pharmacy team to communicate the initiative to our most important audiences.
- Attend in person, by phone, or send a designee, to at least two-thirds of the meetings held each year I serve and, whether I attend or not, will continually communicate with the team and the main coordinator to ensure I understand all current affairs.
- · Complete all necessary training and education as required.
- Provide support for all data collection procedures. All data for each month will be electronically submitted within 10 days of the end of the month.
- Actively participate in all requests for our assistance and response.

I have read and fully agree to this Letter of Commitment and look forward to assisting the Iowa Pharmacy Association Foundation in this initiative.

Signed If Jeckell Marmacy Technician Date 5-

I understand that my role as a New Practice Model Participating Pharmacy Technician is a significant responsibility and will make it a priority. I look forward to working with this team and, like the others, I, <u>Shelly Jakusan</u>, agree to:

- Support the Mission, Vision, Values and Goals of the initiative.
- Offer our expertise to help ensure the health and success of the initiative.
- Work with the rest of the pharmacy team to communicate the initiative to our most important audiences.
- Attend in person, by phone, or send a designee, to at least two-thirds of the meetings held each year I serve and, whether I attend or not, will continually communicate with the team and the main coordinator to ensure I understand all current affairs.
- Complete all necessary training and education as required.
- Provide support for all data collection procedures. All data for each month will be electronically submitted within 10 days of the end of the month.
- Actively participate in all requests for our assistance and response.

| Signed | Shellyplanson | Date _ | 5/26/16 |
|--------|---------------|--------|---------|
| Title  | Cent          |        |         |

I understand that my role as a New Practice Model Participating Pharmacy Technician is a significant responsibility and will make it a priority. I look forward to working with this team and, like the others, I, Shevry America, agree to:

- Support the Mission, Vision, Values and Goals of the initiative.
- Offer our expertise to help ensure the health and success of the initiative.
- Work with the rest of the pharmacy team to communicate the initiative to our most important audiences.
- Attend in person, by phone, or send a designee, to at least two-thirds of the meetings held each year is serve and, whether I attend or not, will continually communicate with the team and the main coordinator to ensure I understand all current affairs.
- Complete all necessary training and education as required.

Association Foundation in this initiative

 Provide support for all data collection procedures. All data for each month will be electronically submitted within 10 days of the end of the month.

I have read and fully agree to this Letter of Commitment and look forward to assisting the lowa Pharmacy

Actively participate in all requests for our assistance and response.

| Signed | Sherry | (Inult | Date | 5/27/16 |
|--------|--------|--------|------|---------|
| Title  | Physon | Canh   |      |         |

I understand that my role as a New Practice Model Participating Pharmacy Technician is a significant responsibility and will make it a priority. I look forward to working with this team and, like the others, I, Rockel Moron, agree to:

- Support the Mission, Vision, Values and Goals of the initiative.
- Offer our expertise to help ensure the health and success of the initiative.
- Work with the rest of the pharmacy team to communicate the initiative to our most important audiences.
- Attend in person, by phone, or send a designee, to at least two-thirds of the meetings held each year I serve and, whether I attend or not, will continually communicate with the team and the main coordinator to ensure I understand all current affairs.
- Complete all necessary training and education as required.
- Provide support for all data collection procedures. All data for each month will be electronically submitted within 10 days of the end of the month.
- Actively participate in all requests for our assistance and response.

| Signed Rachel R | Moraw | Date <u>5-26-</u> | -16 |
|-----------------|-------|-------------------|-----|
| Title Pharmacy  | Tech  | ,                 |     |

# A Pharmacy Pilot or Demonstration Research Project for a New Practice Model for Community Pharmacy Phase 3

In Collaboration with the Iowa Pharmacy Association & Drake University College of Pharmacy and Health Sciences

Site Specific Application for Hy-Vee Pharmacy 1192

# **Primary Contact:**

Christine Donner-Tiernan Pharmacist Pharmacist License #19439 115 South 29<sup>th</sup> Street Fort Dodge, IA 50501 Pharmacy License #981 515-576-5320 (phone) 515-576-4078 (fax) csdonner@yahoo.com

Submitted to the Iowa Board of Pharmacy

June 30, 2016

#### **BACKGROUND**

Since 2009, members of Hy-Vee have been involved within IPA's New Practice Model Task Force (NPMTF). The NPMTF is a continuation of an unofficial working group that had been meeting throughout 2008. It had been charged with the creation and oversight of a pilot program to implement a new workflow and business model for community pharmacy. Since the initial work of the NPMTF, there have been other mechanisms that would help prove a successful impact of community pharmacist-provided medication management.

As a current participant of Phase II of the New Practice Model pilot, our site has demonstrated safety utilizing Tech-Check-Tech (TCT) for refilled prescriptions. Utilizing TCT has allowed growth of patient care services. TCT has helped us expand our vaccinations available to patients and improve MTM process as part of our work flow. Most importantly TCT has given us the opportunity for our pharmacists to spend more time with patients and greater time focused on DUR.

Our pharmacy has agreed to submit this application and collaborate on the specific aims of this pilot project, which include:

- 1. Implement and assess the impact of adding new prescriptions and utilization of pharmacist-interns to Tech-Check-Tech programs in community pharmacies in Iowa on patient safety measures, and
- 2. Implement and assess the impact of adding new prescriptions and utilization of pharmacist-interns to Tech-Check-Tech programs in community pharmacies in Iowa in facilitating the provision of community pharmacist-provided services.

# NEW PRACTICE MODEL 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, Associate Professor of Social and Administrative Pharmacy, Drake University College of Pharmacy and Health Sciences serve as research consultant and principal investigator, will participate in regular team meetings, and will participate in the writing of the study report.

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

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

#### PHARMACY SITE-SPECIFIC INFORMATION

#### Pharmacist-In-Charge:

Thomas F. Donner

License #16040

Creighton University, 1980

Number of Years Licensed: 36

Years at Site: 18

Smoking Cessation, Asthma Training, Outcomes, Mirixa

#### Staff Pharmacist:

Christine Donner-Tiernan

License #19439

Creighton University, 2000

Number of Years Licensed: 16

Years at Site: 8

Other certifications/training: Immunizations, Outcomes/MTM, Mirixa, Smoking Cessation,

**Cholestech Trained** 

#### Staff Pharmacist:

Kristine Ugboh

License #22529

Creighton University, 2015

Number of Years Licensed: 1

Years at Site: 1

Other certifications/training: Immunizations, Outcomes/MTM, Mirixa, Smoking Cessation

#### Certified Pharmacy Technician:

Jill Shoopman

Registration # 16162

Certification# 510107010091687

High School, 2007

Number of Years Registered as Tech: 6

Years at Site: 7

#### Certified Pharmacy Technician:

Megan Hanna

Registration #22476

Certification#10091642

Technical Degree 2006, 2009

Number of Years Registered as Tech: 2

Years at Site: 2

#### Certified Pharmacy Technician:

Terri Luthro

Registration #17103

Certification#11-05-2

BA Chemistry 2010

Number of Years Registered as Tech: 6

Years at Site: 5

#### Certified Pharmacy Technician:

Sandra Rich

Registration #131132 Certification #430101080240272

Associate Degree, 2006

Number of Years Registered as Tech: 9

Years at Site: 3

#### Certified Pharmacy Technician:

Angela Jessen

Registration #20145 Certification #Y8Z4F4F3

High School, 1985

Number of Years Registered as Tech:0

Years at Site: 0

#### Certified Pharmacy Technician:

Lisa Lemon

Registration #22469 Certification #Z4A9C4P5

Associate Degree Nursing 1994

Number of Years Registered as Tech: 1

Years at Site: 1

See attached letters of commitment from each participant.

#### PROJECT SUMMARY

Participating pharmacies were identified to be New Practice Model (NPM) participant sites using criteria defined by the NPMTF. In the phase III NPM pharmacies, the pharmacist(s) will work collaboratively with prescribers and other care providers in their community to optimize the medication use process. This process may involve the appropriate choice of medication as the therapy modality, initial selection of appropriate therapy to minimize drug therapy problems, assisting the patient in the acquisition and use of the medication, appropriate monitoring and adjustment of the medication therapy, and withdrawal or changing of medication therapy as appropriate, among others. This ongoing effort is coordinated amongst providers, with the pharmacist actively engaged in the process.

Community pharmacies will enhance previously implemented "Tech-Check-Tech" programs to include new prescriptions and additional staff (pharmacist-interns) in order to further increase the availability of the community pharmacist for direct patient care. New prescriptions will include prescriptions for a medication that is new to the patient or renewed medication orders for previously established medication. Pharmacists will continue to have ultimate authority over the dispensing process in this model. However, that does not mean the pharmacist will have hands-on direct supervision over every non-judgmental aspects of dispensing medications. The pharmacist's time will be concentrated on those aspects of dispensing that require the expertise of the pharmacist to assure safe and accurate dispensing.

Following is a brief description of what this practice may look like:

- The pharmacist will be physically located on the premises of the pharmacy in an environment and location that is comfortable and efficient for direct patient interaction.

- The prescription department is staffed by nationally certified technicians or employed pharmacist-interns. The pharmacist-technician and pharmacist-pharmacist intern relationship will become more important as the pharmacist will rely on technology and the leadership of head technicians to maintain the highest safety to patients.
- The pharmacist will review accuracy of the order and appropriateness of therapy for all new prescriptions, as well as complete Drug Utilization Reviews (DURs) or other necessary clinical reviews tied to prescription dispensing for all prescriptions. This is done in a pre-verification que after data entry and before dispensing.
- Trained technicians or employed pharmacist-interns will make sure the medication and quantity is correct, it is billed accurately, and the correct patient receives the medication. These non-judgmental tasks of the prescription dispensing process can be entirely technician driven.
- The "final check" technician works closely with the pharmacist. This relationship is important as the pharmacist will often rely on the technician to request appropriate interaction and/or intervention. The "final check" technician has received advanced training. This standardized training was developed by the NPMTF in collaboration with the Iowa Pharmacy Association Foundation with approval by the Board of Pharmacy in 2014. The Board of Pharmacy ultimately approves each pharmacy site's involvement in this initiative.
- Medication counseling and responding to patient questions may be completed in association with the distribution of the medication to the patient, but it may also occur outside of dispensing. Pharmacists would be easily accessible to patients and more available for consultation with patients, prescribers and other care providers as an integral member of the team. Overall, this model will enable pharmacists to provide direct patient care services. We will be able to spend more time counseling patients on new prescriptions and following up with patients on refills that are being monitored.

The medication distribution process will be under the control of a pharmacist, but only in that a pharmacist will be responsible for developing, implementing, and providing Continuous Quality Improvement for a system where the majority of activity will be completed by nationally-certified pharmacy technicians or employed pharmacist-interns. Use of appropriate technologies (e.g., image verification, barcode scanning, filling machines) will be utilized when appropriate to assure the medication is made available to the patient.

#### Board of Pharmacy Rules Needed to be Waived

In order for implementation of this pilot project, it is requested that the Iowa Board of Pharmacy waive three regulations.

657—3.21(1) Technical dispensing functions. By waiving rule 657—3.21(1), the Board of Pharmacy would allow for a certified pharmacy technician to conduct final verification of the patient's prescription or medication order as is the current exception in an approved tech-check-tech program pursuant to 657—Chapter 40, as well as when the initial prescription or medication order is filled by a registered pharmacist-intern.

657—3.23(155A) Tasks a pharmacy technician shall not perform. By waiving rule 657—3.23(155A) specifically point number one, the Board of Pharmacy would allow for a certified pharmacy technician to provide the final verification of a filled prescription or medication order.

657—8.3 (4) Pharmacist-documented verification. By waiving rule 657—8.3(4), the Board of Pharmacy would remove the responsibility of the pharmacist to provide and document the final verification of the patient's prescription medication in order to pilot a tech-check-tech program in community practice settings.

Identification of Patients Needing MTM Services

Patients currently utilizing the community pharmacy will be provided the additional clinical pharmacy services that community pharmacists are available to provide. Patients who would be eligible for commercial and/or governmental MTM services will be identified through pharmacy records. If the patient is not a subscriber to insurance coverage providing payment for pharmacist provided MTM services, these services will be provided when possible. The community pharmacists will also work closely with their physicians in their community to identify key patients in the medical practice that would benefit from medication management services. The physician and pharmacist will be provided the tools to establish a collaborative practice agreement to address these key health care needs in the community.

Services Provided by Pharmacy

Currently our pharmacy offers of variety of MTM services to patients who have been identified through their screening processes to receive them. These services include:

- 1. MTM as described in the *Core Elements of MTM Service Model* document produced as a joint initiative of the American Pharmacists Association and the NACDS Foundation¹ We currently participate in MTM services with Outcomes Pharmaceutical and Mirixa. We are active in the process to establish an enhanced service network in the state of Iowa and the services that will be part of these programs.
- 2. Immunization services We have grown our immunization services from influenza and Zostavax to include all adult immunizations.

It is our goal to build upon these services while being part of this pilot project. We aim to:

- 1. MTM as described in the *Core Elements of MTM Service Model* document produced as a joint initiative of the American Pharmacists Association and the NACDS Foundation<sup>2</sup> We currently participate in MTM services with Outcomes Pharmaceutical and Mirixa. Our Webster County Public Health Department is in the process of setting up an MTM service based on the Trinity ACO model we were part of in 2014-2016. All of these programs are going well, but have more opportunities to provide patient services than we have pharmacist time to provide them.
- 2. Immunization services We have expanded our immunization services from influenza and Zostavax to include all adult immunizations. In the last year we have

<sup>&</sup>lt;sup>1</sup> American Pharmacists Association, National Association of Chain Drug Stores Foundation. *Medication Therapy Management in Pharmacy Practice: Core Elements of MTM Service Model*. Washington, DC: American Pharmacists Association; March 2008.

<sup>&</sup>lt;sup>2</sup> American Pharmacists Association, National Association of Chain Drug Stores Foundation. *Medication Therapy Management in Pharmacy Practice: Core Elements of MTM Service Model*. Washington, DC: American Pharmacists Association; March 2008.

- given five times more immunizations while we were part of the New Practice Model Project and we have more room to grow.
- 3. We are looking to build other patient care services such as disease state monitoring and medication adherence programs as they fit into our medical community's patient care plans. We are working to improve our Medication Synchronization Program and evaluating compliance packaging options.

#### **METHODS**

#### Measures

Aim 1: Implement and assess the impact of adding new prescriptions and utilization of pharmacist-interns to a Tech-Check-Tech program in community pharmacies in Iowa on patient safety measures.

For the assessment of this Aim, information will be gathered to ensure dispensing accuracy of new prescriptions. Each pharmacy will act as its own control, with baseline measurement of dispensing errors being determined for 50 new prescriptions per day, on days when TCT for refills is being done, for 15 weekdays before initiation of the Tech-Check-Tech procedures for new prescriptions. For the first week after the new procedures have been initiated, the pharmacist will double check all technician-verified prescriptions to ensure accuracy and to gather information on the efficacy of the procedures. If the error rate is equal to or lesser than the baseline measurement, 30-50 new prescriptions as well as 30-50 refill per month will be double checked for errors and those measurement recorded for the reminder of the project. If the error rate is greater than baseline measurement, additional training will be given and procedures reviewed, after which a second assessment will be performed. Length of any second assessment will be determined by the researcher. The research consultant will review these results on an ongoing basis and quarterly reports made to the Board of Pharmacy as necessary during the 18 month study period.

Aim 2: Implement and assess the impact of adding new prescriptions and utilization of pharmacist-interns to a Tech-Check-Tech program in community pharmacies in Iowa and in facilitating the provision of community pharmacist-provided medication therapy management.

For the assessment of this Aim, information will be gathered regarding the amount of pharmacist time that is made available for other duties as a result of the implementing Tech-Check-Tech for new prescriptions and utilizing pharmacist-interns for TCT on the provision of MTM services by the pharmacist(s) at the subject pharmacies. Each pharmacy will again act as its own control, with baseline measurements consisting of the last quarter of results from the previous pilot program of Tech-Check-Tech for refill prescriptions. 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 for new prescriptions 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.

#### Other Measures:

#### Job Satisfaction Survey

A job satisfaction survey will be conducted prior to, and one year after implementation of utilizing TCT for new prescriptions. All technicians, pharmacists and employed pharmacist-interns will be asked to complete the survey.

#### Amount of time spent utilizing TCT (# of TCT days)

The amount of time utilizing TCT will continue to be monitored and will be compared to the previous pilot in order to determine whether or not allowing technicians the ability to check prescriptions filled by employed pharmacist-interns impacted the ability to use TCT.

**Analysis** 

Error rates during the 18 month study period will be compared to those found at baseline by means of Chi-squared testing and matched samples t-tests. Specific errors tracked will include wrong drug, wrong strength, wrong quantity, and wrong cap (safety-cap vs. non-safety cap). Comparisons of pharmacist task composition will be compared to those found at baseline by means of Chi-squared testing matched samples t-tests. The services provided data gathered during the study period will be compared to those found at baseline in terms of the overall number of services provided.

#### STUDY PARTNERS

#### Drake University

Drake University will oversee the research component of this project, by working with the pharmacy partners to assure that study activities are conducted in a timely and coordinated manner. Dr. Andreski will design data collection procedures, supervise data collection, manage and analyze study data, and assist in writing the study reports.

#### Iowa Pharmacy Association

The Iowa Pharmacy Association (IPA) will assist in preparing the community pharmacy sites to deliver the MTM services. They have experience in helping pharmacy practices adjust to providing services such as MTM. IPA will help the practices adjust staffing, workflow, and service delivery issues with the participating community pharmacies

#### Local Community Pharmacies in the New Practice Model Initiative

Community pharmacies across the state of Iowa will initially participate in the study by working to transform their current patient care delivery model to enhance their Tech-Check-Tech program and further engage pharmacists in clinical programs that follow the JCPP's Pharmacists' Patient Care Process to improve patient safety and provide enhanced patient care. Pharmacists in these pharmacies will deliver the clinical services as described in this study proposal and subsequent service descriptions.

PROJECT TIMELINE

Month 1-2 Project start-up; Baseline data collection; transition workflow to include

TCT for new medications

Month 2 -3 Community pharmacies begin enhanced Tech-Check-Tech programs;

pharmacists engage in collaborative practice agreements for patient care

delivery

Month 18 Pilot project authority expires for Tech-Check-Tech

Month 18-19 Data analyses and report writing

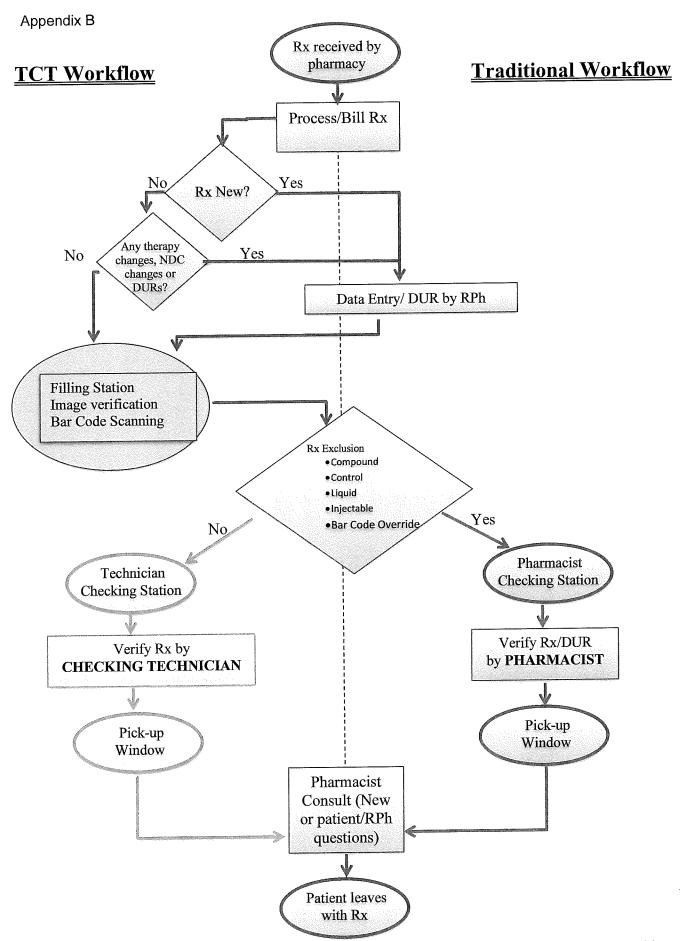
# Appendix A Pharmacy Site # 9

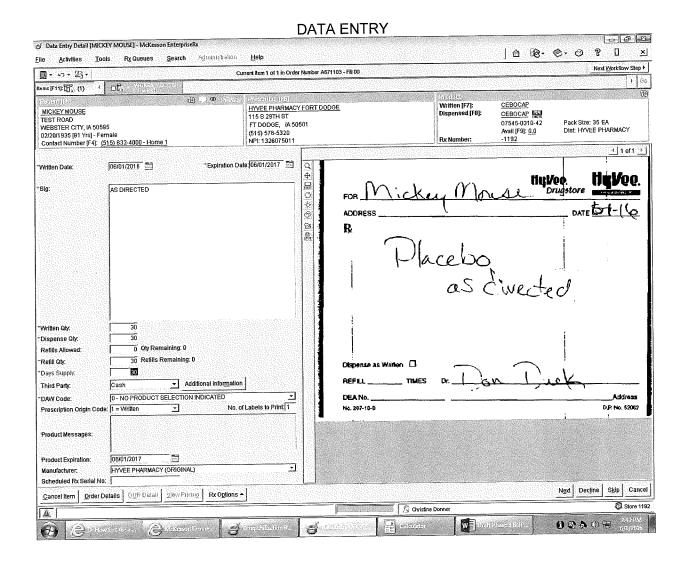
Tech check Tech: Why Hy-Vee Pharmacy 1192?

By Christine Donner-Tiernan, New Practice Model Site Coordinator, Hy-Vee Pharmacy 1192, Fort Dodge, Iowa

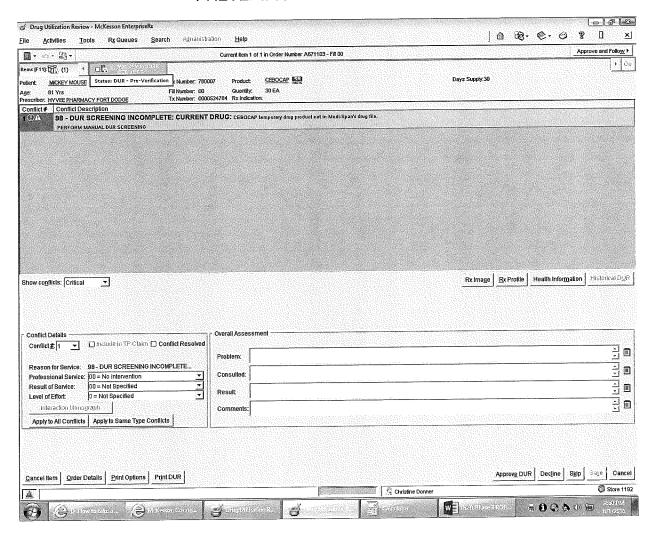
- Physical layout/Community Pharmacy layout with 3 computer terminals on the front counter and 2 terminals on our dispensing island. Counseling room is located about 50 yards away. In our pharmacy dispensing area computer terminals are located close together and conducive to:
  - O Direct technician supervision
  - o Questions from techs
  - Follow-up from pharmacists
  - o Direct observation of work flow
- Staffing:
  - 1:1 Pharmacist/Tech Ratio most of the time some evening and weekend hours are 1:2
  - o Experienced Pharmacists (All of our RPh have at least 1 year of experience)
- Existing Clinical
  - O Have initiated several services in last 2 years that we wish to continue
  - Want to expand services offered
  - Want to expand patients reached

Hy-Vee Pharmacy 1192 in Fort Dodge, Iowa opened 18 years ago. We fill between 1600-1700 prescriptions per week with approximately half of those being refills. We are very active in the Webster County Area. We actively participate in the health care team to improve patient care and reduce hospital admissions.

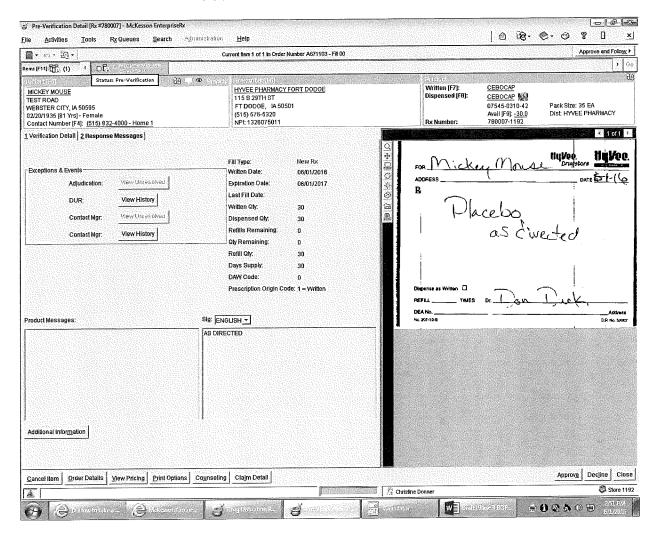




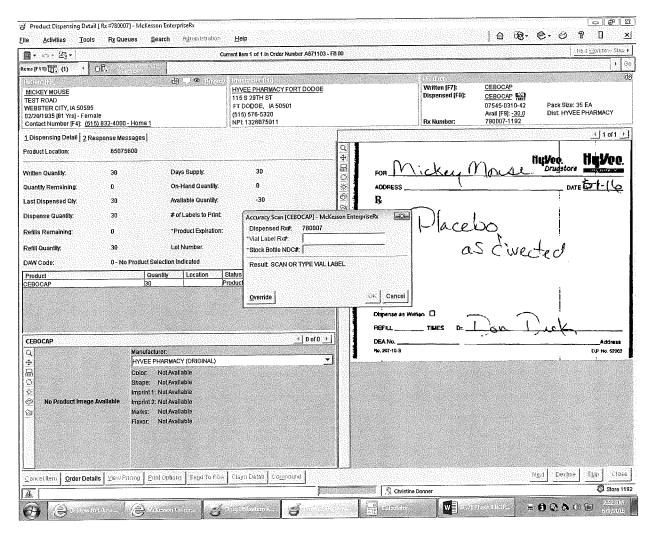
#### PREVERIFICATION SCREEN - DUR



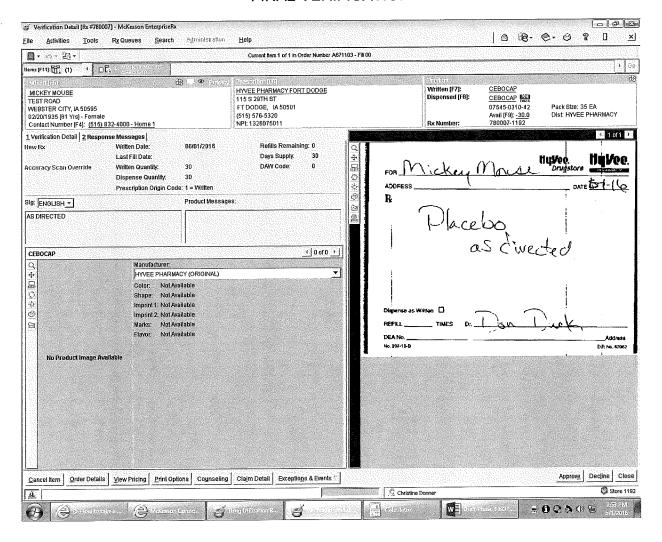
#### PREVERIFICATION SCREEN - RX



#### **DISPENSING SCREEN**



#### FINAL VERIFICATION



#### Appendix C

#### Pharmacy Staff Training Requirements & Checklist

Technician Utilization & Authorized Checking Functions

Each technician specifically authorized to participate in TCT at the participating pharmacy will be identified in their personnel file and an added designation to their posted registrations. A certified pharmacy technician authorized to participate in TCT will be trained in and maintain all the duties, activities, and work of registered and certified technicians. Additionally the Checking Technician may be allowed to check medication orders filled by other certified technicians, limited to the following patient care situations:

 Refill medications and new medications, in which DUR and data entry review has already occurred by a pharmacist

Each technician certified to check will have documented training and evaluation of necessary training. Each pharmacy location will determine examples of medications that will NOT be checked by technicians. This could include:

- · Controlled substances,
- · Compounded medications,
- · Injectables,
- Liquids
- Bar Code Override
- Others as designated by PIC or staff pharmacists.

#### "Filling" Technician or Pharmacist-Intern

- Certified technicians filling prescriptions for the TCT program must be nationally certified and passed an audit of accurately filling prescriptions as established by a site's policy and procedures.
- Employed student interns must have at least 300 hours of experience working as a technician or intern, and at least 100 of the 300 hours must be at the current TCT location.
   Interns must pass an audit of accurately filling prescriptions as established by a site's policy and procedures.

### "Checking" Technician Participation & Training

All of the following shall apply to a certified pharmacy technician authorized to be a "Checking Technician" at the participating pharmacy:

- National Certification: current and in good standing
- lowa Registration: current and in good standing, and not currently subject to disciplinary charges or sanctions.
- Prior Experience: The checking technician shall work at the participating pharmacy full time and:
  - a) Shall have at least 1,000 hours <u>prior technician work experience at the TCT site</u> and at least 1,000 hours of prior technician work experience at the current or previous pharmacy, successfully complete their necessary location-specific training, and then complete the TCT training (see below).
  - b) If the technician has <u>no prior technician work experience in a pharmacy</u>, they shall work at least 2,000 hours at the pharmacy and successfully complete their necessary location-specific training, and then complete the TCT training (see below).

#### IPA/CEI Tech-Check-Tech CPE Modules

If a pharmacy will be implementing a Tech-Check-Tech program, the certified pharmacy technicians, pharmacist-interns and the pharmacists, shall receive specialized and advanced training as provided in policies and procedures, including training in the prevention, identification, and classification of medication errors. The training program for a certified pharmacy technician shall be didactic in nature and shall include successful completion (80%) of a competency test for each module.

- Pharmacists will be required to complete the first two modules listed, filling technicians and pharmacist-interns will complete the first three modules listed, and checking technicians will complete all the modules listed.
  - a. Thinking about Tech-Check-Tech?
    - i. State the need in the profession for a technician-managed distribution process
    - ii. Describe the opportunities for pharmacists to provide clinical services
    - iii. Review current regulations that govern Tech-Check-Tech programs
    - iv. Review the principles of ASHP's New Practice Model Initiative and an example of state implementation
    - v. Illustrate the case to pharmacy staff, upper management, and the Board of Pharmacy
  - b. Tech-Check-Tech: A Step-by-Step Guide for Outpatient Pharmacy
    - i. Illustrate the case to pharmacy staff, management, and Board of Pharmacy for Tech-Check-Tech
    - ii. Recognize the steps needed to prepare and implement a Tech-Check-Tech program
    - iii. Outline how a pharmacy monitors for quality assurance in a Tech-Check-Tech program
    - iv. Formulate a sample job description for a pharmacy technician engaged in a Tech-Check-Tech program
    - v. Review liability issues in a Tech-Check-Tech program
  - c. Accuracy in the Outpatient Pharmacy: Preventing, Identifying and Classifying Medication Errors
    - i. Recognize and classify common medication errors
    - ii. Recognize the causes of medication errors
    - iii. List ways to prevent medication errors
    - iv. Recognize the importance of continuous quality improvement (CQI) in the pharmacy distribution process
    - v. Describe the technician's role in CQI in the pharmacy
  - d. Dosage Forms
    - i. Identify the most common medication dosage forms
    - ii. Describe the advantages and disadvantages of different medication dosage forms
    - iii. Recognize the different routes of administration and the advantages of each
    - iv. List ways to recognize and prevent dosage form dispensing errors
  - e. Calculations Review
    - i. Describe examples of common systems of measurement
    - ii. Demonstrate the ability to convert units of measurement
    - iii. Appropriately calculate the day's supply from a prescription order
    - iv. Use percentages, ratios, and proportions to make accurate pharmaceutical calculations using mathematical skills reviewed in the activity

- v. Solve common pharmacy calculations using mathematical skills reviewed in this activity
- vi. Master specific math functions appropriate to practice setting
- f. Advanced Review of Common Medications
  - i. Group medications by pathophysiologic class using established stems (prefixes, infixes, & suffixes)
  - ii. List common adverse effects and drug interactions
  - iii. List common adherence challenges
  - iv. Distinguish medications with similar generic names
  - v. Recognize medications with multiple formulations

#### Responsible Individual

The New Practice Model Project Site Coordinator at Hy-Vee Pharmacy 1192 shall be ultimately responsible for the TCT program activities (unless otherwise noted). The New Practice Model Project Site Coordinator will be responsible for meeting TCT program training and validation requirements. The New Practice Model Project Site Coordinator will designate the staff pharmacists to supervise the activities of Checking Technicians. All participating staff, pharmacists and technicians, will be involved in collection of data for the program evaluation on a regular basis, reporting information to the New Practice Model Project Site Coordinator for analysis.

#### Staffing

Pharmacy staffing shall be adequate to ensure consistent and safe implementation and usage of the TCT program and will optimize pharmacist patient care services, which will have data collected and analyzed through the pharmacy's existing CQI process with variations as requested or demeaned necessary by the research team.

#### Records

The pharmacist in charge shall maintain in the pharmacy department records for each certified pharmacy technician authorized by the pharmacist in charge or responsible pharmacist to participate in the TCT program. The records shall be available for inspection and copying by the Board or its representatives and any other authorized agencies for two years beyond the term of the certified pharmacy technician's employment. The record summary (Technician Function Levels) shall include:

- a. The name of the certified pharmacy technician.
- b. The date the certified pharmacy technician completed the standardized training and sitespecific evaluation for participation in the TCT program.
- c. The date the certified pharmacy technician was authorized to participate in the TCT program and the specific TCT program functions and tasks the certified pharmacy technician is authorized to perform.
- d. When the certified pharmacy technician is authorized to check the work of other certified pharmacy technicians, the date the checking technician completed the specialized and advanced training.
  - e. The dates and results of all competency evaluations.
- f. The dates of and reasons for any suspension or revocation of the certified pharmacy technician's TCT program authorization, identification of corrective action or retraining completed, and date of subsequent reinstatement of the certified pharmacy technician's TCT program authorization.
- g. The dates of and reasons for any disciplinary action taken against the certified pharmacy technician in connection with the certified pharmacy technician's performance of duties relating to the TCT program.

Evaluation of Program and Technicians:

Technician filling and checking responsibilities will be monitored daily. Errors will be documented for both filling and checking, and review of all errors will also be documented on this sheet by the PIC or responsible staff pharmacist. These sheets will be collected and data entered for bi-weekly review. The records will be maintained in the pharmacy for a minimum of two years.

The implementation of the TCT program shall result in the redirection of pharmacists from distributive tasks to cognitive and patient care activities. The participating pharmacy will document these clinical activities and will collect and maintain these records for no less than two years following the date of the record. These records shall be updated at least semiannually.

- 1. The PIC shall conduct continuous monitoring and evaluation of each Checking Technician to ensure the continued competency of the TCT program and the safety of the patients. Errors will be identified and records maintained following the pharmacy's quality measures, including variance tracking and reports, event analysis, follow up and education.
- 2. Specific evaluation of the TCT program will incorporate three measures:
  - a. **Filling**: Review of errors identified by a Checking Technician or Pharmacist. The responsible staff pharmacist shall review with all certified pharmacy technicians involved with any errors identified during the evaluation of the <u>filling process</u> and shall discuss procedure and document the review on the daily monitoring sheet to ensure the errors are not repeated.
  - b. **Checking**: Periodic review and checking by the pharmacist of work <u>checked</u> (monthly to quarterly as designated) by the Checking Technician and identification and documentation of all errors not identified and corrected by the checking technician and shall discuss procedure and document the review on the daily monitoring sheet to ensure the errors are not repeated.
  - c. **Review of errors** identified following <u>release</u> by Checking Technician or Pharmacist. The responsible staff pharmacist shall receive, evaluate, and review with all certified pharmacy technicians involved with any errors identified by a health care professional, a patient, or any individual following release of a drug by the checking technician. All such errors will be documented on the daily form AND recorded via the pharmacy's CQI program.
- 3. Periodic review and monitoring will be recorded on our Ongoing TCT Competency Evaluation Record.
- 4. Benchmarks will be identified by compiling and evaluating of the <u>Technician QA Monitoring Daily Reports</u>. <u>Bi-weekly reports</u> will be used to evaluate ongoing competencies, identify possible system modifications, provide data for continuing site specific education, and to establish need for any retraining.
- 5. Retraining will occur when a Technician or Checking Technician has an error rate significantly above the average for participating pharmacy's technicians. Error rate "outliers" will be determined by an excessive error rate in filling or checking over two consecutive bi-weekly periods OR if the technician's cumulative error rate significantly exceeds the average cumulative error rate. During the retraining period (of not less than two bi-weekly periods) a technician's work will be checked by a pharmacist nor will the technician be allowed to check other technicians. Retraining will consist of a repeat competency evaluation in the area/s where excessive errors have occurred and potential repeat of didactic modules as appropriate. The PIC, with the input of staff pharmacists, will determine which sections, or all, of the training modules must be repeated.

# Letter of Commitment by Pharmacy Owner or Regional Supervisor

| I understand that my role as a Ne   | ew Practice Model Participating Pharmacist is a significant      |
|-------------------------------------|--|
| responsibility and will make it a p | priority. I look forward to working with this team and, like the |
| others, I. Justin Marning           | λ, agree to:   |

- Support the Mission, Vision, Values and Goals of the initiative.
- Offer my expertise to help ensure the health and success of the initiative.
- Work with the rest of the pharmacy team to communicate the initiative to our most important audiences.
- Attend in person, by phone, or send a designee, to at least two-thirds of the meetings held each year I serve and, whether I attend or not, will continually communicate with the team and the main coordinator to ensure I understand all current affairs.
- Provide support for all data collection procedures. All data for each month will be
  electronically submitted within 10 days of the end of the month. Those pharmacies who
  are unable to meet this standard will be reviewed quarterly for assessment of
  continuation in the pilot study.
- Provide adequate staffing as required to support the New Practice Model procedures.
   Those pharmacies who are unable to implement the procedures at least 60% of the time will be reviewed quarterly for assessment of continuation in the pilot study.
- Actively participate in all requests for my assistance and response.

I have read and fully agree to this Letter of Commitment and look forward to assisting the Iowa Pharmacy Association Foundation in this initiative.

Signed \_

fastia Mann

Date 3

Title

lamacy Superviser NW Territory

I understand that my role as a New Practice Model Participating Pharmacist is a significant responsibility and will make it a priority. I look forward to working with this team and, like the others, I, I agree to:

- Support the Mission, Vision, Values and Goals of the initiative.
- Offer my expertise to help ensure the health and success of the initiative.
- Work with the rest of the pharmacy team to communicate the initiative to our most important audiences.
- Attend in person, by phone, or send a designee, to at least two-thirds of the meetings held each year I serve and, whether I attend or not, will continually communicate with the team and the main coordinator to ensure I understand all current affairs.
- Complete all necessary training and education as required.
- Provide support for all data collection procedures. All data for each month will be electronically submitted within 10 days of the end of the month.
- Actively participate in all requests for my assistance and response.

| Signed _ | Thomas of Com |  |
|----------|---------------|--|
| Title    | PeZC          |  |

I understand that my role as a New Practice Model Participating Pharmacist is a significant responsibility and will make it a priority. I look forward to working with this team and, like the others, I, \_, agree to:

- Support the Mission, Vision, Values and Goals of the initiative.
- Offer my expertise to help ensure the health and success of the initiative.
- Work with the rest of the pharmacy team to communicate the initiative to our most important audiences.
- Attend in person, by phone, or send a designee, to at least two-thirds of the meetings held each year I serve and, whether I attend or not, will continually communicate with the team and the main coordinator to ensure I understand all current affairs.
- Complete all necessary training and education as required.
- Provide support for all data collection procedures. All data for each month will be electronically submitted within 10 days of the end of the month.
- Actively participate in all requests for my assistance and response.

| Signed | Date 5/10/14 |
|--------|--------------|
| 001    |              |
| Title  |              |