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CHAIN COMMUNITY PHARMACISTS' WILLINGNESS, ATTITUDES, AND BARRIERS IN PROVIDING SELF-CARE MEDICATION AND SUPPLEMENT RECOMMENDATIONS

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ABSTRACT

BACKGROUND: Pharmacists are commonly called on as the first resource for patients when selecting an appropriate self-care medication or supplement. This study examines pharmacists' over-the-counter (OTC) recommendations in the chain community pharmacy setting in the United States.

OBJECTIVES: The objective of the study was to assess chain community pharmacists' willingness and attitudes to provide self-care recommendations to patients and to identify chain community pharmacists' barriers to making OTC medication and supplement recommendations.

METHODS: An anonymous survey was created to identify pharmacists' attitudes and their willingness to perform these recommendations. The questionnaire included specific questions to identify barriers that exist to making OTC recommendations. The survey was distributed by fax and email to 527 pharmacists in the Mid-South regional district of a U.S. grocery chain pharmacy. Descriptive statistics were used to identify demographic trends and display results.

RESULTS: Pharmacists are overwhelmingly willing to provide OTC recommendations (100%) and see it as an important part of community practice (99%). The greatest barriers were time/prescription volume (94%) and staffing demands (78%). The greatest need for education was in the areas of eye/ear care and vitamins/herbal products.

CONCLUSIONS: The results affirmed pharmacists' willingness and overall positive attitude to providing OTC medication counseling in the community pharmacy setting. The research uniquely identified barriers that pharmacists experience when attempting to make OTC recommendations. This information can be used not only for the implementation of patient care services targeting self-care needs but also in the application of general community pharmacy practice.

Key words: Self-care, over-the-counter, pharmacist, self-care recommendations.

INTRODUCTION

Self-care medications play an increasingly important role in the health care of millions of consumers. In fact, the majority of medications used in the United States are nonprescription products, some of which were only available with a prescription a few years ago¹. According to data presented in the Journal of the American Medical Association in 2008, 42% of Americans aged 57 to 85 years of age reported using at least one over-the-counter medication, and 49% reported using a dietary supplement².

Self-care medications offer symptom relief and disease prevention while providing convenience and affordability to consumers. While these medications provide an increased accessibility to health care, they are not without risk. In fact, 48% of Americans take more than the recommended dose of an over-the-counter (OTC) medication because they believe it will increase the product's effectiveness³. In the same survey, two-thirds of respondents say that selecting an OTC product is challenging because of the wide array of self-care products available on the market today³. In addition, Soller and Shaheen revealed 80% of patients are not likely to keep the carton from an OTC product for reference and 51% are not likely to read the allergy alert before first using the medication⁴.

Pharmacists serve in a unique role as the most accessible health care professional. Located at thousands of retail pharmacies, pharmacists are positioned as the health care provider at the point of sale for millions of self-care products sold each year. While less than half of consumers (43%) requested the assistance of a pharmacist when purchasing OTC medications, nearly 80% of Americans would purchase a product when recommended by a pharmacist, while 82% would not buy a product if the pharmacist recommended against it³. Many consumers value the input of their pharmacist when choosing an OTC medication because pharmacists have more experience with self-care products than any other health care professional. While not specific to self-care products, there have been numerous examples of pharmacists' expertise in literature addressing health literacy⁵, medication adherence⁶, and an ability to reduce costs while improving care for the patient in providing medication therapy management services⁷. All of these examples of clinical expertise can be used to show pharmacists' effectiveness in providing valuable counseling on the use of OTC medications in self-care.

A review of the literature revealed a limited number of surveys specifically directed to the pharmacist and his/her role in counseling on self-care medications⁸⁻¹⁰. These previous pharmacist surveys on self-care products emphasize characteristics of product selection and provide some background on the amount of patient interaction, time, and frequency of pharmacists' interactions with patients^{8,9}. One survey reported 90% of pharmacists participated in counseling patients on OTC-related products¹⁰. The past surveys, however, did not address pharmacists' attitudes, willingness, and potential barriers to counseling patients on self-care medications.

This study was designed to understand parameters that could affect the role of the pharmacist in self-care in community pharmacy practice. The objective of the study is to assess chain community pharmacists' willingness and attitudes to provide OTC recommendations to patients and to identify chain community pharmacists' barriers to making self-care medication and supplement recommendations.

MATERIALS AND METHODS

An anonymous survey was created to identify pharmacists' attitudes about self-care recommendations and their willingness to perform such recommendations. The survey questionnaire was developed with input from community pharmacists and faculty at the

University of Kentucky College of Pharmacy and tested for time restraints using current community pharmacy practitioners. The questionnaire included specific questions to identify barriers that exist to making OTC recommendations. The study was reviewed and approved by the University of Kentucky Institutional Review Board.

A grocery store chain pharmacy with stores in the Mid-South Region of the United States to include the states of Kentucky, Tennessee, Southern Indiana, and Southern Illinois was identified. Surveys were distributed to approximately 527 pharmacists in the chain community division.

A cover letter and survey were distributed to pharmacists by two methods: "blast fax" (fax to all pharmacies in the division) and by email. The cover letter and accompanying survey should have taken no more than approximately ten minutes to complete.

The survey consisted of 28 questions (Appendix 1). The first nine questions were specific to obtain demographic data. Respondents were asked questions about their age, location, training, education, work experience, and the amount of prescriptions filled at their pharmacy. In order to identify location while maintaining anonymity, respondents identified the zone where they worked within the larger division. Each zone is comprised of approximately 20 stores and this information was used to identify whether or not the respondent worked in an urban or rural setting. A zone was determined to be either rural or urban using the U.S. census rural-area commuting area (RUCA) codes¹¹. Each zip code is classified by metropolitan area and if greater than 50% of stores in a zone were classified as metropolitan, the zone was considered urban. The remaining questions focused on attitudes (job satisfaction, how important OTC recommendations are to community practice), willingness (how willing a pharmacist was to provide these recommendations), and barriers (questions related to time, training, and a question asking respondents to rank potential barriers to OTC medication counseling). Potential barriers were developed by input from currently practicing community pharmacy and self-care faculty.

In order to identify the greatest, neutral, and least barriers, the percentage of respondents who ranked a barrier one or two was considered a 'greatest barrier', three or four a 'neutral barrier', and five or six a 'least barrier.' In the survey, pharmacists were directly asked if they had sufficient time to counsel on OTC medications. Based upon their answer they were grouped into one of three groups: 'strongly agree/agree' meaning they had enough time to counsel on OTC medications; 'neutral'; and 'disagree/strongly disagree' meaning they did not have sufficient time. The demographics used were age (greater or less than 35 years old), urban versus rural pharmacies, the amount of prescriptions filled daily (greater or less than 300 prescriptions), job satisfaction, and number of years practiced (greater or less than 10 years).

After the survey and cover letter were distributed by "blast fax" and email, the pharmacist had the opportunity to return the survey by whichever method was most convenient. Surveys distributed were returned by fax or by completion of an online survey tool, SurveyMonkey®. It was made explicitly clear by multiple methods that each pharmacist was to fill out the survey only once. The original survey was distributed in late September 2010. After sending out the

survey by fax and email, a follow up reminder was given in early November 2010, four weeks after the original correspondence. A final reminder to return the survey was given two weeks prior to the conclusion of data collection in December 2010¹².

The surveys had no information to identify the individual pharmacist. Nothing in the survey or database could have been used to identify sources of research material.

Statistical Analysis

Statistical analyses were conducted using SAS Version 9.1 (SAS Institute, Cary, NC). Descriptive statistics were calculated using Microsoft Excel and were used to summarize data using means and percentage of respondents. All reported P values are based on chi-squared hypothesis tests and power was set at $p < 0.05$.

RESULTS

A total of 201 pharmacists of the 527 pharmacists completed and returned the survey for a response rate of 38.1%. Table 1 details the demographic information from the respondents.

Table 1. Respondent Demographics

Total Respondents	N=201 (Response Rate 38.1% = 201/527)
Age	
23-35	95 (47.5%)
36-45	46 (23.0%)
46-55	34 (17.0%)
56-65	25 (12.5%)
Gender	
Male	70 (39.1%)
Female	109 (60.9%)
Practice State	
Kentucky	117 (58.5%)
Tennessee	65 (32.5%)
Indiana	13 (6.5%)
Illinois	12 (6.0%)
Average Years in Practice	13.4
Degree	
B.S. Pharmacy	95 (47.5%)
Pharm.D.	108 (54.0%)
Pharmacy Residency/Fellowship	6 (3.0%)
Other	5 (2.5%)
Pharmacy Manager	76 (38.0%)
Practice Setting	
Urban	142 (70.6%)
Rural	59 (29.4%)

The majority of respondents were female (60.9%) and were 23 – 35 years old (47.5%). Over half of the respondents had a Doctor of Pharmacy (54.0%), while three percent had completed a residency and two and a half percent had another advanced degree. The majority of pharmacist respondents practiced in an urban area (70.6%).

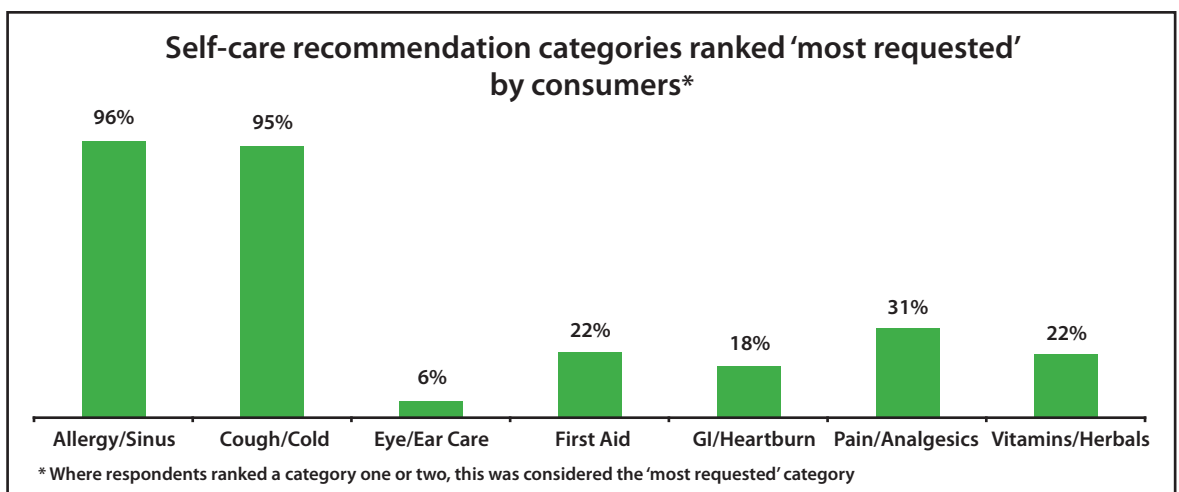
In a typical shift at the pharmacy, the highest percentage of respondents (36%) reported counseling patients on OTC medications six to ten percent of the time, which equates to 30 or 45 minutes during an eight hour shift. Of the total respondents, 72.7% of pharmacists reported that they ‘always’ or ‘frequently’ leave the physical space of the pharmacy to make OTC recommendations.

When asked if pharmacists were willing to provide OTC recommendations given the opportunity, 100% of respondents either ‘strongly agreed’ or ‘agreed.’ A near unanimous response of respondents (99%) felt that OTC recommendations were an important part of community practice.

The majority of pharmacists reported that they received their primary education for OTC medications from practice experience (60.5%), followed by pharmacy school education (28.5%), and by continuing education (8.0%).

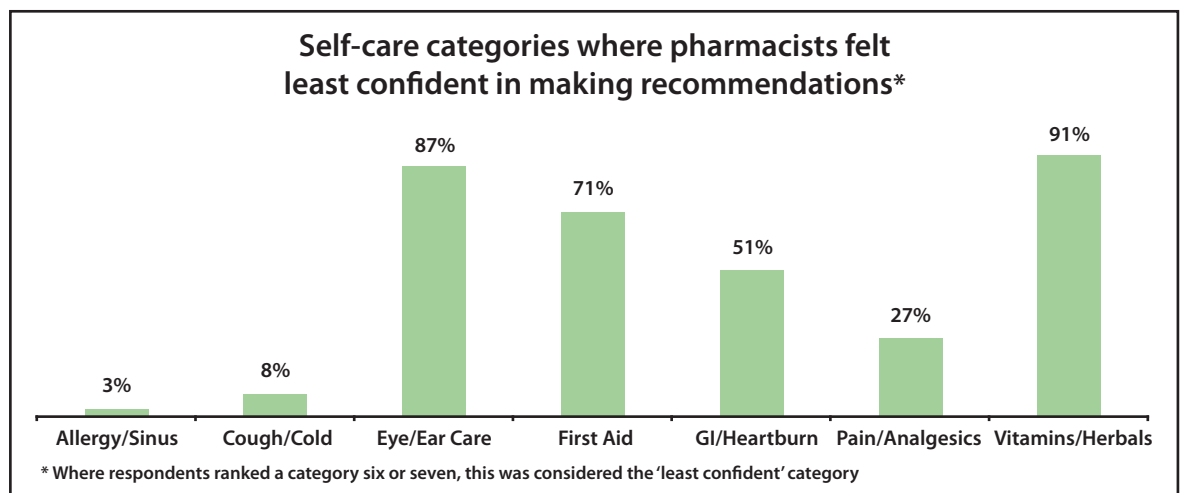
Pharmacists were asked to rank medication classes from one to seven based on the order in which they recalled receiving the most requests from patients (one being the ‘most requested’ and seven being the ‘least requested’) and the order that they felt the most confident in counseling patients (one being the ‘most confident’ and seven being the ‘least confident’). The order by which a medication class was considered ‘most requested’ was structured as the percentage of respondents who ranked the medication class as either one or two. Allergy/Sinus (97%) and Cough/Cold (95%) product selections were the most requested OTC medication classes (Figure 1).

Figure 1. OTC Medication Requests



The level of confidence in counseling on an OTC medication class was calculated the same way (i.e., as the most and least requested OTC medication classes). The percentage of respondents who ranked a medication class one or two was considered most confident and a ranking of six or seven was considered least confident. The most confident medication classes were Allergy/Sinus (97%) and Cough/Cold (92%). Areas where pharmacists felt least confident were vitamins/herbals (91%), Eye/Ear Care (87%), and First Aid (71%) (Figure 2).

Figure 2. OTC Medication Recommendation Confidence



Pharmacists were asked to rank common barriers to making OTC medication recommendations. Six barriers were listed for pharmacists to rank on what they felt was the barrier of greatest significance. The greatest barriers to OTC counseling were time/prescription volume (94%) and insufficient staff to cover pharmacy (78%). Neutral barriers were physical space/access to OTC aisles (52%) and lack of reimbursement for OTC consults (55%). The least barriers to OTC counseling were knowledge of OTC medications (64%) and comfort level in approaching patients (62%) (Table 2).

Table 2. Barriers to OTC Medication Recommendations

Pharmacist barriers to self-care medication recommendations			
Barriers	Greatest barrier*	Neutral barrier**	Least barrier***
Physical space/Access to OTC aisles	30 (15.1%)	103 (51.8%)	66 (33.2%)
Time/Prescription Volume	197 (93.8%)	11 (5.2%)	2 (1.0%)
Knowledge of OTC Medications	4 (2.1%)	66 (34.2%)	123 (63.7%)
Lack of reimbursement for OTC consults	22 (11.2%)	109 (55.6%)	65 (33.2%)
Comfort level in approaching patients	5 (2.6%)	69 (35.4%)	121 (62.1%)
Insufficient staff to cover pharmacy	153 (78.1%)	34 (17.4%)	9 (4.6%)

* Where respondents ranked a barrier one or two, this was considered a 'greatest barrier'
 ** Where respondents ranked a barrier three or four, this was considered a 'neutral barrier'
 *** Where respondents ranked a barrier five or six, this was considered a 'least barrier'

Since time was identified as one of the greatest barriers to providing OTC counseling, several sub-analyses were performed to see if a certain pharmacist demographic believed they had more time to counsel patients on OTC medications. All categories failed to show a statistically significant correlation between a certain demographic and the amount of time the pharmacist believed they had to make OTC recommendations with the exception of job satisfaction. The respondents who ranked their job satisfaction as 'very satisfied' or 'satisfied' believed they had enough time to counsel on OTC medications (81%) compared to those who were not satisfied (40%) ($p < 0.0001$).

When the pharmacists were asked about their interest in providing an OTC counseling service, 80% of pharmacists reported being either 'very interested' or 'interested' in a service that allows pharmacists to spend a dedicated amount of time in the OTC aisles counseling patients. A greater percentage (84.4%) of pharmacists was in favor of a student pharmacist/intern — under the supervision of a pharmacist — spending a dedicated amount of time in the OTC aisle.

DISCUSSION

The study aimed to identify chain community pharmacists' willingness and attitudes to provide self-care medication and supplement recommendations to patients and to identify barriers to making these medication recommendations. Since previous studies did not examine attitudes, willingness, and barriers to OTC medication recommendations, the study provides a unique perspective to community pharmacy practice. The study showed the pharmacists' willingness and overall positive attitude to providing OTC medication counseling and identified time/prescription volume and insufficient staff as the greatest barriers to making OTC recommendations. The ability to incorporate non-pharmacist staff into other facets of workflow can allow pharmacists more time to perform clinical services in community pharmacy practice. Many pharmacies integrate these models to provide medication therapy management; similar models could be implemented to overcome the identified barriers in this study.

A possible solution involves using student pharmacists to spend a dedicated amount of time in the OTC aisle to assess patients, select appropriate products, and provide education and medication counseling. For example, one grocery store community pharmacy in the United States designed a program to utilize student pharmacists under the supervision of a licensed pharmacist to be physically available in the self-care aisles to assess patients, select appropriate products, and provide self-care education and medication counseling. The program was piloted at the University of Kentucky College of Pharmacy in the fall of 2010¹³. The program assessed multiple outcomes including the confidence of the student pharmacists and the types of encounters and interventions.

This program could be one model for pharmacists to be involved in providing the clinical service while involving the student pharmacist in the education process. From the results of the program, when a pharmacist was consulted on an OTC question from a student pharmacist, the time required of the pharmacist was less than two minutes¹³. Since the amount of staff needed and time/prescription volume were identified as the biggest barriers, the program offers an

excellent staffing alternative by incorporating students into the OTC medication process while requiring relatively little time of the pharmacist to provide these services to patients. This survey affirmed pharmacists' support of this type of model service with 84% of pharmacists being interested in allowing a student pharmacist to make OTC recommendations under their supervision.

Overall, pharmacists believed that their overall knowledge level was not a barrier to providing OTC medication recommendations; however, when asked about specific topics, pharmacists were least confident in providing recommendations on vitamins/herbals, eye/ear care, and first aid compared to other categories. This result indicates that there may not be a need for continuing education on general self-care medications; rather, it may provide colleges of pharmacy and continuing education providers some information to help target specific self-care areas for programs to help pharmacists feel more confident.

In our results, practice experience was identified as the primary tool for pharmacist education. This information could be used by colleges and schools of pharmacy to structure experiential education opportunities in OTC areas to better prepare future practitioners. Although "pharmacy school" as the primary means of education was not defined in the survey, it was assumed by the authors to be a classroom experience and likely to be interpreted as such by the survey participants. Practice experiences, such as Introductory Pharmacy Practice Experiences (IPPE) or Advanced Pharmacy Practice Experiences (APPE) that are currently defined in US ACPE accreditation standards, can be implemented through experiential education programs in colleges and schools of pharmacy to help reinforce didactic coursework and better simulate the practice experience that the survey pharmacists found to be the most beneficial environment for their education in self-care. Specific experiential rotations in self-care and students' ability to effectively provide OTC recommendations through these experiences have been documented¹⁴⁻¹⁶.

There is not a specific pharmacist demographic that is more motivated over another for performing OTC medication recommendations. The data represents a majority of young practitioners who have graduated in the past 10 years and are highly motivated to provide clinical services to patients in the community pharmacy setting. Pharmacists who were most satisfied with their job felt like they had more time to make OTC recommendations, but nearly every respondent in the survey had a positive attitude and was willing to provide OTC recommendations given the opportunity.

LIMITATIONS

While a response rate of 38% may not seem high, the response rate is comparable to other broad pharmacist based surveys. The National Pharmacist Workforce Study prepared by the Midwest Pharmacy Workforce Research Consortium — which employed both mailing and phone reminders as a method to improve response rate — had a useable response rate of 33.8%¹⁷. The other pharmacist based OTC surveys did not report a specific response rate^{9,10}.

All pharmacists surveyed in this study practiced pharmacy in a similar fashion and workflow. While the information is applicable to community pharmacy practice, specific attitudes and barriers were not identified in other areas of community pharmacy practice such as independent pharmacies and outpatient clinics. While the study may be limited by specifically surveying grocery store pharmacists in the Midwest and South regions of the United States, the pharmacists who completed the survey practice in urban settings, rural settings, and over multiple states, leading to some diversity of pharmacist and pharmacy practice sites represented in the results.

There was no method to prevent pharmacists from completing the survey multiple times on the online database. The survey had to be created to ensure anonymity among respondents and every measure was taken in communication with potential respondents to ensure they were fully aware to complete the survey only once.

CONCLUSION

Community pharmacists are overwhelmingly willing to provide OTC recommendations and see it as an important part of community practice. The greatest barriers to making OTC recommendations were time and staffing demands. The survey found that knowledge was not a barrier to making OTC recommendations, but the greatest need for education was for eye/ear care and vitamins/herbal products. Pharmacists should be able to use the information from this research to identify attitudes, willingness, barriers and educational needs to advance pharmacy practice by further promoting the pharmacist's role in self-care.

Conflict of Interests: None

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REFERENCES

1. The Attitudes and Beliefs about the Use of Over-the-Counter Medications: A National Opinion Survey Conducted for the National Council on Patient Information and Education. Harris Interactive, Inc; Bethesda, MD: National Council on Patient Information and Education; 2003. Available at: http://www.bemedwise.org/survey/summary_survey_findings.pdf. Last accessed April 25th, 2011.
2. Qato D, Alexander G, Conti M *et al.*, Use of Prescription and Over-the-Counter Medications and Dietary Supplements Among Older Adults in the United States. *JAMA*. 2008; 300(24):2867-2878.
3. Uses and Attitudes about Taking Over-the-Counter Medications: Findings of a 2003 National Opinion Survey Conducted for The National Council on Patient Information and Education. Harris Interactive, Inc; Bethesda, MD: National Council on Patient Information and Education; 2002. Available at http://www.bemedwise.org/survey/summary_Survey.pdf. Last accessed April 25th, 2011.
4. Soller RW and Shaheen C. Self-reported consumer medication taking behavior in the United States: Evidence for a medication education gap. *SelfCare* 2011;2(3):66-75

5. Ngoh, Lucy. Health literacy: A barrier to pharmacist-patient communication and medication adherence. *Pharmacy Today*. 2009(Aug); 15(8):45-57.
6. Bubalo J, Clark RK, Jiing SS, *et al*. Medication Adherence: Pharmacist Perspective. 2010 May-Jun; 50(3):394-406.
7. Oliveria D, Brummel A, and Miller D. Medication Therapy Management: 10 years of experience in a Large Integrated Health Care System. *J Manag Care Pharm*. 2010; 16(3):185-95.
8. Levy S. They're All Ears. *Drug Topics* 2005(Nov 7)10
9. Levy S. 2007 Drug Topics OTC recommendations Survey. *Drug Topics* 2007(May 7)
10. Pharmacists take center stage in OTC counseling. *U.S. Pharm* 2007; 32(7):4-6.
11. United States Department of Agriculture Economic Research Service. Rural Urban Commuting Area Codes. Accessed at <http://www.ers.usda.gov/Data/RuralUrbanCommuntingAreaCodes/>. Last Accessed February 17th, 2011
12. Dillman D. Mail and Internet surveys: The Tailored Design Method 2007 Update with New Internet, Visual, and Mixed-Mode Guide. New Jersey: John Wiley & Sons, Inc.; 2007.
13. Divine H, Grise W, Sansom V, Cox E, Freeman P. Student Pharmacists' Role in a Self-Care Patient Encounter Service in Community Pharmacies. *Journal of the American Pharmacists Association*. 2011;51(2):271.
14. Hastings JK, Flowers SK, Spadaro DC. Integrating an elective self-care experience with a required advanced pharmacy practice community experience. *Am J Pharm Educ*. 2006;70(6):Article 144.
15. Angelo LB. Engaging students in self-care activities during an advanced community pharmacy practice experience. *Am J Pharm Educ*. 2007;70(6):Article 143.
16. Sansom V, Cox E, Divine H. A comparison of PY2 versus PY4 readiness to make self-care recommendations. Poster session presented at: Rho Chi Research Day University of Kentucky College of Pharmacy; 2011 Apr 7; Lexington, KY.
17. Midwest Pharmacy Workforce Research Consortium. National Pharmacist Workforce Survey. September, 2005. Accessed at www.aacp.org/resources/research/pharmacym manpower/Documents/finalreport.pdf, Last Accessed May 10, 2011.

Appendix 1

Over-the-Counter (OTC) Medication Recommendations: Kroger Pharmacists' Views

1. Age (Circle One): 23 – 35 36 – 45 46 – 55 56 – 65 66 or Older 2. Gender: Male Female
3. In what state do you practice? Kentucky Tennessee Illinois Indiana
4. How many years have you been a practicing pharmacist? _____
5. What degree(s)/training do you have? Check all that apply:
 B.S. Pharmacy Pharm.D. Pharmacy Residency/Fellowship Other _____
6. What is your current job status at Kroger?
 Full-Time Store Based Part-Time Store Based Full-Time Float Part-Time Float
7. Are you the Pharmacy Manager? Yes No
8. In which zone/district of the Kroger Mid-South Division are you based?
Zone/District: 1 2 3 4 5 6 7 8 9
9. How many prescriptions are filled at your pharmacy each weekday on average?
 <100 100-200 201-300 301-400 401-500 >500
10. Rate your overall job satisfaction:

1	2	3	4	5
(VERY SATISFIED)				(VERY UNSATISFIED)
11. In your estimation, what percentage of your time do you spend making OTC recommendations during a typical shift (circle one)?

0%	1-5%	6-10%	11-15%	16-20%	21% or greater
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12. In your estimation, how often do you leave the pharmacy/prescription area (i.e., to go to the OTC aisles) to make your OTC recommendations (circle one)?

1	2	3	4	5
(ALWAYS)	(FREQUENTLY)	(SOMETIMES)	(RARELY)	(NEVER)
13. Did you take an OTC course in pharmacy school (i.e., a specific course dedicated to OTC education)?
 Yes No
14. Where did you learn the most information about OTC medications?
 Pharmacy School Continuing Education Practice Experience Other _____
15. Regarding physical environment of your pharmacy, does your pharmacy have easy access to the OTC aisles?
 Yes No
16. Making OTC recommendations is an important part of community pharmacy practice.
 Strongly Agree Agree Disagree Strongly Disagree Neutral
17. I have sufficient time to provide OTC recommendations to patients.
 Strongly Agree Agree Disagree Strongly Disagree Neutral

18. Patients regularly accept my OTC recommendations.

Strongly Agree Agree Disagree Strongly Disagree Neutral

19. I am willing to provide OTC recommendations given the opportunity.

Strongly Agree Agree Disagree Strongly Disagree Neutral

20. I have sufficient training to provide OTC recommendations to patients.

Strongly Agree Agree Disagree Strongly Disagree Neutral

21. Providing OTC recommendations increases my job satisfaction.

Strongly Agree Agree Disagree Strongly Disagree Neutral

22. Of the following OTC medication classes, rank from 1 to 7 in the order that you receive the most OTC recommendation requests from patients (With 1 = most requested and 7 = least requested; Use each number once):

_____ Allergy/Sinus	_____ Pain/Analgesics
_____ Cough/Cold	_____ GI/Heartburn/Dyspepsia
_____ First Aid	_____ Eye/Ear Care
_____ Vitamins/Herbals	

23. Of the following OTC medication classes, rank from 1 to 7 in the order that you feel the most confident in responding to OTC recommendation requests. (With 1 = most confident and 7 = least confident; Use each number once):

_____ Allergy/Sinus	_____ Pain/Analgesics
_____ Cough/Cold	_____ GI/Heartburn/Dyspepsia
_____ First Aid	_____ Eye/Ear Care
_____ Vitamins/Herbals	

24. Which of the following best represents your level of interest in participating in an OTC counseling service that allows pharmacists to spend a dedicated amount of time each day in the OTC aisles for patient consults?

Very interested
 Interested
 Not very interested
 Definitely not interested

25. Which of the following best represents your level of interest in participating in an OTC counseling service that allows student pharmacists/interns under your supervision to spend a dedicated amount of time each day in the OTC aisles for patient consults?

Very interested
 Interested
 Not very interested
 Definitely not interested

26. Of the following potential barriers to providing OTC recommendations, rank from 1 to 6 in the order that you believe would be most burdensome (With 1 = greatest barrier and 6 = smallest barrier; Use each number once).

_____ Physical space/access to OTC aisles	_____ Lack of reimbursement for OTC consults
_____ Time/prescription volume	_____ Comfort level in approaching patients
_____ Knowledge of OTCs	_____ Insufficient staff to cover pharmacy

27. If not listed above, what are other barriers that exist to providing OTC recommendations? _____

28. Please list any additional comments that you would like to contribute regarding OTC recommendations below.