Exploring U.S. Pharmacists' Willingness to Fill Prescriptions Illegally, or Not to Fill Prescriptions That Are Legal but Morally Offensive to Pharmacists and the Rationale Behind Their Decision-Making

Susan A. Hayes

This thesis is submitted in partial fulfilment of the requirements for the award of the degree of Professional Doctorate in Criminal Justice of the University of Portsmouth, U.K.

May 2021

Abstract

The aim of this research was to determine the extent U.S. pharmacists are willing to fill ambiguous prescriptions or not fill legal prescriptions that may be morally offensive to the pharmacist, and the rationale behind their decision-making. Pragmatism is the research philosophy underpinning this study. The data was collected using an online survey of 5,839 U.S. pharmacists that yielded 362 responses. Five case studies and 21 moral statements were presented. Key findings of the case studies were that 612 (35.2%) decisions would have been to proceed illegally and 1,125 (64.7%) to proceed illegally. An ethical typology was assigned to each of the responses revealing no one ethical ideology with results evenly split between 638 virtue (35.9%), 570 deontological (32.1%) and 567 utilitarian/consequentialist (31.9%) responses. Training and corporate policies had little influence on ethical decision-making. With regard to the moral statements, respondents were most inconsistent concerning filling a placebo/assigning a price for an ineffective drug, breaching confidentiality to reveal to a patient the medication found in a spouse's jacket and filling a fatal dose for a hospice patient. Respondents were most consistent in agreeing that PBMs do not pay enough for the work pharmacists perform.

The contribution of this research is an important one. Pharmacists are the gatekeepers of the national drug supply. Little academic research in the United States has been conducted in pharmacoethical and pharmacomoral decision-making and this research starts to fill that gap. Theory informs that providing pharmacists time and financial rewards for dispensing medication advice rather than solely dispensing products would reduce crime opportunities. Both decision-making and criminal justice theories that underpin this study were confirmed as ways pharmacists make decisions, that is, with an emphasis towards patient satisfaction above all else.

Keywords: pharmacist decision-making, pharmacoethical decision making, pharmacomoral decision making, pharmacist survey, ethical decision-making

ACKNOWLEDGEMENT

I would like to express deep gratitude to the staff of the University of Portsmouth, Institute for Criminal Justice Studies, allowing me the opportunity to research the role of the pharmacist decision-making.

There were many other mentors along the way. Dr Danielle Rousseau, Boston University, and Dr Kelly Richmond Pope, DePaul University, assisted throughout the process.

The cohort group of the 2016 Criminal Justice Professional Doctoral Programme provided support, humour, and encouragement.

Finally, my husband provided counsel, Excel tutorship, proof reading, and was a travelling companion to the U.K., encouraged and supported me in this effort and with every endeavour I have taken on. I am very fortunate to have his love and the love of my family, friends, and colleagues who also supported me through this journey.

DECLARATION

Whilst registered as a candidate for the above degree, I have not been registered for any other research award. The results and conclusions embodied in this thesis are the work of the named candidate and have not been submitted for any other academic award.

WORD COUNT: 42,672

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LIST OF ABBREVIATIONS

ACA	Affordable Care Act
ACLU	American Civil Liberties Union
CDC	Centers for Disease Control
CMR	Comprehensive Medical Review
CMS	Centers for Medicaid and Medicare agency
COPs	Colleges of Pharmacy
COSO	Committee of Sponsoring Organisations
CPT	Common Procedure Terminology
DEA	Drug Enforcement Administration
DIT	Defining Issues Test
DME	Durable Medical Equipment
DOJ	Department of Justice
EBSA	Employee Benefits Security Administration
EHC	Emergency Hormonal Contraception
ERISA	Employee Retirement Income Security Act of 1974
ERM	Enterprise Risk Management
FDA	Food and Drug Administration
FDR	First Tier, Downstream and Related Entities
FEHB	Federal Employees Health Benefits
HCPCS	Health Care Common Procedural Coding System
HMOs	Health Maintenance Organizations (HMOs)
IRB	Internal Review Boards
MD	Medical Doctor
NHS	National Health Service
OTC	Over-the-Counter
PA	Physician Assistant or Prior Authorization
PBM(s)	Pharmacy Benefit Manager(s)
RPh	Registered Pharmacist
RPS	Royal Pharmaceutical Society
SPSS	Statistical Package for Social Sciences
U.K.	United Kingdom
U.S.	United States

CHAPTER 1 : INTRODUCTION

1.1 Research Purpose and Aims

Pharmacists make countless decisions a day about what drugs to fill, when to fill them, and whether or not other health care professionals should be consulted prior to filling prescriptions. There are often competing stakeholders in these decisions: Should a prescription be filled without a physician's order to benefit the health of a patient? Should an order be changed that is written incorrectly? Should a prescription be filled that is morally offensive to the pharmacist? Some of these decisions result in illegal acts by a pharmacist.

The problem to be addressed by this study is to examine pharmacists' decision-making. Pharmacists are in the precarious but powerful position of being the medication gatekeeper between the prescriber and the patient (Chiarello, 2013). Pharmacists are often overlooked and understudied decision-makers in the health care ecosystem (Chiarello, 2013). The issue is that there are many ways to resolve moral dilemmas. At first glance, there may be little harm in filling a prescription without a refill. The patient requesting the medication from the pharmacist remains therapeutically compliant without waiting to get a refill order from the physician. The pharmacist benefits from the revenue derived from the medication and reduces the time needed to call the physician and document a refill request. But such a simple illustration undermines the patient–physician relationship. In this thesis, I explore the rationale behind pharmacists' reasons when making pharmacoethical or pharmacomoral decisions, particularly when the decision can lead to crime.

The data collected in a survey of U.S. pharmacists allowed me to assign an ethical typology based on decision-making reasons. By assigning a typology, I could examine whether there was a consistent manner in which pharmacists made decisions and if decision-making

rationales favoured the pharmacists' own character (virtue ethics), the law (deontology), or the outcome-object of the decision (consequentialists). I could also examine whether pharmacists presented a consistent ethical ideology.

Pharmacists are taught above all else to do no harm and to favour patient interest (Gettman & Arneson, 2003, p. 52–53). However, if this patient-centric notion is taken to the extreme, pharmacists would be nothing more than order takers for the public dispensing of whatever drugs are desired by a patient as long as no harm was done. Therefore, it is critical that pharmacists balance the public's desire for medications against what is ethical (legal) and what is moral as defined by society. Veatch et al. (2017) stated, "Pharmacists and other health care professionals often go through the process of determining the correct action in a specific case unconsciously" (p. 19). Unconscious decision-making over-emphasizing the patient and/or expediency without taking overt, conscience consideration of other interests may allow pharmacists to slide down a slippery slope that eventually ends in breaking the law. A better understanding of principled actions could engender more honesty and integrity in the health care system to mitigate unethical behaviour, financial and human losses, and importantly, embolden goodwill for the profession of pharmacy.

Therefore, in this thesis, I examined the rationale of pharmacists' ethical and moral decisions (through survey results) and assigned an ethical decision-making typology to pharmacists' decisions based on classical ethical theory. Pharmacists could be over-educated order takers but undereducated decision makers, leading to their own frustration. Such potential moral distress of filling scores of prescriptions a day, with little time for thoughtfulness, as described by Sporrong et al. (2005), can provide the motivation for unethical behaviour. Throughout this thesis, and in particular, in the words of study respondents to the survey, the

rushed, isolated environment to quickly dispense prescriptions and the financial realities of the pharmacy are discussed as decision motivators.

1.2 Research Question

The purpose of this study was to address this question: to what extent are U.S. pharmacists willing to fill ambiguous prescriptions or not fill prescriptions that are legal but may be morally offensive to the pharmacist, and what is the rationale behind the decisions? A survey was disseminated to pharmacists that explored this research question by presenting five cases and 21 moral issues. For each of the cases, three questions were asked: how often does this situation occur in your practice, what would you do in the case and what is the reason for your decision. For the moral statements, a Likert scale was used to determine if the respondent strongly agreed, agreed, disagreed or strongly disagreed with the statements involving moral issues. Findings and discussions are presented in Chapter 5.

1.3 Research Motivation and Importance

On June 28, 2018, the U.S. DOJ arrested 601 physicians, nurses, and pharmacists in a $2 billion false billing scheme involving 58 judicial districts (Department of Justice, 2018). The 2018 arrests came after an annual set of similar arrests in 2015, 2016 and 2017, in which 243, 301, and 412 providers were arrested, respectively (Department of Justice, 2015, 2016, 2017). Concerning the 2018 arrests, 162 defendants, including 76 doctors, were charged for their roles in prescribing and distributing opioids and other dangerous narcotics. Providers participated in schemes that involved submitting claims to the government's insurance carriers for services that were either medically unnecessary or that never occurred. FBI Deputy Director David Bowdich stated, "Through investigations across the country, we have seen medical professionals putting

greed above their patients' well-being and trusted doctors fanning the flames of the opioid crisis" (Department of Justice, 2018, para. 8).

In June 2016, CVS Pharmacy Inc. paid $3.5 million and entered into a 3-year compliance agreement with the Drug Enforcement Administration (DEA) that requires CVS to maintain and enhance programs for detecting and preventing diversion of controlled substances. CVS pharmacists in New Hampshire and Massachusetts dispensed 523 forged prescriptions, all for highly addictive opioids (Department of Justice, 2016a).

In 2016, there were 42,000 Americans who died of opioid-related deaths, an overall 18% increase from 2009 to 2016 (Manchikanti et al., 2018). In 2017, 58.5 prescriptions per 100 persons in the United States were written for opioids representing 17.4% of the population with the average person receiving 3.4 prescriptions. The Centers for Disease Control and Prevention (CDC) stated that addiction to opioids occurs within 3 days (Dowell et al., 2016).

Significant arrests involving health care and pharmacy crimes are not limited to national sweeps with hundreds of providers arrested. In fact, the Department of Justice (2018) stated that in a month I randomly selected, September 2018, 28 arrests occurred over a 30-day period, involving 38 providers or entities and $514,749,722 in restitution or alleged amounts of criminal activity.

Perhaps the most egregious act committed by a single pharmacist was by Robert Courtney (Draper, 2003). Facing the prospect of life in prison, Courtney admitted to diluting over 98,000 oncology prescriptions in Kansas City, MO, causing the death of at least one patient. Courtney pleaded guilty to 20 federal counts of diluting Taxol and Gemzar prescriptions (Draper). He also acknowledged that he and his corporation, Courtney Pharmacy Inc., had weakened 72 drugs, conspired to traffic in stolen drugs and caused the filing of false Medicare

claims (Draper, 2003). Courtney stated that from 1992–2001, he diluted 98,000 prescriptions from 400 doctors, which were given to 4,200 patients and included chemotherapy treatments as well as medications for diabetics, AIDS and fertility treatments (Draper, 2003). Courtney owned his own pharmacy and worked totally alone and unsupervised in his 9 x 9-foot sterile compounding room in his pharmacy (Draper, 2003).

Given these headlines, the motivation for this study aimed to reveal a distinct understanding of the judgement used by pharmacists of whether or not to dispense ambiguous or illegally written prescriptions or morally offensive prescriptions. Arguably, some or all of the situations described above could have been mitigated through better decisions made by pharmacists. In the very important role of medication gatekeeper, pharmacists singularly stand between the national drug supply and potential wide sweeping social and health care issues like the opioid crisis. Wright et al. state that the central purpose of the pharmacy profession should be to ensure the safe and effective use of medicines (Wright, et al., 2019). In some cases, this means not dispensing medication (Wright, et al., 2019). Yet, this conflicts with the primary role of pharmacists which is to dispense medication. Further, as discussed in Chapter Two, financial pressures and role conflict issues arise when pharmacists are not paid if medication is not dispensed.

The importance of this study is to determine the extent and rationale of pharmacists' willingness to dispense medication that could be harmful to patients or that can abuse the physician-patient relationship. By doing so, a better understanding of pharmacists' decision-making can help avoid situations like a national opioid addiction, death or financial loss of pharmacy corporations from fines and/or restitution.

1.4 Research Methodology

The current study used a mixed-method approach to data collection, namely a questionnaire including both qualitative and quantitative questions which was disseminated to working pharmacists from January to February 2019. Details regarding this study's methodology are discussed in Chapter 4. A survey was selected because it enabled access to working pharmacists and the ability to easily gather information from pharmacists from a variety of work settings, such as retail, hospital and managed care pharmacists. More importantly, a survey met the objectives of the epistemological and ontological considerations based on the research question, as discussed below.

Deans at Colleges of Pharmacy were recruited to disseminate the survey because these Deans had access to a reasonably accurate mailing list of emails of pharmacists kept for alumni fundraising activities and news, found nowhere else. Surveys such as the one used in this study were also used in prior similar research (Deans, 2007; Rabi et al., 2006; Ip, 2016).

A mixed methods approach is one in which the researcher uses both quantitative and qualitative methods (Creswell, 2002, p. 14). In this case, data were collected using an established survey instrument that yielded statistical data that were then analysed. The rationale behind respondents' views and actions in the given scenarios and open-ended queries into the rationale of respondents' actions were purely qualitative. Using both qualitative and quantitative methods in a single research study is an embedded mix-methods design (Creswell, 2002, p. 16). This mixed methods approach is ideally suited for a pragmatic worldview (Creswell, 2002, p. 19).

Ethical approvals were sought and obtained from the University of Portsmouth before data collection. More details about ethical issues and how the current study addressed these issues are available in Section 4.6.

Interviews were not selected as a researcher method. The questionnaire allowed to collection of data from a relatively large sample which would not have been possible in the case of an interview. In addition to the impractically of national based face-to-face interviews, the mixed method design of the survey provided both quantitative data that could be analysed objectively and qualitative data analysis through open-ended questions. As Creswell writes, "instrument data may be augmented with open-ended observations, or census data may be followed by in-depth exploratory interviews. In this case of mixing methods, the researcher makes inferences across both the quantitative and qualitative databases (20002, p. 17)." I wanted to be able to tabulate the findings to a population (in this case, pharmacists) as well as develop a detailed view into the meaning of a phenomenon or concept (i.e., how decisions were made). The survey instrument provided these dual datasets, whilst being a practical way to collect data.

1.5 Theoretical Lens

It is important in research to confirm or debunk theories, in this case, concerning ethical and moral decision-making (Oden, 2021). To do so, pharmacist decision-making theory, ethical theory and criminal justice theory underpin this study. Details regarding these theories can be found in Chapter 2. Decision-making theory focuses on *how* ethical decisions are made and is rooted in biomedical ethical decision-making theory. Ethical theory focuses on the values of decision-making for the decision-maker, essentially, given a tough decision, should the needs of the decision-maker or the object of the decision prevail. The last set of theories are rooted in criminological theory attempts to explain *why* pharmacists make the decision they do and in particular the decisions in the survey to the case studies. All of these theories are pertinent to answering research question. Biomedical decision-making and ethical theory address the *how* part of the research question: pharmacists' willingness to fill ambiguous prescriptions or not fill

prescriptions that are legal but may be morally distressing. Criminal justice theory explains the *why* or rationale and/or means for the decision.

There are three major ideologies of ethical decision-making: Virtue theory, Deontological theory and Utilitarian/Consequentialism (Ashcroft et al., 2007, p. 44). However, these theories often conflict. To act legally (deontologically), may not be to act in the best interest of the object of the decision (consequentialism) (Schwartz, 2016). Biomedical theory incorporates the principles of beneficence, nonmaleficence, autonomy and justice (Ashcroft et al., 2007, p. 43). In order to sort out these ethical theories in the practicality of day-to-day pharmacy practice, Veatch et al. (2017, p. 15) suggests a Level of Ethical Analysis, followed by a Model for Ethical Problem Solving (Veatch et al., 2017, p. 20). Both of these Analysis and Models are discussed in Chapter 2.

Criminological theory, specifically the general strain theory, explains why pharmacists may act illegally. Pharmacists rationalise acting illegally because the profession involves strains (unmet goals) that are perceived as unjust. These unjust and unmet goals are the tensions produced by the gatekeeper role (doing the right thing like calling a prescriber if prescription directions need to be altered) and the patient-benevolent role of taking care of the patient in an expedient manner. Criminological theory in discussed in Chapter 2.

1.6 Significance of the Study

This research is significant because it addresses an understudied player in the health care ecosystem (Wright, et al., 2019), the pharmacist, and uncovers how poor or even illegal decisions by pharmacists can lead to disastrous results, such as a large-scale opioid epidemic or national drug busts by the Department of Justice. Less dramatic, even extending a refill that has not be authorised by prescriber, or filling out of scope, can undermine the patient-physician

relationship. Further, not filling medication can lead to patient distress such as the Rachel Peterson case (CBS KMOV4, 2018), discussed in Chapter 2. Such moral distress by patients demeans the pharmacy profession as discussed by Deans (Deans, 2007). Additional research gaps filled by this study include that this is one of the only research studies aimed at working pharmacists in the U.S. and the significance of ethical and moral decision-making tied to criminological theory. In essence, a major contribution of this research is confirmation of pharmacists' decision-making theories, that is, respondents used a process that confirmed putting the patient's needs first as well as confirming the general strain theory and other social learning theories are used as motivations for committing crime or filling prescriptions illegally.

A second significant finding is that this study shows little consideration for regulatory agencies or chain pharmacy controls or education/training compared to what pharmacists perceive as their own professional judgement as a decision-making reason. As is discussed in Chapter 5, corporate rules accounted for 2.6% (n=46) of the 1,775 decisions made by survey respondents. In essence, while rules and regulatory agencies attempt to correct potentially bad decisions, these rules and regulations had little influence on pharmacists' decision-making.

Academically, little research in the area of pharmacists' decision-making has been performed in the U.S., little tied to criminological theory or reflective of consistency among pharmacists. This study enhances academic research in these three areas.

1.7 Researcher Background and Professional Development

My background is that professionally I am an Accredited Health Care Fraud Investigator, a Licensed Private Detective and Certified Pharmacy Technician with over 40 years' experience and have national recognition as an expert in health care fraud cases. My expertise has been

pivotal in cases as diverse as security fraud, health care fraud and commerce law versus ERISA law relating to state's rights in the regulation of pharmacy benefit managers (PBMs).

As part of my journey in professional development, I have attended conferences during the course of obtaining this degree, such as the Certified Fraud Examiners of Greater Chicago annual training conference in 2019 and the 9th Counter Fraud and Forensic Accounting Conference hosted by the University of Portsmouth in June 2019. I have presented to the American Society of Criminologists the findings regarding this study in 2018 and 2019. These academic presentation opportunities afforded me new research and presentation skills, as well as providing others knowledge that can be applied in practice.

1.8 Summary and Remaining Thesis Structure

In the Introduction of this thesis, I have briefly discussed the research question and methodology, as well as the importance and significance of this study and identified the theoretical underpinnings of the study. Chapter 2 provides background information and is organised into three major sections. The first section discusses pharmacists' ethical decision-making, the second section discusses ethical theory generally and the last section provides background as to the role of the pharmacist in the health care ecosystem. Chapter 3 provides a critical analysis of academic literature relative to this study while also providing context for the study findings. Key prior research is discussed in Chapter 3, including the significance of these studies and academic projects as well as the gaps of prior works and how this study fills those gaps. Chapter 4 discusses and justifies the methodology for the study. Chapter 5 discusses the five cases' results and findings as well as 21 moral statements in detail. Chapter 6 provides conclusions and implications of the study. In Chapter 6, observations regarding the study results

are used to illustrate the research contribution of applying decision-making, ethical and criminal justice theory to the practical problems surrounding pharmacists' decision-making.

CHAPTER 2 : BACKGROUND

2.1 Overview and Purpose

This chapter chronicles the developing theories surrounding pharmacy ethical decision-making through various models and theoretical concepts of ethical and criminological theory, as well as providing information relative to the U.S. health care system and the role of pharmacists. This chapter is organized in three main sections: a) pharmacist ethical decision-making theories, b) ethics, biomedical and criminological theories and c) a brief understanding of the U.S. health care system. These three main categories describe the theories which are the theoretical support (underpinnings) of this research. In Chapter 5, findings are discussed which provide confirmation of (implications of) these theories. This chapter also provides background of the U.S. health care system, specifically, how pharmacists make decisions, and the rationale in the context of their working environment.

Ethical theory categories allowed the reasons selected by survey respondents to be categorised into and assignment of ethical typologies to survey respondents' answers, realising that each survey respondent can be a different ethical type based on the case presented. By assigning a typology to decisions, it was possible to evaluate if pharmacists generally favour patients (a utilitarian/consequentialism approach), the law (deontological) or their own internal moral compass (virtue).

Overlaying the theoretical concepts is a discussion of the important role in the health care ecosystem that pharmacists play and the tension between this powerful role with few controls, and conflicting financial motivators facing pharmacists. The role of pharmacists in the U.S. health care system, particularly since this thesis is U.K.-based, provides a basis of understanding

how U.S. pharmacists, through the public-private funding systems, are paid and may be more motivated to contemplate unethical behaviour.

2.2 Pharmacists' Decision-Making Theories

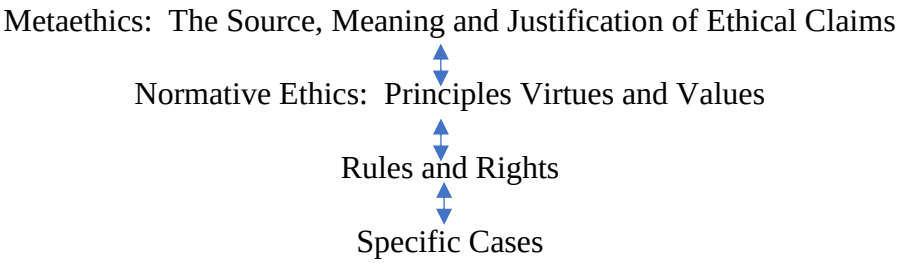
There are many normative models for resolving ethical problems in health science literature, but all require critical thinking and should result in a choice that is morally justifiable (Veatch et al., p. 19). I have used, as an ethical underpinning of this study, Veatch's model, supplemented by Wright et al. (2019). Wright et al. (2019) supplements Veatch's model and introduces the important gatekeeper role of pharmacists.

As McLean (2007) stated, "the relationship between ethics and law is complex . . . they do not equate to or inform each other, but in some cases, the impact of moral values on the law is clear" (p. 165). The law cannot possibly proscribe all various combinations of the ethical encounters of humans; therefore, professionals are left with grey areas in which theoretical frameworks of decision-making must be employed.

Robert Veatch is a leading and contemporary biomedical ethicist involved in pharmacy practice. The textbook authored by Veatch, along with co-authors Amy Haddad and E.J. Last, *Case Studies in Pharmacy Ethics*, (Veatch, et al., 2017) is used in Colleges of Pharmacy throughout the United States. It is Veatch's ethical framework that is used to warrant this study's decision-making model and its methodology as well as providing theoretical underpinnings. This framework can be graphically displayed thusly:

Figure 2.1

Veatch's Level of Ethical Analysis



This ethical framework can be used by pharmacists to evaluate ethical concerns. Metaethics refers to the identification of an ethical concern (Veatch, et al., 2017, p. 9). This is an important concept discussed in context with ethical passivity. If pharmacists cannot acknowledge an ethical concern, are ethically passive, it would then be difficult to parse out how to resolve the ethical conflict. Normative ethics refers to the ethical theory that should apply: virtue, deontological or consequentialist ethical theory (discussed below). Next, "rules and rights" refer to the "rules-situation" debate (Veatch, et al., 2017, p. 12). At one extreme is the rigorist who insists that rules never be violated. At the other end is the antinomian who claim rules never apply because every situation is unique. Veatch then posits that given the background of an ethical concern, normative ethics theory and the rules-situation debate, an ethical decision can take place regarding a specific case and fact-based circumstances (Veatch, et al., 2017, p. 12). It is this theoretical framework that underpins the research of this study presenting cases to pharmacists who must then decide to dispense (or not) ambiguous prescriptions or agree/disagree to key moral oriented statements.

Veatch then suggests a practical framework to incorporate the ethical analysis into action steps. This model of ethical problem solving has five steps (Veatch, et al., 2017, p. 20):

1. "Respond to the sense or feeling that something is wrong.
2. Gather information/make an assessment.

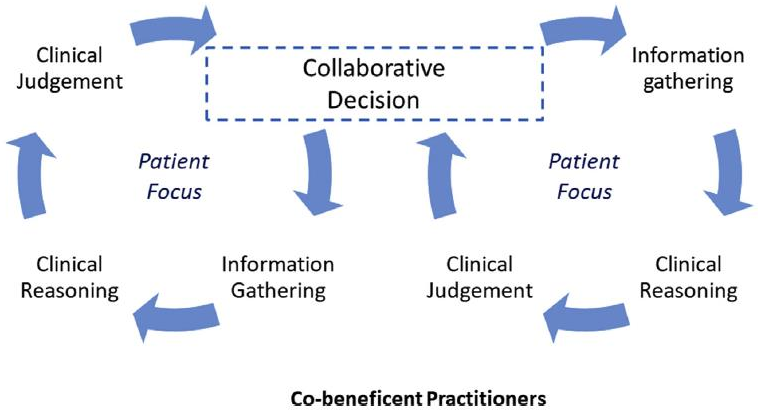
3. Identify the ethical problem/consider a moral diagnosis.
4. Seek a resolution.
5. Work with others to determine a course of action."

Veatch proposes that this five-step model provides the structure for decision-making process and that they are linear, that is, that they should be carried out in the order presented. Veatch suggests that additional steps could be taken and elaboration could be included within each step, but the basic framework is sufficient to focus moral judgments and simple enough to recall and apply in actual clinical practice (Veatch, et al., 2017, p. 20). The remainder of Veatch et al., textbook then explores various cases and assigns this five-step model as a framework for ethical decision-making. I applied Veatch's model to this study, that is, the presentation of cases or moral situations in which pharmacists could then parse out and arrive at a dispensing decision.

Wright et al. (2019) elaborates on Veatch's model by establishing a more modern and complex framework to parse out the issues in an ethical decision looking specifically at the role conflict of pharmacists: the role as a medication gatekeeper versus patient satisfaction. Wright's model is depicted, as follows:

Figure 2.2

Wright's Co-beneficent Practitioners' Model



In this model, pharmacists are encouraged to gather information, apply clinical reasoning and clinical judgement from a co-beneficent practitioners' model. The co-beneficent practitioners' model refers to the dual role pharmacists play: a beneficent model, which is patient centred to "do good" by providing the medication ordered by a physician and *at the same time*, the role as a gatekeeper of medication (a non-maleficent practitioner or do not harm) which might involve calling a prescriber to confirm/change therapy directions or denying to fill the prescription, referred to as de-prescribing (Wright et al., 2019). This gatekeeper/benefactor model is what creates tension in the mind of the pharmacist when deciding to dispense or not an invalid prescription.

2.3 What Is Pharmacoethics and Pharmacomoral Decision-Making?

As I use the term throughout this thesis, "pharmacoethics" and "pharmacomoral" decision-making require definitions. Many academics tend to use "ethical" and "moral" interchangeably, when referring to dilemmas such as Rest and Narvaez (1994, p. x). However, academics such as Banks (2013, p. 5) also bifurcated these terms. Like Banks, I am drawing a clear distinction. Banks described normative ethics as a code of rules that a given society at a given time agree upon or ethical relativism. Ethical absolutism are rules that apply across cultures and times. Murder is a crime in any culture and in any time and exemplifies ethical absolutism. The right to vote is a law or right that was only granted to U.S. women in 1920 and is an example of ethical relativism.

Banks (2013) argued that laws or ethics and morality are two different things: "Laws do not and are not intended to, incorporate ethical principles or values, but sometimes ethical standards will be reflected in laws" (p. 10). One may be personally and morally offended by abortion, but on a cultural basis, abortion in the United States is legal and ethical.

Gettman and Arneson (2003) defined the entire process of pharmacists making ethical decisions as "pharmacoethics" (p. 49–59). Gettman and Arneson, like Banks (2013), drew a distinction between ethical and moral decision-making. Citing an example of a professor's failing to meet with a student to review an exam because his wife fell ill, Gettman and Arneson stated, "The professor has an ethical responsibility to meet with the student because of his previous promise, but has a moral responsibility to care for his wife" (p. 51).

As it pertains to the practice of pharmacy, in this thesis I use the term **"**pharmacoethics" as the framework of a decision by a pharmacist to dispense medication, even if dispensing the medication is illegal. Pharmacoethical decision-making is when a pharmacist has to decide that the risk of dispensing a medication illegally outweighs the licensed sanction (or arrest) that might result from dispensing a medication or not dispensing the medication as written by the prescriber.

Pharmacomoral decision-making, or pharmacomorality, is a different process closely related to individual relativism (Banks, 2013, p. 6) and a term becoming more common in the U.S. literature. Deans (2007) referred to this type of decision-making extensively in her thesis and published works as "decisions around the conscientious clause" (p. 254). The conscientious clause allows pharmacists not to dispense a medication because the medication's use is morally offensive to the pharmacist rather than the need of the patient and approval through the prescribing process of the physician. Cooper (2006) also noted the tension between ethics (what is legal) and the pharmacist's own morality, attributing to what he terms as "ethical passivity":

> "The sale of emergency hormonal contraception (EHC) was especially problematic for such pharmacists, and it was religion that underpinned their decisions not to sell such medicines and led to their belief that it was a form of abortion. (p. 161)"

In the United States, the conscience provisions contained in 42 U.S.C. § 300a-7 et seq., collectively known as the "Church Amendments" (named after Senator Frank Church and not related to religion) were enacted in the 1970s to protect the conscience rights of individuals and entities that object to performing or assisting in the performance of abortion or sterilization procedures if doing so would be contrary to the provider's religious beliefs or moral convictions (Health and Human Services, 2018). On President George W. Bush's last day in office, Bush expanded the rule (The Rights of Conscience Act, 2011) to include virtually anything in health care that might present a moral dilemma, such as birth control, stem cell therapy, HIV/AIDs treatment, and end-of-life wishes for the terminally ill (Federal Register, 2018). Health Care Reform replaced that law in 2011 and reduced the Conscience Law to just abortion rights. Since then, further expansion of the Conscience Clause settled in the courts has allowed closely held private employers not to cover oral contraceptives (which was a requirement of the Affordable Care Act or ACA) known as the "Hobby Lobby case" (in which the closely held, large private company refused to cover oral contraceptives). In addition, insurance companies are now allowed to refuse to cover transgender persons based on religious beliefs (Franciscan Alliance v Sylvia Burwell, Northern District of Texas).

Pharmacomorality, therefore, is decision-making by the pharmacist not to dispense medication or to alter a medication order because it is offensive to the pharmacist on their moral grounds although the medication is legal and ethical to dispense.

Recently, this controversial position was covered in the media when a woman carrying a two-month-old foetus with abnormalities that would end in a miscarriage was offered the option by her physician of medication that would induce an abortion or a surgical abortion. The woman chose the former option but was refused the medication at a Walgreens pharmacy (Porter, 2018).

The Walgreens pharmacists not only refused to dispense the prescription but did not allow anyone else in the pharmacy to dispense the medication, contrary to Walgreens' policies. In this case, the pharmacist's morality was pitted against the patient's right to have medication that is lawful and legal. Stated the patient, "I left Walgreens in tears, ashamed and feeling humiliated by a man who knows nothing of my struggles but feels it is his right to deny medication prescribed to me by my doctor" (Porter, 2018, para. 4). The obvious moral dilemma presented is whose morals pervade: that of the pharmacist or the patient and her physician?

A second case, involving a patient in Michigan, was taken up in a legal battle involving the American Civil Liberties Union (ACLU Michigan, 2018). In this case, Rachel Peterson, while on vacation in Ionia, MI, had her physician call in a prescription for Misoprostol, also known by the brand name Cytotec, which is often used to treat miscarriages (CBS KMOV4, 2018). The pharmacist, Richard Kalkman (ACLU Michigan), called Ms. Peterson and told her "he could not in good conscience fill this medication because he was a good Catholic male and could not support an abortion". After she explained the drug was prescribed legally and used to avoid infection, he also refused to allow anyone else at the pharmacy dispense the medication or allow the prescription to be transferred to another pharmacy (ACLU Michigan). Upon returning home, Ms. Peterson had the prescription filled in her regular pharmacy (ACLU Michigan). The ACLU's goal was to mandate that pharmacists must have a second pharmacist available and fill all valid prescription orders without having to transfer the prescription. Kalkman no longer works for Meijer's Pharmacy (Shamus, 2018). In March 2019, Peterson and Meijer's Pharmacy reached a decision whereby Meijer's changed its policy that if a pharmacist has a religious objection to filling a prescription, a second pharmacist will take over and immediately fill the prescription. If a second pharmacist is not available, the prescription will be transferred to

another pharmacy and filled in another Meijer's Pharmacy and delivered to the pharmacy within 30 minutes to 2 hours, and the patient will not be made aware of the objection so that there is no shaming involved. All Meijer's pharmacists were also to receive training regarding the new policies (Chicklas, 2019).

Last, the State of California introduced Senate Bill 24, known as the Public University Student Health Centers: Abortion by Medication Techniques (Fink, 2019). This bill, signed into law in October 2019, now requires all 34 University of California Medical Centers to stock and dispense drugs for medication-assisted abortions and provides funding for additional resources and education for providers (Seipel, 2019).

2.4. The Role of Applied Ethics Theory

In this subsection, I detail the role of applied ethical theory as it applies to ethical decision-making. In ethical decision-making, pharmacists decide whose morals prevail: the pharmacist (virtue ethics), the law/corporate rules (deontology) or the patient (consequentialism).

Banks (2013) wrote that a knowledge of ethics enables a professional person to question and analyse assumptions that are typically not questioned in business (p. 3). Banks further stated that the study of ethics enables the development of tools that enhance ethical decision-making, helps professionals quickly recognize the ethical consequences of various acts and the moral principles involved, and increases sensitivity to the issues of right and wrong.

Certainly, the job of dispensing prescriptions is complex, with many stakeholders to manage: patient care, corporate responsibilities, financial gain, managed care rules, and the pharmacist's own sense of right and wrong. It is oftentimes not a simple task of dispensing what is or is not written on a prescription order, as can be observed from the theoretical models above.

Ethical theory can be broken down into three disciplines: metaethics, normative ethics, and practical ethics (LaFollete & Persson, 2013, p. 19). Metaethics concerns itself with moral epistemology, that is, the nature and status of ethics and our knowledge of moral matters. Metaethics is the philosophical aspects of what we know is right and wrong and why certain aspects of what we say has moral values and others of our speech do not. Normative ethics concerns itself with the major philosophical theories in which moral and ethical decisions are made and how we distinguish right from wrong and good from bad. Practical or applied ethics is the study of how decisions are made, in essence, how normative ethical theory is applied to everyday life.

2.4.1 Virtue Ethics

If not for medical ethical decision-making, there might not be the study of ethics at all. Aristotle, considered one of the greatest intellects on ethical decision-making, observed his father, Nicomachus, who was the physician to the Greek King, Amyntas III, no doubt making decisions about life and death in the King's court. Because of his father's position in court, Aristotle formed an early association with the ruling elite. Aristotle, who formed his own academy, Lyceum, after studying with Plato, was concerned with virtues and argued that a "good man" with virtues would make good decisions. His "virtues," delineated in detail in *The Nicomachean Ethics,* reflect the times he lived in, virtues perhaps ascribed to the ruling elite, male dominated society of Greece in the late 300 B.C.E. Aristotle stated:

> "Goodness is simple, badness manifold. Virtue then is a settled disposition of the mind determining the choice of actions and emotions, consisting essentially in the observance of the mean relative to us, this being determined by principle, that is, as a prudent man would determine it." (Aristole, 1996, p. 41)

While the term "prudent man rule" is evident in law today and used to describe fiduciary responsibilities, Aristotle's notion that by simply having virtues one would and could make good decisions seems archaic. Take the abovementioned Robert Courtney case. He was an otherwise law-abiding, church-going, outstanding member of society until he diluted 98,000 prescriptions, killing at least one patient (Draper, 2003). Certainly, Courtney could be considered "virtuous" but for his 98,000 acts of unvirtuous behaviour. This acknowledges that a given person can be many ethical types depending on the situation presented and as discussed in Chapter 5.

Virtues such as honesty and integrity are part of the code of ethics for pharmacists. Buerki and Vottero (2002) wrote, "while pharmacists have displayed a wide ranges of virtues in their practice, most of these virtues can be discussed under three broad categories: *fair-dealing and equity, patient-centred services, and faithfulness* [italics original]" (p. 37–38). Modern virtue ethicists, such as Rosalind Hursthouse, argued that virtuous qualities are displayed over a lifetime and that one virtuous person can make a decision about a moral dilemma one way and another a different way and neither are wrong. She stated that this is not a moral dilemma "coin toss" but rather than each virtuous agent has their own set of virtuous reasons (e.g. justice, honesty, compassion, kindness, loyalty, wisdom) for acting the way they did (Shafer-Landau, 2013). Hursthouse argued that acting virtuously, that is, acting in accordance with reason, is acting in the way characteristic of the nature of human beings and this will lead to Eudaimonia (human flourishing or happiness).

2.4.2 Deontological Theory

Immanuel Kant is the father of deontological theory with the major tenet that there are categorical imperatives or maxims (incorporating both principle and motive) that must be obeyed (Banks, 2013, p. 264). The Golden Rule, "Do unto others as you would want to be done unto," is

an example of deontological theory. The Ten Commandments is another: do not lie, steal, or murder, respect your parents, and so on. These "categorical imperatives" are generally common across societies and individual differences (Banks, 2013). In typical Kantian moral theory, strict moral dilemmas are conceptually impossible. If action A conflicts with action B, then the solution is to go back and think through why there is this conflict in performing one or the other duty. Kant believed in the strict adherence of duty; that is, obligation performed in a rational manner regardless of the consequences of the actions (Banks).

Of course, one "right" may conflict with another "right". You might lie to a spouse that the outfit they are wearing is attractive to avoid hurting their feelings. Robert Nozick wrote, "we each sometimes choose to undergo some pain or sacrifice for a greater benefit or to avoid a greater harm" (cited in Shafer-Landau, 2013, p. 523). In other words, killing one person to justify keeping many more alive still is a deontological concept taking into consideration these side constraints.

Kant and subsequent deontological philosophers relied on an important concept that we should respect other people because they are rational human beings with dignity, and we should not treat them as a means to an end but as an end in themselves. In doing so, we promote the worth and dignity of others. Phillipa Foot deals with the conflicting nature on this "means as an end" (as cited in Shafer-Landau, 2013, p. 536–542). If during labour, a surgery is required of the mother to save her life but results in death to the child, how is that or should that be resolved? Foot stated, "Here the doctrine of the double effect has been invoked to show that we may not intervene, since the child's death would be directly intended while the mother's death would not (Foot in Shafer-Landau, p. 542)".

2.4.3 Utilitarianism or Consequentialism

An alternative theory to deontology is utilitarianism or consequentialism theory. Under this theory, an act is right if its consequences are at least as good as those of any alternative. Therefore, unlike deontology, consequentialism holds that acts are right or wrong based on the goodness or badness of their actual consequences (Frey, 2007). A consequentialist goal is to maximise human welfare and happiness. An act consequentialist would argue that each act should be taken on its own merits, a case-by-case decision-making process. The "principle of utility" requires that we act so as to produce the maximum amount of goodness or happiness for all involved, almost as in a mathematical calculation tabulating the happiness of all parties. Rule consequentialists argue that rules can govern decisions, and those rules maximising the greatest happiness are better than rules that minimise happiness. In some cases, rule consequentialists blend deontological thinking (Banks, 2013). A rule consequentialist would argue that speaking the truth is good (as would a deontologist), even though it might cause short term pain (as in a spouse answering the question: "How do I look in this dress?") but in the long term has the maximum benefit ("Thank you for telling me the dress was too tight, even though it hurt my feelings, because I was not embarrassed at the party").

2.4.4 Subtheories to Classic Ethical Theories

There are entire libraries filled with books on ethical theory, and it was not the intent to recite them herein but to familiarise the reader with three major ethical theory perspectives. Each of these major theories has subtheories; for example, consequentialist theory also has a subset theory of no consequentialism in which there are other third party factions beyond those directly involved in the decision that must be taken into consideration (Kamm, 2013). Classic theories such as stoicism, ethical egoism, and hedonism have very little following today in a more just

and inclusive ethical decision-making philosophical perspective (Banks, 2013). For the purposes of this thesis, the three major classical theories are most relevant and these theories are attached to the decisions of survey respondents to make an ethical typology of pharmacists' ethical decision-making. Table 1 depicts these theories and draws comparisons and contrasts. Note that individual pharmacists may decide one case as one ethical type and another case as another ethical type. Teagarden (2003) states that pharmacists can be different ethical typologies at different times based on the ethical problem faced.

Table 1

Comparison and Contrast of Ethical Theories

Moral system	Consequentialism: An action is right if it produces best consequence	Deontology: An action is right if it follows a moral rule	Virtue Ethics: An action is right if it is what a virtuous person would do in the situation
Ethic is based on ...	Ethic of conduct	Ethic of conduct	Ethic of character
Example of a theory	Utilitarianism	Kantianism	Aristotelianism
Question asked	How do I get what is best for society?	What is the rational thing to do?	What is the best kind of person to be?
Right and wrong	The action is right if it results in the best consequence.	The action is right if it fits the moral code, no matter the consequence.	The action is right if it embodies the greatest virtue

2.4.5 Modern Decision-Making Processes: Rawls, Kohlberg, and Gilligan

The above classical theories have evolved into the modern era of ethical decision-making that intertwines newly emerging social scientist theories (e.g., criminological theories, discussed below) that incorporate concepts of justice, fairness, inequality of distribution of goods to favour the disadvantaged, and liberty. These theories shift the emphasis from: "How should I make a decision?" to "How should we make a decision?" Chief among these theorists is John Rawls who sets out in *A Theory of Justice* to work out an ethical theory that represents an alternative to

utilitarianism thought (Banks, 2013). Rawls' theory is based on the liberty principle and the difference principle. The liberty principle encompasses basic civil liberties, such as individual freedom and political recognition. The difference principle adopts equality as a primary goal, with the proviso that distributional decisions should aid, or at least not make worse, the condition of the least advantaged members of society (Matsuda, 1986).

Rawls presented "a veil of ignorance" as a thought experiment, or theoretical condition, in which the inescapability of the self suggests that the veil is only a theoretical not an actionable construct (Banks, 2013). In other words, as nice as it would be to take into consideration liberty and redistribution of wealth, are individuals capable of making decisions that do not benefit themselves (Chugh et al., 2013)? The Rawlsian theory of moral development suggests that indeed we do make decisions that benefit the greater good by being exposed to a positive family experience early in life (Chugh et al., 2013). In Rawls' morality of authority, children learn to make positive decision through exemplifying clear and rational parental decisions. Through the morality of association, children learn morality of how decisions are made that affect themselves, their school and their neighbourhood and which may not benefit them directly (Chugh et al., 2013). Adults, therefore, progress to a morality of principles to gain wider acceptance in society (Chugh et al., 2013).

Lawrence Kohlberg advanced the theory of moral development and exposed gender bias in decision-making (Banks, 2013). Heinz's dilemma has a pharmacist and Heinz pitted against each other over the cost of a prescription drug needed to save Heinz's wife. This dilemma was presented to children in Kohlberg's research and the result was an understanding that girls preferred to "talk and reason" between the pharmacist and Heinz, whereas boys preferred to steal the drug because money was less important than human life (Banks, 2013). Kohlberg then

developed his theory of moral development in which moral reasoning has six stages of development, each more adequate at responding to moral dilemmas than its predecessor, with most people achieving only the fourth of six stages. The six stages are grouped into three moral levels: preconventional (blind and instrumental egotism), conventional (concern over social systems and social relationships), and postconventional (social contracts and universal principles of mutual respect). Further, Kohlberg posited that these stages are universal, sequential and irreversible. These stages are not meant to be a "cookbook" of how to make decisions but rather a method to categorize decision-making into stages. Kohlberg's theories rest on a deontological groundwork, favouring laws (social contracts) over all else.

Critics, such as Carol Gilligan, stated that Kohlberg over-emphasised justice and that the stages of moral development favour boys' more principled, abstract, rules views than feminist theory emphasising caring and personal relationships (Gilligan, 1982). Gilligan (1982) argued that under Kohlberg's moral development stages, women could not achieve beyond the second level because they are focused primarily on caring for others. Gilligan concluded, *"It depends"* [italics original]. Because women are typically more relationship oriented with an interdependence of feelings of empathy and compassion, women are typically situationally oriented. Therefore, in assessing morality, women typically ask if there has been damage to relationships or were people hurt, and these situations and the choice that is adjudicated differ by the parties involved. Gilligan's theory of moral development is a restatement of Kohlberg's as such:

Level One—Orientation to Individual Survival: Decisions are made that only benefit oneself and people transition from selfishness to responsibility as they become responsible for others.

Level Two—Goodness as Self-Sacrifice: Goodness in the form of self-sacrifice is joined with the desire to care for others, and people transition from goodness to truth.

Level Three—Morality of Nonviolence: Moral goodness is seen as caring for others, takes on the ideals of inclusiveness and nonviolence, and condemns exploitation and hurt with morality primarily about caring.

2.4.6 A Transition to Health Care Ethics

Classic ethicists thought about rules versus consequences or a means versus ends/ends versus means test in deciding what is right and wrong. This early thinking has evolved into modern-day ethicists who emphasise concepts such as justice, liberty, respect, and caring in ethical and moral decision-making. The current code of pharmacists' ethics reinforces modern day ethics' thinking. The American Pharmacists Association Code of Ethics (see Appendix A) emphasizes behaviour that is a covenant of trust, caring, compassion, and confidentiality, with the pharmacist acting with honesty, integrity, dignity, and competence, valuing other health care professionals as well as society's needs and in dispensing resources in a distributive justice manner. The code, therefore, reflects a consequentialist perspective with a great deal of Gilligan's caring and relationship-oriented thinking along with Rawlsian distributive justice.

Beauchamp stated that there are four principles associated with health care ethics: respect for autonomy, non-maleficence, beneficence, and justice (discussed in Ashcroft et al., 2007). The principles are hardly arguable and reflect modern-day ethics theory. But moral and ethical dilemmas occur when these principles conflict: how does a pharmacist weigh respect for the patient to chart their own course (autonomy) when telling the patient about a drug's side effects might hamper adherence to the medication regimen (nonmaleficence)? Beauchamp argued when prima facie duties conflict, a method of coherence should be applied to bioethics. In a method of

coherence model, the following are taken into consideration: consistency (avoid contradictions), argumentative support (evidence to support a position), intuitive plausibility (judgement being secure in its own right), compatibility with empirical medical evidence, comprehensiveness (covering the entire moral domain), and simplicity (reducing the number of options). Therefore, if the evidence determines that the benefits of taking the medication outweigh the patient's autonomy, a decision to not tell the patient the medical side effects might be the best outcome.

Cullity (2007) provided a more nuanced approach and said more information would be needed about the patient. Is the patient an adult who has made their wishes known? If so, the moral authority lies with the patient. If the patient lacks competency (either by age or disease state), then the moral authority rests with near relatives. Finally, when consensus cannot be reached, it is recommended that "an institutional and legal structure [is] in place which is likeliest to result in the patient's interest receiving the best protection" (p. 25).

These conflicts between prima facie duties often call professional judgement into play. The Royal Pharmaceutical Society (RPS) described professional judgement as:

> "the use of accumulated knowledge and experience, as well as critical reasoning to make an informed professional decision—often to solve or ameliorate a problem presented by, or in relation to, a patient. . . it takes into account the law, ethical considerations, relevant standards and all other relevant factors related to the surrounding circumstances. (The Royal Pharmaceutical Society, 2016, p. 7)."

The RPS provided a process illustrating the steps of professional judgement: 1) identify the ethical dilemma or professional issue, 2) gather relevant information, 3) identify the possible options, 4) weight the benefits and risks of each option, 5) chose an option, and 6) record the result. The RPS concluded that "two different pharmacists faced with the same facts and

circumstances may determine two different courses of action" (The Royal Pharmaceutical Society, 2016, p. 8).

The gaps among consistent behaviour expected by the public and the law in dispensing commodity-based health care products (drugs), the American Pharmacists Association Code of Ethics (see Appendix A) emphasising patient care above all else (over the law, in some cases), and the ability to take on professional judgement that leads to inconsistency is the critical analysis of this thesis. In a product-based delivery system (such as a drug), not a service-based delivery system (such as providing a diagnosis), given the same facts and circumstances, is it reasonable to except two different outcomes? In the case example involving the patient wanting to fill a prescription for which there is not a valid order, it is not reasonable to expect a pharmacist to do so, even if such action benefits the patient. The RPS's definition of professional judgement allows pharmacists to offer the public an inconsistent product. That then compels the public to shop until they get the desired outcome: medication without valid orders, denial of medications because of the pharmacists' own moral compass, breach of confidentiality, and withholding the truth about medications.

2.5 The Role of Criminological Theory Applied to Pharmacists' Decision-Making

My research question explored the rationale as to why pharmacists make decisions that lead to criminal behaviour. Like most crimes, the perpetrator has the choice: drop the gun or shoot, break into the house or find legitimate means for support, create fabricated invoices to embezzle employer funds, or fill a prescription that is not valid or require the patient and the prescription to be rewritten by the provider. Theory often informs us of the rationale for crimes. Of the following theories, the general strain theory provides the underpinning for this research to address the "rationale" part of the research question. Nonetheless, like ethical theory, it is

important to examine theory evolution and for that reason, several theories are mentioned below to show a series of social learning theory, all contributing in some part with the culmination of the more modern general strain theory. Survey answers regarding job satisfaction provide answers to tie the general strain theory to pharmacists' motivations for illegal behaviour.

2.5.1 The General Strain and Differential Association Theories

The general strain theory is used in this thesis as an underpinning of my research to answer issues regarding the rationale of pharmacists' decision-making. The theory, posit by Robert Agnew in 2000, was not formulated overnight. Rather, criminological theory is developed over time with new scholars adding to knowledge (Cullen, et al., 2014, p. 5). The general strain theory is part of a group of social learning theories that began with the differential association theory which is the basis for white-collar crime theory first formulated by Edwin Sutherland in 1938 and later memorialised in *White Collar Crime* (Sutherland, 1983) by sociologists Gilbert Geis and Colin Goff.

The differential association theory is often referred to as a learning theory because its major premise is that by association with others that are significant in our lives, we learn that crime is acceptable. Further, criminality increases if favourable attitudes towards crime are exposed to definitions (e.g. motives, drives, rationalizations, attitudes) early in life, on a relatively frequent basis, over long periods of time and from sources they like and respect (Sutherland, 1983, p. 240).

Student of Sutherland Donald Cressey developed the three tenets of the theory discussed below. Cressey's theory is now widely adopted by the American Institute of Certified Public Accountants (SAS No. 99; SAS No. 113.). There are three elements of Cressey's theory: motive,

opportunity, and rationalisation (Cressey, 1953, cited in Schuchter & Levi, 2016). Cressey determined that the following three elements were necessary for white-collar crime to occur:

1. A problem that the offender considers to be nonshareable becomes a stimulus for crime if the situation is perceived as a unique possibility to fix a desperate situation. These nonshareable problems include debts, personal failure, business reversals (inflation or recession, physical isolation, status gaining and employee/employer relations (Kassem & Higson, 2012).[1]
2. The individual has to regard their position of trust as an opportunity for committing a crime.
3. Finally, the rationalizations used are relevant and necessary to neutralise the view that the conduct is acceptable.

According to Cressey's theory, crime is more likely to occur when someone has an incentive (pressure) to commit crime, weak controls or oversight provide an opportunity for the person to commit crime, and the person can rationalize the criminal behaviour (attitude).

Classic strain theory posits that crime is caused by strain or failure to achieve positively valued goals (Cullen et al., 2014, p. 170). Robert Merton's classic strain theory holds that individuals are pressured into crime because the legitimate means of attaining societal-valued goals (money, success) are not available (i.e., students of little means will not be able to attend college no matter how smart the student may be because the student will not be able to afford the tuition) (Cullen et al., 2014, p. 170). Robert Agnew's general strain theories, adapted from the classic strain theory, refined the theory to state that people engage in crime because they

[1] Subsequent literature frequently showed a division of this motivational element into pressure and incentive. Even if the problem were communicable and easily soluble, all fraud triangle elements depend solely on the perception of the fraudster.

experience stressors or strains, of which there are three kinds: prevention of goals, removal of positive stimuli or a presentation of negative stimuli, resulting in anger and frustration (Cullen et al., 2014, p. 203–211). Strains may be objective (disliked by all) or subjective (disliked by some) (Cullen et al.). Anger and frustration are increased if there are low constraints, such as peers who are also frustrated and angry over not being able to achieve society's goals (Cullen et al.). Crime likelihood is increased if the strain is seen as high in magnitude, the strain is unjust, individuals have low social control (i.e., bonding with corporate goals in the case of white-collar crime), and criminal activity is a way of coping with the strain (Cullen et al.). Often strains on some people lead to crime because individuals lack the ability to cope with crime in a legal manner, the costs of coping are low, and the individual is disposed to crime (negative emotionality or low constraint) (Cullen et al.).

As part of the school of social control theories, Sykes and Matza developed the techniques of neutralization theory (discussed in Cullen et al., 2014, p. 221). Like Sutherland, Sykes and Matza believed that criminal behaviour is learned. In neutralization theory, crimes are justified and seen as valid and not the legal system or society at large. In this theory, the perpetrator denies responsibility, denies injury to the victim, denies the victim themselves (e.g., "They had it coming".), condemns those who condemn them for the crime, and appeals to higher loyalties. Crimes, then, are really "the other guy's fault," and the perpetrator is a victim. All of these theories explain why a pharmacist would risk their licensure to commit illegal acts. In particular, the general strain theory provides concrete underpinnings in which to explore pharmacist decision-making motivations, using the survey results.

2.6 Theories Underpinning the Research

There are two theories that underpinned this research. The first is the theory concerning how pharmacists make decisions. In this research, I used Veatch's theory that proposes a five-step model that is a linear model. Veatch suggests that additional steps could be taken and elaboration could be included within each step, but the basic framework is sufficient to focus moral judgments and simple enough to recall and apply in actual clinical practice (Veatch, et al., 2017, p. 20).

From a criminological theory perspective, and to better understand the rationale of pharmacists' decision-making, the underpinning of the research is based on the general strain theory. This theory fit well into the environment that pharmacists work, with the rushed effort to dispense as many prescriptions as possible and not enough compensation (see Section 5.16). The theory posits that crime is caused by strain (unmet goals) or failure to achieve positively valued goals (Cullen et al., 2014, p. 170).

2.7 The U.S. Health Care Ecosystem

The U.S. health care system is complex. Keeping 330 million people healthy, as of 2016, cost the U.S. $3.3 trillion (17.9% of GDP), or $10,438 per person; major categories included 32% on hospital care, 20% on physician and clinical services, and 10% on prescription drugs (CMS, 2018). In comparison, the U.K. spent $3,749 per person (Brink, 2017). Cooperation between many health care providers and entities can be required to keep a single person healthy. These entities include hospitals, physicians, nurses, home health care aids, pharmacists and social workers. Pharmacists are the gatekeeper for appropriate medication management (Sinha, 2014). In this chapter subsection, I discuss the U.S. health care system briefly so as to provide background for the discussion in Chapter 5 and to orient non-U.S. readers.

2.7.1 Complex Agencies, Little Centralised Control

Medicare and Medicaid programs cover the elderly and disabled and the indigent, respectively, and are overseen by CMS. Medicaid is funded by a combination of federal funds and state funds and are administered at the state level while overseen at a federal level. Each state may have different programs aimed at a targeted indigent population, such as pregnant mothers and children, children, seniors, or the disabled. “Dual eligibility” refers to people who are covered under both Medicare and Medicaid with Medicare as the primary insurer and Medicaid secondary (Kliethermes, 2017). TRICARE (2019) covers 9.5 million active-duty military as of 2019, and the Veterans Administration (CNN Editorial Research, 2020) covers 18.5 million retired or nonactive duty personnel as of 2018. The Office of Personnel covers 9 million federal employees through a program called the Federal Employees Health Benefits (FEHB; 2004).

There are four levels of Medicare: Part A, Part B, Part C, and Part D. Part A covers hospitalization, and Part B covers outpatient medical and physician charges. Part C is referred to as Medicare Advantage and is the program whereby the government outsources the management of medical and outpatient medical services (essentially the same as Part A and Part B benefits) to plan sponsors (typically insurance companies). CMS pays each plan sponsor a set fee per member per month based on the patient’s health. It is then up to the plan sponsor to manage costs under that amount while still providing, at a minimum, the same level of service and benefits as in Parts A and B. Many Part C plan sponsors have additional benefits to attract members but are not reimbursed for these services by the CMS, such as health club memberships.

Medicare Part D was enacted by the Medicare Modernization Act of 2003 and covers prescription drugs for those over 65. Plan sponsors, generally insurance companies or PBMs,

apply to CMS to become plan sponsors. Once approved, plan sponsors must cover an approved drug list, or formulary, in a certain manner and are paid by the federal government depending on the complexity of patients' illnesses, with some upside or downside risk in what is known as a "risk corridor" (Centers for Medicaid and Medicare Services, 2019).

Benefit programs, referred to as the "commercial" line of business, are funded by one's employer and covers those that are employed and their spouses and children. Benefit programs may be fully insured and so are regulated at the state level through a department of insurance. Self-funded programs, in which the employer bears all of the financial risk, are not regulated by the state but are covered under the U.S. Department of Labor, Employee Benefits Security Administration (EBSA), which is responsible for administering and enforcing the fiduciary, reporting, and disclosure provisions of Title I of the Employee Retirement Income Security Act of 1974 (ERISA). ERISA attempted to alleviate the public's concern about the mismanagement of pension funds. ERISA has been amended many times to meet the changing retirement and health care needs of employees (Department of Labor, 2019). ERISA has four main parts. Title I, administered by the Department of Labor, contains rules around reporting, fiduciary responsibility, funding, and civil enforcement. Title II, administered by the Internal Revenue Service, contains rules regarding tax implications of ERISA. Specifically, corporations get tax benefits by offering benefits to employees. Title III covers jurisdictional matters and the coordination of enforcement and regulatory activities. Title IV covers pension plans.

To summarise, the costs of benefit plans (including the costs of prescription drugs) can be funded through many financial sources. Some of these programs are federal programs; some are state programs or a combination of the two. Other programs are insured and self-insured benefit programs provided by employers. Therefore, there is no single funding mechanism for U.S.

pharmacy revenue, and pharmacists' revenue is derived through a variety of federal, state and private/employer funds administered through PBMs.

2.7.2 Pharmacist Payment Methods

Outside the United States, most pharmacists are paid consistently and fairly through a national health scheme, such as the NHS, and there is a single "plan design". In the United States, each patient presents a personalized set of payment rules through employer- or government-set plan designs (such as copays, deductibles, out-of-pocket limits, covered drugs, quantity limits, and exclusions to coverage). Depending on which coverage a patient may have, the same drug on the same day can result in vastly different payment amounts to the pharmacist. There is little oversight or regulation by different government agencies over transactions based on who pays for the prescriptions; government programs are regulated through CMS under the Department of Health and Human Services, and corporate programs are regulated though the Department of Treasury and the Department of Justice, as detailed below.

Pharmacists may practice in a variety of settings including retail and community pharmacies, hospitals and clinics, and managed care settings, such as insurance companies, PBMs, and health maintenance organizations (HMOs). While each of the settings presents discrete decision-making opportunities, many situations are similar. U.S. pharmacists are paid primarily by PBMs, which are funded by private corporations or state and federal government agencies. Payment is an important concept to the discussion around, as the Deans (2010) and Cooper (2006) stated, whether the practice of pharmacy is actually a profession. Deans concluded that pharmacy is a profession, but based on the U.K. version of the pharmacy profession, citing that altruism over profits justifies pharmacy as a profession. However, U.S.

pharmacists do not directly bill for professional services but rather are reimbursed for the products they sell, and pharmacist take a "margin" between the buying price and selling price.

2.7.3 Pharmacy Benefit Plans Administration

Approximately half of prescription drugs dispensed in the United States are from hospitals, clinics, and other medical settings (i.e. "inpatient drugs"); the remaining half are dispensed outpatient or in retail settings (American Pharmacists Association, 2015). Where a prescription drug is dispensed determines how the prescription drug will be priced and by whom and whether other cognitive services rendered by a pharmacist may be billed.

Pharmacists are one of the few medical providers with an advanced degree not allowed to independently bill for Medicaid and Medicare services directly whether inpatient or outpatient (Kliethermes, 2017). Commercial plans also generally do not allow pharmacy cognitive services to be billed (with the exception of Medication therapy management programs discussed below). Pharmacists may work as auxiliary personnel under an eligible provider who may bill for a pharmacist's services. But the rules around such billing are complicated, and making a "mistake" can lead to charges of health care fraud, even if unintentional (Kliethermes, 2017).

There are two rules that must be followed for pharmacists' services to be billed as auxiliary personnel. The first is that there must be direct supervision of the pharmacist by the billing entity. Therefore, if a physician bills for a pharmacist's services (e.g., while making rounds with patients), the physician must directly supervise that activity. The second criterion is that auxiliary personnel may provide services only to established patients; therefore, a new patient must first have been seen by and Medicare must have received an outpatient visit bill from an eligible provider (Kliethermes, 2017). Essentially, this means that Medicare does not

accept that pharmacists can work without being supervised by a physician or develop an initial patient care protocol.

In a hospital setting, pharmacists are employees of the hospital and get paid a salary. Hospital charges, which can include prescription drugs, are billed under a medical benefit (Part A for hospitals and Part B for physicians) using a set of codes to denote the product and service (Kliethermes, 2017). The Health Care Common Procedural Coding System (HCPCS) has two parts. The first, the Common Procedure Terminology (CPT) code, denotes the service performed. For example, "Medicine" is billed under 90281–99099; 99151–99199; 99500–99607 codes. The CPT code is modified by a Level 2 code to describe the medicine dispensed under a "J" code, followed by four numbers that further describe the actual medicine dispensed. Durable Medical Equipment (DME) is denoted by an "E" code and further described in a four-digit number depicting the actual DME product dispensed. "G" codes describe "temporary procedures and professional services" and are typically used by pharmacists to denote cognitive services (such as counselling patients while making rounds).

All of these codes, with related charges, are submitted to the government or insurance companies for payment on a uniform billing form that can be submitted on paper or electronically. The level of payment for each code/service is determined either by CMS (if the patient is covered by Medicare or Medicaid) or insurance companies based on prenegotiated contracts with the hospital.

In outpatient settings, prescription drugs are obtained through retail pharmacies. For mail order and chain pharmacies, pharmacists are paid a salary by the pharmacy benefit manager (PBM) or chain pharmacy for which the pharmacist works. A pharmacist may choose to go into business for themselves and open their own retail pharmacy. Pharmacists in these settings take

the funds created from the cost to buy prescription drugs from a wholesaler and the cost to sell the prescription drug as determined by the PBM.

Outpatient prescription drug claims are denoted by a series of codes, but these codes are different from those for the inpatient setting. The National Council on Prescription Drug Programs (NCPDP) sets the outpatient drug code standards. NCPDP's Billing Unit Standard helps to ensure consistency in how pharmaceutical products are distributed and billed. Payers and providers use the NCPDP standard for processing claims. Manufacturers determine the standardized billing unit for a product before it is packaged, labelled, and submitted to drug compendia maintained by NCPDP (2019). Each drug with a dose, strength, and package size has a unique 11-digit national drug code (NDC) assigned. As pharmacists or technicians electronically submit a claim to a PBM for payment; the NDC and other patient and drug information are sent electronically, and the PBM sends back a message of approval, denial, or reject code indicating the claim has/has not been paid, the reasons for nonpayment (e.g., the patient is no longer eligible for benefits) and the amount to be paid to the pharmacy.

Medication therapy management programs (MTMs) are unique programs that allow pharmacists to bill for services independently under Medicare Part D and commercial plans, providing there is a formal agreement to do so. Medicare Part D requires MTM programs and commercial plan may opt to develop an MTM program. Pharmacists either working at a PBM or a chain or independent based pharmacist can bill for these services. In an MTM program, claims data are used to target enrolment, and targeted members must have multiple chronic diseases, with three chronic diseases being the maximum number a Part D plan sponsor may require for targeted enrolment and or spends (in 2019) more than $3,967 (Larrick Chavez-Valdez, 2018).

Once enrolled, once a year a pharmacist can develop a comprehensive medical review (CMR). According to CMS, a CMR is a:

> "systematic process of collecting patient-specific information, assessing medication therapies to identify medication-related problems, developing a prioritized list of medication-related problems, and creating a plan to resolve them with the patient, caregiver and/or prescriber". (Larrick Chavez-Valdez, p. 9)

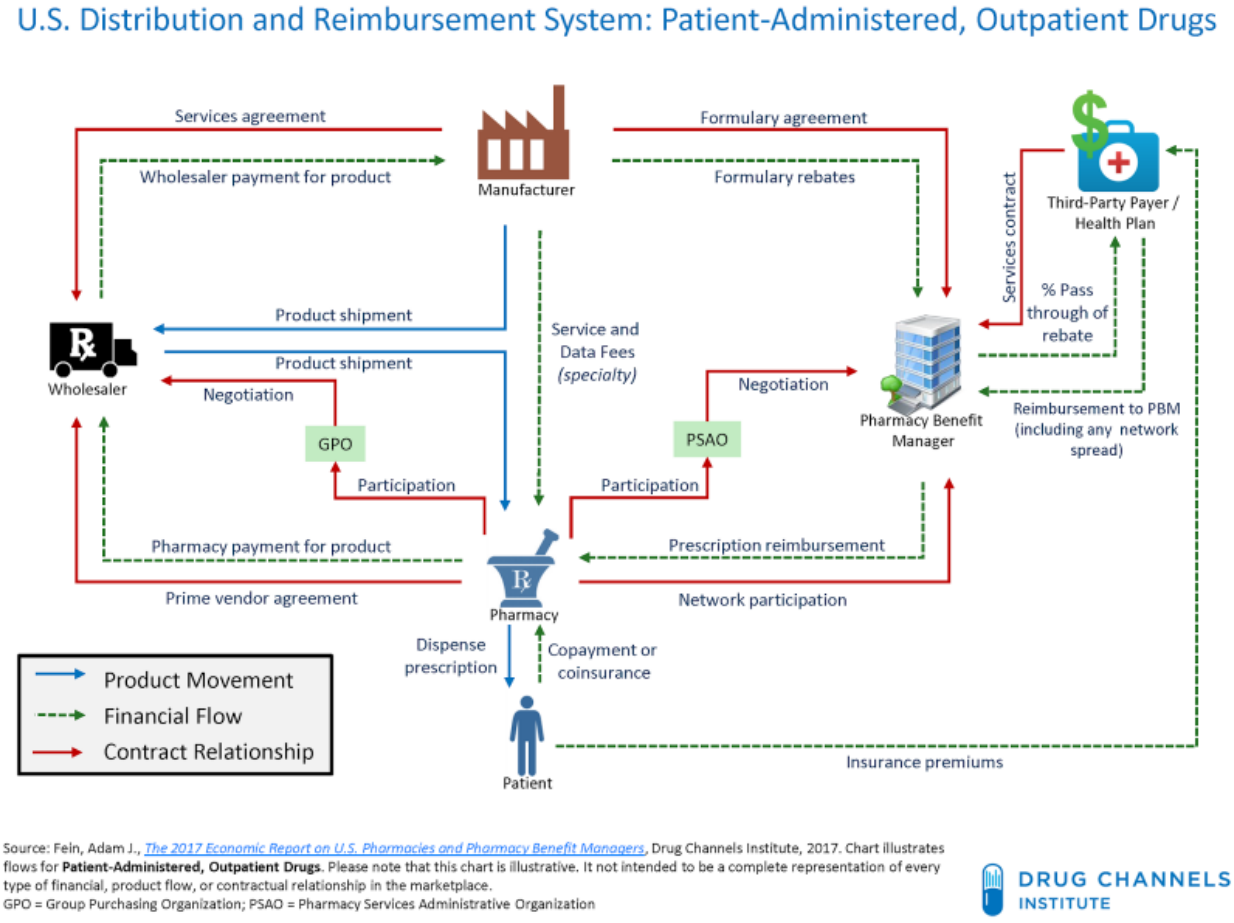
Once developed, the CMR is an interactive person-to-person or telehealth medication review and consultation conducted in real time between the patient or other authorized individual, such as a prescriber or caregiver and the pharmacist or other qualified provider and is designed to improve patients' knowledge of their prescriptions, over-the-counter (OTC) medications, herbal therapies, and dietary supplements as well as to identify and address patients' problems or concerns, and empower patients to self-manage their medications and health conditions (Larrick Chavez-Valdez, 2018). Pharmacists generally make from $30–100 for a single CMR (Wang et al., 2011).

2.7.4 The Role of Pharmacy Benefit Managers (PBMs)

The function of a PBM is to process claims for patients or claim adjudications. Pharmacists electronically transmit information to the PBM, and the PBM's software sets a price for the prescription, as well as checking to ensure the patient is eligible. If the drug is covered, the PBM determines what the patient's cost share portion (copay) should be, and if there is a problem, the PBM transits a message back to the pharmacy indicating what is wrong with the claim. In addition, PBMs contract with U.S. pharmacies (both independent and chain pharmacies) to set overall payment metrics, develop formularies, provide usage reviews, and communicate with plan sponsors, patients, and pharmacies (Desselle et al., 2012, p. 646–647). Fein illustrated the role of the PBM, as shown in Figure 2.3.

Figure 2.3

The Role of the PBM in Pharmacy Benefits

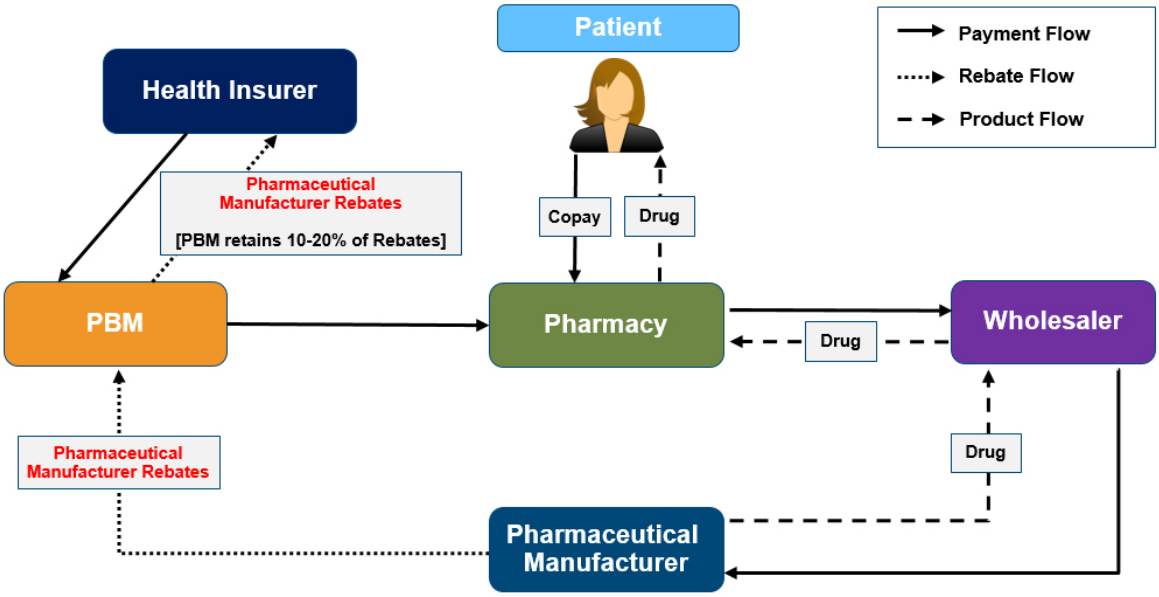


The role of the PBM is controversial because PBMs stand between those that pay for pharmacy benefits (i.e. PBM plan sponsors) and the pharmacists community (Desselle et al., 2012, p. 648). PBMs make money based on the difference (or spread) from what is reimbursed to pharmacies and what is charged to PBM clients, and these are called “traditional” programs. The top three PBMs, which make up 70–75% of the PBM market are OptumRx, CVS/Caremark, and Express Scripts, and they only offer traditional programs; this spread is estimated at $23 billion gross annually for these three PBMs (Yu et al., 2018, para. 6). This spread is not disclosed to

either party; clients do not know what a pharmacy is reimbursed for a given transaction, and pharmacies do not know what clients are charged for the same transaction. Similarly, PBMs stand between drug manufacturers and plan sponsors by which rebate and coupon monies flow from drug manufacturers to the PBM and then to plan sponsors, with PBMs retaining all or some of the relevant money (Roehrig, 2018). Figure 2.4 shows how rebates and coupons are retained by PBMs.

Figure 2.4

How Rebates and Coupons Are Passed to Health Plans and Consumers



Source: Milliman, 2020

The Ohio Department of Medicaid found that in a 1-year period (April 2017–March 2018), Ohio taxpayers paid $224 million in spread pricing to CVS/Caremark and OptumRx, the state's PBMs, or 8.9% of the costs of prescription drugs for Medicaid patients (Yost, 2018). Note that the spread for the State of Ohio Medicaid program of $224 million equalled 10% of the total spread taken by all three PBMs of $224 billion (Yu et al., 2018), which means the total spread amount is underestimated. Just days before the report was released, CVS/Caremark sued to get

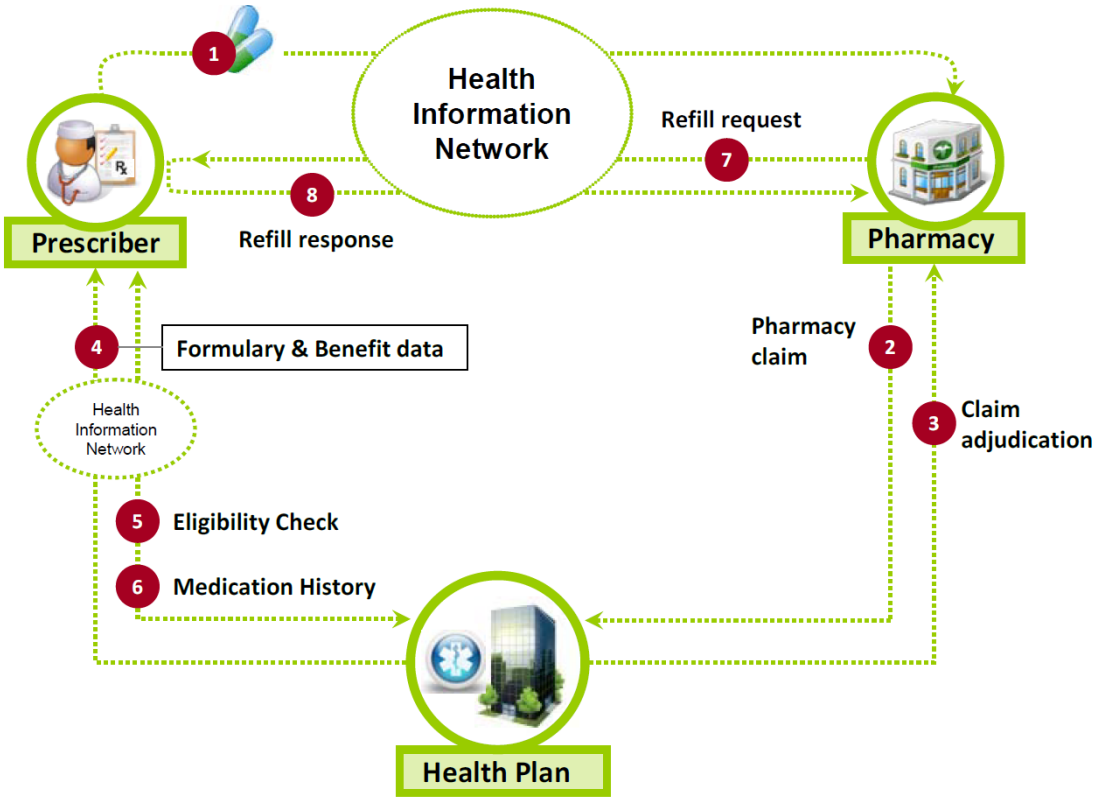
the report redacted, stating that it would be “devastating to its entire business model” (Kasler, 2018). However, CVS/Caremark’s stock took a dip to $63.78 on August 1, 2018 but quickly rose to over $80 a share by October 3, 2018 (New York Stock Exchange, 2019).

PBMs take a spread on all claims, even those inappropriately processed. For example, if a pharmacist submits a claim for which there is no prescription order (i.e., a “phantom claim”), the PBM processes the claim, reimburses the pharmacy, takes the spread on that claim, and “upcharges” the plan sponsor for a claim that never existed and for which no medication was dispensed. In essence, the entity in charge of monitoring claims to ensure that crime is monitored actually profits from crime. This conflict of interest means that there is little or no motivation for PBMs to curb crime and little opportunity for any other entity to detect, investigate, or obtain restitution for pharmacy crime.

Electronic prescription delivery allows physicians to electronically transmit the prescription from the physician’s office to a designated pharmacy selected by the patient. Figure 2.5 shows a diagram of such an e-scripting process.

Figure 2.5

E-Prescribing Flow of Information



(Source: Patel, et al. Rand Corporation, 2011).

E-prescribing provides the ability to send error-free, accurate, and understandable prescriptions electronically from the health care prescriber to the pharmacy. E-prescribing is meant to reduce the risks associated with traditional prescription script writing. According to SureScripts (2020), electronic prescribing reached 20 billion prescriptions e-transmitted in 2019. SureScripts also stated it provided a 26% greater accuracy of prescriptions by correcting faulty information from prescribers in the areas of drug descriptions, structured and codified patient instructions, corrected potency unit code, drug coding, and prescription norms (comparing normative dosing per drug). Many states require e-prescribing for opioids, and New York now requires e-prescribing for all prescriptions. Given the prevalence of e-prescribing, there is less

for pharmacists to review on a prescription order because electronic edits used by SureScripts have corrected many of the errors before the pharmacist even reads the order. For example, if a drug is to be taken once a day and the prescriber writes for one tablet twice a day, SureScripts will alter the order accordingly.

2.7.5 Is Pharmacy a Profession in the United States Health Care System?

Is the role of U.S. pharmacists a professional role? If not, can pharmacists exercise professional judgement in making ethical and moral decisions? The term "profession" is defined by the Cambridge Dictionary as "any type of work that needs special training or a particular skill, often one that is respected because it involved a high level of education." However, the term "professional judgement" applied to pharmacists has specific scope, according to Waterfield (2010) in defining professionalism in pharmacy involves the following traits:

- "Professional authority over the lay person;
- Sanction by the community of the power and privilege of professionals;
- Confidential nature of the professional-client relationship;
- Shared ethical values regulating the profession;
- Theoretical knowledge underlying the practice of the professional; and
- The existence of a professional culture that is passed on to new entrants to the profession (p.2)."

It is hard to argue that a pharmacist does not possess the above traits. However, Waterfield (2010) stated that pharmacy technicians also possess many of the above traits and technicians are not allowed to make "professional judgements". Waterfield furthered the argument around the distinction that pharmacists must have "knowledge (that) is dynamic and can be described as 'problem-solving capability on the move'" (p. 5). That is, pharmacists must

possess knowledge that can be synthesized within their technical knowledge base to a practical application. Waterfield (2010) states that professional judgement as applied to pharmacists is defined as the "complex, varied and integrated expert knowledge that qualifies them, and them alone, to make professional judgements relating to medicines (p. 1). Waterfield (2010) further states:

> "For example, formal knowledge of respiratory disease is of little use when the presenting patient has arthritis and is unable to manipulate her inhaler device without an appropriate practical compliance aid. The use of seemingly simple strategies when linked with formal knowledge is a potent force for improving patient care. . . pharmaceutical knowledge is one of the unique key attributes of the pharmacy profession, and without this being more fully utilized, the status of the profession may be called into question. (p. 4)"

Therefore, while pharmacists possess "theoretical knowledge", how can that knowledge be sufficiently applied in the routine process of dispensing medications? More important, is "theoretical knowledge" applied, along with important stakeholders' perspectives (e.g., the law, PBMs, insurance company/plan sponsor/CMS rules) in making ethical or moral decisions in which "pharmacist judgement" overrules the law?

A significant difference between pharmacists in the U.K. and the United States is the payment source. Pharmacists who own their own pharmacy must be judicious in the patients they serve or risk not making sufficient margins to stay in business (and one could argue chain pharmacies to a much larger extent). The lack of altruism overshadows professionalism (Deans, 2006). Pharmacists who are paid a salary must also abide by the formulary regulations of the institutions that employ them. Given this restriction, is the hospital or chain pharmacist free to

"dispense knowledge," or is the hospital or chain pharmacist bound by the rules of the institution that employs them?

Autonomy is also an important consideration in professionalism. Eraut (1994) described levels of professionalism at the highest level (Level 5) involving "very substantial personal autonomy and often significant responsibility for the work of others" (p. 184). Pharmacists find themselves in an autonomy quandary. Pharmacists often work alone in pharmacies and outside the purview of other medical professionals. However, while pharmacists can make suggestions about alternative treatments for patients, only a nurse or physician assistant (in some limited situations) or physician (ultimately) can legally write or change a prescription for a patient. Except for very limited situations, pharmacists cannot bill autonomously for their services. Therefore, while pharmacists work almost in isolation (with the exception of subordinate pharmacy technicians), they must depend on other medical professionals to approve any recommendations that are proposed. This quandary further questions the role of the pharmacist as a professional.

The idea of how and when professional judgement should be turned off or on is also ambiguous in the pharmacy practice. If the patient refuses counselling but makes the pharmacist aware that they are homeless and the medication requires refrigeration, is the pharmacist obligated to call the prescriber? If the pharmacist reviews a prescription order that is above the maximum daily dose for a given drug, is the pharmacist obligated to call to resolve the order? In *Abrams v. Bute* (NY Slip Op 01627, 2016), the plaintiff sued CVS Pharmacy and the pharmacist because the prescriber, postsurgery, prescribed hydromorphone 8mg. The plaintiff's wife administered the hydromorphone 8mg, and the patient died an hour later. The plaintiff contended the drug was too much for an opioid-naïve patient. CVS contended that pharmacist filled the

drug using the "technical accuracy" rule, meaning the pharmacist has a duty "to ensure that patients receive the correct drug, in the correct dosage, with the correct directions, (Adams v Brute, Section II, para. 16)" as prescribed by their physicians. The court observed that some medical professionals, in particular hospital nurses, may be liable for carrying out a doctor's order when they know that the order is "so clearly contraindicated by the normal practice that ordinary prudence requires inquiry into the correctness of the order (Adams v Brute, Section II, para. 24)". Under *Abrams*, where a pharmacist does not "undertake to exercise any independent professional judgement (Adams v Brute, Section II, para. 21)" in filling a script, they cannot be liable for negligence so long as the patient received the correct drug, in the correct dosage, with the correct directions, as prescribed by the patient's physician. However, where the prescription "was so clearly contraindicated (Adams v Brute, Section II, para. 36)" under the circumstances, the pharmacist is charged with a duty to exercise their professional judgement by taking additional measures before dispensing the medication. *Abrams* "rejects the contention that a pharmacy is no more than a warehouse for drugs and that a pharmacist has no more responsibility than a shipping clerk who must dutifully and unquestionably obey the written orders of omniscient physicians (Adams v Brute, Section II, para. 23)".

Unfortunately, *Abrams* provides little guidance as to when and under what circumstances pharmacists must take these "additional measures", or what those measures consist of. To its credit, the decision recognizes this and the "infinite variety of situations which may arise" making it "impossible to fix definite rules in advance for all conceivable human conduct" (Barclay Damon, 2016, para. 9). Ultimately, the court awarded CVS' motion for summary judgement, stating that there was no obligation to determine if the patient were opioid naïve beyond the records available to the pharmacist in CVS' system and that "it was insufficient to

raise a triable issue of fact as to whether the prescription was so clearly contraindicated that the applicable standard of care required the CVS defendants to confirm that the prescription was not issued in error (Adams v Brute, Section II, para. 42)". Essentially, the court's opinion stated that the dose was not so in excess of a standard dose that the pharmacist did not have to go beyond the records readily available to her to determine if the patient were opioid naïve.

In understanding how pharmacists make pharmacoethical and pharmacomoral decisions, it is important to acknowledge that pharmacists rely on professional judgement to make pharmacoethical and pharmacomoral decisions. Professional judgement relies on the ability to exercise such judgement. Altruism, independence, and the synthesis of knowledge rather than the application of knowledge are all important considerations in addressing if pharmacists are highly paid and overeducated technicians or medical professionals. Professional judgement is also a virtue ethics construct ("If I am good, I make good professional judgements.) rather than a consequentialist leaning ("I make good decisions based on what is good for patients".), or a deontological leaning ("I make good decisions based on the rules".).

2.7.6 The Role of Regulatory Agencies

Pharmacists and pharmacies in the United States are regulated by Boards of Pharmacy. There are 54 Boards of Pharmacy for each U.S. state and major territory with the main purpose of protecting the public (National Boards of Pharmacy, 2020). Each Board drafts regulations about the practice of pharmacy that are then passed into law by the state legislature. These laws are designed to protect the public and determine, for example, what is or is not a valid prescription, rules of how pharmacies should operate, and how prescription drugs are purchased and inventoried. Each of these Boards of Pharmacy has a professional board of regulation that monitors and records licensure for the practice of pharmacists and pharmacy technicians. Even

if a law is not broken, pharmacist licensure can be suspended permanently or temporarily for unethical behaviour. While these agencies play an important role in both determining what is and is not acceptable (legal) and to some extent ethical behaviour by pharmacists, these agencies are reactive, not proactive. For example, the public can register a complaint about a pharmacy provider by going to the Illinois Department of Professional Regulation and reporting a complaint to the Agency. Depending on the validity of the complaint, an investigator may be assigned and if it is believed there is an infraction, the provider will be investigated (Illinois Department of Financial and Professional Regulation webpage, 2020). Subsequently, there will be a hearing before the Board of Pharmacy. However, given the millions of prescriptions dispensed annually, these Boards cannot regulate every prescription dispensed. Therefore, if a pharmacist acts illegally by refilling a prescription without refills, the likelihood of a license infraction is very rare. Only when national headlines ensue does the process retrospectively review the situation. A case in point is the Courtney case, where Courtney diluted prescriptions for over a decade and it was not until a physician-whistle-blower exposed the situation that Courtney was eventually arrested and prosecuted (Draper, 2003). Regulatory agencies then took a "look-back" and suspended Courtney's license.

The cases and moral situations described in the survey are all situations that involve breaking the law. The table below illustrates the cases and how these cases are tied to illegal behaviour.

Table 2

How Pharmacy Decisions Lead to Crime

	Law Broken
Case One—Filling without a refill	Pharmacy practice acts adopted at the state level states that refills cannot be authorised without prescriber permission (e.g., Pharmacy Practice Act (in Illinois, for example, Illinois 225 ILCS 85/19, Ch. 111, par. 4139)
Case Two—Filling an OTC versus brand	Misfiling the prescription order, wrong drug and dosage violates state statutes
Case Three—Signing a PA form with a physician's signature	Forgery is a criminal offense
Case Four—Filing an out-of-scope prescription	It is illegal to fill a prescription written by a physician that does not have authority to write it – example: 43 Ill. Reg. 6924
Case Five—Misfilling dangerous compounds	It is illegal to fill compounds in bulk, let alone for dangerous drugs like ketamine (Drug Quality Security Act of 2013)

2.8 Chapter Summary

Decision-making, ethical and criminological theory inform us as to the how and why, respectively, regarding pharmacists' decisions to dispense ambiguous prescriptions or not fill valid prescriptions based on the pharmacists' own moral compass. Decision-making theory helps to break down the mechanics of decision-making and provides theoretical underpinnings for this study. A discussion of ethical theory provides a way to assign an ethical typology to responses from survey participants in this study as well as informing as to the variety of decision-making that can occur.

Criminological theory informs about the second part of the research question, namely, the rationale for decision-making. Specifically, the general strain theory provides the understanding of rationales of bad decision-making. When confronted with prevention of goals, removal of positive stimuli or a presentation of negative stimuli, there is a resulting response of anger and

frustration. Discussed in Chapter 5, pharmacists are frustrated by their responsibilities and this frustration is addressed through a practical (albeit illegal) way around these conflicts.

The health care ecosystem in the U.S. is complicated yet the role of the pharmacist, often overlooked, is an important one; one that is the gatekeeper to important medications. Waterfield (2010) discusses the important concept of professional judgement as it applies to pharmacists and draws a distinct line in the sand between physician professional judgement and pharmacist professional judgment.

Research gaps filled by this study include that this is the only research studies aimed at working pharmacists' ethical (legal) and moral decision-making in the U.S. Further, this study examines the role of ethical decision-making tied to criminological theory as a mechanism to provide rationalisation to commit illegal behaviour. Pharmacist play a powerful and largely unregulated role in what medication is consumed by the public. The theoretical framework for this study was modelled from decision-making models (Veatch, 2017; Wright, 2019). This framework identifies the need to balance the tension created by the role of a non-maleficent practitioner (concerned with rules) with that of a primary beneficent role concerned with patient health (Wright, et al., 2019). The tension between these two roles is exacerbated when overlaid with the U.S. payment system of confusing rules and payment for products rather than consultative services which then influences ethical decision-making in the wrong direction leading to headline cases, national sweeps by the Department of Justice, humiliation of patients which then undermines the professionalism of the pharmacy profession. This study is important in identifying ethical and moral decisions of pharmacists in the U.S. with a basis in prior theoretical frameworks which are confirmed by this research and provides practical implications.

CHAPTER 3 : LITERATURE REVIEW

3.1 Introduction

In this chapter, academic research in pharmacists' ethical decision-making is discussed that was influential to this study and its conclusions. As an overarching statement regarding academic literature in pharmacists' ethical decision-making, there is a dearth of actual research studies in this area (Sharif et al., 2011; Duffull, et al., 2018). Deans and Cooper, in each of their theses, comment similarly (Deans, 2017, p. 4; Cooper, 2006, p. 19), as well as many other articles cited in this thesis.

Prior academic works conclude that pharmacists make decisions based on a passive common-sense approach rarely understanding that ethics are a part of the decision-making process (Cooper, 2006, Deans, 2007; Gregory, et al., 2016; Sim et al., 2019). This conclusion is also supported in academic textbooks, such as Veatch et al. (2017). This finding was confirmed in this study. The most frequently cited reason for making an ethical decision was professional judgement (32.2%), even though professional judgement was not called for in the cases.

Prior studies also concluded that often there is a non-altruistic and self-interest approach to pharmacist decision-making (Cooper, 2006). Pharmacists often rely on their own knowledge and expertise as superior in the decision-making process (Benson, 2006).

There are no studies that explore pharmacists' consideration of the law when they make decisions. This study makes a significant contribution to academic knowledge by exploring how significant the law is to decision-making by pharmacies. This contribution can have an impact in developing laws and corporate policy to ensure that laws are not broken in the future. In Chapter 5, there is discussion concerning how impactful the law is to pharmacists and the findings were

that 22.4% of the decisions in the 5 cases presented resulted in pharmacists' consideration of the law, meaning that 77.6% of the decision disregarded the law. Further, Latif (2001) provides one of the only academic studies concerning pharmacomorality, that is how pharmacists weigh their own morals and values against that of the patient. This study also provides insight into this topic. Lastly, there are few studies that have been conducted in the U.S. on the topic of pharmacists' decision-making. These three gaps in the research (how decision-making applies to the law and criminological theory, the role of pharmacomorality and a U.S. based study) are all gaps that have been addressed and discussed by this study.

3.2 Academic Research Focused on Pharmacists' Decision-Making Processes

In this subchapter, I discuss the theses and academic articles relating to pharmacists' pharmacoethical and pharmacomoral decision-making. In the next subchapter, I synthesise these articles to provide an academic argument to support the valuable contribution of this study. In short, academic literatures supports that pharmacists make decisions in a common-sense passive approach defaulting to self-interest and superiority (Deans, 2007; Cooper, 2006, Gregory, 2016).

A seminal presentation was given to the Royal Pharmaceutical Society in May 2000, by Nick Barber, Pharmacy Practice, London University, entitled "Developing Pharmacy Values: Stimulating the Debate" (Cribb & Barber, 2000). The presentation stated pharmacists needed to advance beyond "supplying technical facts about medicines and interaction of drugs to making professional judgements on how drugs could be used with individual patients and involved in policy-making at a national and international level (p. 14)". That transformation, contended Barber & Barber (2000), could only happen when pharmacists encompassed core values and value literacy in the professional practice of pharmacy. In 2007, the RPS revamped its ethical

procedures, which were later scrapped by a subsequently formed General Pharmaceutical Council in 2010 (General Pharmaceutical Council, 2010).

The Barber proclamation essentially laid down the gauntlet that for the profession of pharmacy to grow, pharmacists needed to evolve from simple dispensers to making more informed decisions using a combination of technical knowledge with the incorporation of ethical values, encompassing core values and value literacy. Value literacy means that pharmacists now understood that decision-making required values or ethics to be incorporated with the act of dispensing. With this understanding, pharmacists could then query their own dispensing decisions as to what was right and for whom. In turn, this led to a quandary about pharmacist ethical decision-making and the prevailing agency. Who retained agency in decision-making: the patient (who may lack knowledge about the right medication therapy), the pharmacist (who make not always have altruistic goals) or the prescriber (who may lack complete information about drug therapy and alternatives)?

What ensued after the Barber proclamation was several doctoral students from various disciplines that explored the topic of how pharmacists make decisions in the U.K. in an effort to better understand the process. In short, these theses revealed that decisions are made passively and in a common-sense manner. Richard Cooper, University of Nottingham, in his doctoral thesis (Cooper, 2006) explored what U.K. community pharmacists experience as ethical problems in their work, how pharmacists try to resolve such problems and how the community pharmacy setting may be influential. Cooper's qualitative methodology involved hour long, semi-structured interviews with 23 U.K. pharmacists. Cooper concludes that "ethical passivity emerged as a description of pharmacists who were ethically inattentive, displayed legalistic self-interest and failed to act ethically" (p. 2). Cooper was also instrumental in understanding that

pharmacists rarely distinguished ethical problems from philosophical dilemmas and many pharmacists understood law and ethics synonymously, which is not appropriate.

Cooper's exploration of ethical issues also added two key concepts of ethics in pharmacy. One, that pharmacists work in isolation from other health care professionals, leaving little opportunity to discuss the ethical dilemmas faced by the profession either with other health care professionals (nurses and physicians) or other pharmacists. Second, pharmacists are relegated to a subordinate role by physicians. Physicians write prescriptions that pharmacist must dispense, unless it is against the professional judgement of the pharmacist (generally defined as harmful to the patient). This situation leaves pharmacists naturally in a subordinate role to physicians and questions their authority in any decision-making role.

Cooper also filled the gap of academic knowledge by addressing the role conflict of having to sell medications rather than dispense knowledge (Cooper, 2006, p. 153) noting that a pharmacist was forced to balance the independence of the patient with what she considered to be pressure from her manager and her employer's strategy for generating further sales. As noted, Cooper's research was based in the U.K. where there is a consistent payment mechanism (i.e., the NHS) for pharmacists. This research fills the gap of looking at an even more incongruous payment system in the U.S. where pharmacists literally have no idea from one patient to the next how they might be paid for a prescription, adding even greater pressure to the role conflict dilemma.

Cooper, during the time of his thesis, published an article with P. Bissell and J Wingfield (2007), which was in essence a literature review of academic articles of pharmacists' decision-making over the prior 19 years. From a methodological perspective, Cooper et al. conclude that both qualitative and quantitative methods were used to ascertain pharmacists' ability to make

moral and ethical decisions. The decision to use one or the other is the choice of the research approach and should be based on the research question. Cooper et al. (2007) cite studies from as far back as 1988 (Lowenthal et al., 1988 in Cooper at al., 2007) that dealt with the attitudes of practising and student pharmacists to ethical dilemmas, with the aim of developing more appropriate undergraduate ethical teaching. The authors chronicle bioethical theory associated with decision-making which I discuss in depth in Chapter Two of this thesis. Further, the authors point to the fact that many of the earlier studies used pharmacy students as a convenience sample, ignoring the effects of long-term job exposure on ethical decision-making.

Unsurprisingly, Cooper et al. (as Cooper does in his 2006 thesis) conclude that pharmacists rarely see ethical dilemmas and that little is known about the decision-making theories that underpin pharmacists' decision-making. However, that was not the case. Veatch, Haddad and Ladd had already published the first edition of *Case Studies in Pharmacy Ethics* (1999) (and Haddad is referenced by Cooper et al. in this 2007 article). The Veatch text book is referenced in this thesis and provides the ethical decision-making theory that underpins this research. Cooper at al. (2007) conclude that it is hoped that a "new prescription can be written" for research in pharmacists' decision-making where a wide range of theoretical insights and research methods can be considered and worthwhile in exploring this under-researched area. This study takes on a quantitative analysis, contrary to Cooper's (2006) qualitative approach thesis and fills the gap of a more modern quantitative approach as this call for a "new prescription".

Cooper et al. (2009), using as a basis the same interviews of 23 pharmacists as in his thesis, wrote a subsequent article that focused on the relative isolation that pharmacists work in and their subordination to physician which is ethically significant. Stated Cooper:

> "Solitary working arrangements, increased dispensing workload, medicine delivery services and consumerist attitudes amongst pharmacy customers may be contributory. It will be argued that such isolation is inimical to ethical practice since, first, it may impede ethical discourse (Habermas, 1987) and also result in anomie that inhibits the transmission of professional values and norms; second, it may lead to a lack of proximity between pharmacist and patient or customer that, following theoretical insights from Malone (2003), Bauman (1993) and Levinas (1981), may prevent the formation of ethically necessary relationships; and third, it may lead, in a psychological sense, to less ethical concern for those who are less close (Jones, 1991; Singer, 1993; 1997) (Cooper, 2009, p. 299)."

The concept of working in isolation is important. Courtney, discussed in Chapter 1, largely escaped notice of the dilution of 98,000 prescriptions because he worked alone and would not allow pharmacy technicians, who would typically mix oncology medication, to mix the medication that caused at least one death (Draper, 2003). Further, the concept of being subordinate to physicians was the basis for the defence in the *Abrams v Brute* (2016) case in which a pharmacist filled a prescription for an opioid naïve patient that led to his death on the basis that she was simply filling the medication as prescribed by the physician with no ability to understand/be aware of the patient's opioid naïveté or not. By identifying these issues (isolation and subordination), Cooper et al. (2009) brought important issues into the conversation around pharmacists ethical and moral decision-making.

Zuzana Deans, in her doctoral thesis at the University of Bristol, U.K. (Deans, 2007), explored the issue of pharmacists' decision-making from an ethical perspective. Deans conducted research using a quantitative survey and qualitative focus groups of U.K. pharmacists.

Similar to this thesis, Deans' aims were to discover the types of ethical problems that occur in pharmacy practice, how often these problems occur and the decisions pharmacists make when faced with certain ethical problems. Deans' aims also included determining the level of pharmacists' understanding of ethics and what the respective roles of empirical and philosophical research in applied ethics ought to be for pharmacists. Deans' field of study is applied ethics in biomedicine, in essence, the study of philosophical methods to identify the morally correct course of action in the field of medicine, specifically, pharmacy.

Deans concluded that U.K. pharmacists frequently face ethical dilemmas, approach these dilemmas in a common-sense way, often favouring patient needs and fearful of regulations (Deans, 2007). Much of Dean's thesis focused on separation of the ethics of the profession versus the ethics of the pharmacist and the use of conscience clauses (a clause that allows a pharmacist not to dispense a lawful prescription because it causes him/herself anguish or is in conflict with the individual's own personal ethics). While the profession, for example, allows emergency contraceptives to be dispensed, does the ethics of the individual pharmacist allow the dispensing of such medication? Deans concludes that "use of conscience clauses outside these conditions (i.e., those outside the profession) would simply be unprofessional" (Deans, 2007, p. 267). That is, the profession as a body of regulators allows the dispensing of emergency contraception so the individual pharmacist acts outside the bounds of the profession if they fail to act as prescribed by the profession.

Deans' contribution was important in that it underscored the role of pharmacists, the boundaries set for pharmacists in the health care ecosystem and that going outside those boundaries was unprofessional. Deans' thesis is one of the only academic research projects that explores, from an ethical perspective, if the role of a pharmacist is actually a profession requiring

knowledge or a trade that is a technical/dispensing role. Dean's explored issues like autonomy, sanctions by the community, the confidential nature of the relationship between pharmacist and patient and the theories of knowledge underlying the practice (Deans, 2007, p. 218) to conclude that pharmacy is a profession and should be given professional status. Further, Deans' analysis of "whose morals rule: the patient or the pharmacist" tied that argument to the professional codes. If a pharmacist signs on to be a pharmacist, then they must supplant their own moral conscience to that of the patient (Deans, 2007, p. 254).

However, a gap in Deans' research is that it did not explore the *rationale* of decision-making. Because Deans approached the issue from an ethical perspective as a bioethicist, Deans was more concerned with what pharmacists ought to do when confronting an ethical decision. This research furthers Deans' research by asking on what basis pharmacists make decisions. Understanding decision-making rationales can help develop policies, programs or improved ethical decision-making theories that can then improve the decision-making process for both pharmacists and patients (and reduce pharmacists' crime). Further, this research assigns an ethical typology to determine if decisions are made consistently among pharmacists and concludes that there is little consistency (see Chapter 5.8).

Alisa Benson, King's College, London (Benson, 2006), interviewed 38 pharmacists and analysed the transcripts using a grounded theory approach. Benson found themes within the interview transcripts, stating, "Decisions about risk/harm and good/benefit are motivated by concerns for the patient's best interests, although the patient is not always the first concern. The focus on the individual patient leads to a generally limited appreciation of justice considerations" (p. 3). This theme is echoed in Benson's published research findings with Nick Barber and Alan Cribb (Benson et al., 2009). The explanation of this conflict between always having the patient's

best interest in mind, but not putting the patient first perhaps lies in the emphasis placed on professional accountability for the assessment of harm/benefit, and which is related to the vocational confidence in the respect for medicines. Assumptions that the patients will not have sufficient knowledge to make personal harm/benefit decisions, the professional takes on this paternalistic assessment. There is identification of a professional responsibility to try to minimise patient wastage of medicines, commonly managed through the use of cautious and respectful strategies in patient communication. Sensitivities to patient rights minimises the extent of any action to prevent wastage. Benson argues that pharmacists' personal agency and accountability supports a reduction in the effect of any rules designed to ensure either equity or impartiality in resource allocation or the creation of autonomy.

Benson's perspectives are clear when understanding that prior to conducting her research, she was the Head of Training for the National Pharmaceutical Association in the U.K. Uniquely, she has the perspective of both being a pharmacist and educating pharmacists. She therefore, is keenly aware that pharmacists take on the superior attitude towards patients due to their training and that they alone believe they know what is best for patients because medications are complex and those that take medication are not the "experts." Benson identifies this paternalistic attitude, advocates for changes in the nature of pharmacist/patient relationships and calls for greater patient involvement and respect of patient autonomy (Benson, 2006, p. 201). Benson's work is important in identifying this paternalistic attitude, but she leaves it to the Royal Pharmaceutical Society of Great Britain to develop greater training. While this might have applicability in the U.K., there is no one governing body in the U.S. that could exercise such control.

Cooper's (Cooper et al., 2008) post-graduate work included an academic article that discussed four stages of ethical decision-making for pharmacists. Ethical attention involved

recognizing an ethical dilemma in everyday practice. As Cooper stated, “It was apparent that the interviews offered pharmacists an opportunity – and for some the very first opportunity – to consider and discuss what might be ethical” (p. 442). Cooper stated that few pharmacists even recognize that they are making many ethical decisions in the routine minutiae of community pharmacy practice. A second stage, ethical reasoning, took place when the dilemma was recognized and pharmacists had difficulty articulating how ethical reasoning took place. In the case when pharmacists could articulate why a decision was made, reasons such as “the patient’s best interest” and the Golden Rule were used. Ethical intention involved a third stage in which the intended action was reviewed in relation to stakeholders. Cooper points out that pharmacists were willing to act in the best interest of the patient, as long as the intended action would not involve discipline to the pharmacist or “putting their certificate on the line”. A last stage involved ethical action, that is, acting on an ethical dilemma. Many of Cooper’s pharmacists failed to act and rather left the decision to others, coined as “ethical apathy”. If a physician incorrectly prescribed a drug, it was in essence the fault of the physician, and the pharmacist was simply “doing their job” in filling a prescription even though filling the prescription could have resulted in harm.

Cooper post-thesis work advances the argument around pharmacists’ ethical decision-making by identifying these four stages and making a credible argument that pharmacists in the U.K. rarely “see” ethical decision-making and have little understanding of how to make ethical decisions. Further, this ethical passivity often involved perpetuating bad or improper decisions of other health care professionals. However, Cooper did not explore the pharmacists’ rational for decision-making.

During the same timeframe, essentially within the last 15 years, there have been no theses or studies specific to pharmacists' decision-making in the United States. This is perplexing since, starting in about 2008, the U.S. has been involved in an opioid dispensing crisis. As Lembke writes (2016) physicians were "baristas" working in health care factories, objectifying patients as commodities (for reimbursement), and patients using physicians as "nothing more than a source of drugs" (p. 128). Pharmacists could have stopped this epidemic at the pharmacy counter. It was not until 2019, *after* I conducted my research, that Russ (2019) released her findings of a phenomenological qualitative study with the aim of understanding and explaining the rationale implemented by pharmacists to decide whether or not to dispense an opioid. Like Deans (2007) and Cooper (2006), Russ (2019) states that "patient care is paramount. The study responses consistently identified compassion for and consideration of patients' needs for effective pain relief from acute health problems that only opioids could deliver (p. 99)." Russ reinforces from a U.S. perspective that even when dispensing opioids, patient care is foremost and even outshines the possibility of malingering or addiction. However, dispensing opioids to the extent that no one is ever in pain increases the probability of addiction, which certainly has its own negative ramifications.

In a somewhat related U.S. thesis, Terry Rohraff (2010) performed a phenomenological study of health care leaders in Florida to ascertain on what basis these leaders made ethical decisions. While not directly on point from a pharmacy point of view, Rohraff's work in one of the only U.S. based reviews of health care ethical decision-making. Four main themes of health care leaders' ethical decision-making emerged that included principles associated with past experience, family upbringing, collaboration, and doing the right thing. When these senior business leaders were confronted with the question of evaluation and resolution of ethical issues

involved in decision-making, the leaders' answers fell into one of three groups as to the framework (i.e., what they used) to make ethical decisions and that was mediation (use of outside sources), factual data, and feeling of innate ethics. None of the executives seemed prepared to make the decision using classical ethical decision-making processes described in Rohraff's thesis but instead used other personnel to rationalize the decision, the decision maker's interpretation of the facts, and their own understanding of what is "right". The gaps in Rohraff's thesis are that the decision-making was performed by executives in health care, not pharmacists in daily practice, which is the focus of this research.

Chaar et al. (2005) conducted research of working pharmacists and their attitudes towards pharmacoethical decision-making in Australia. While this study focused on the pharmacist's ability to make ethical decisions, it did not focus on the framework of how decisions were made. Semi-structured interviews were carried out with 25 pharmacists from Australia. Findings of this study indicated primarily that Australian pharmacists regard the ethical principle of 'best interest' of the patient as the fundamental framework within which they practice. Pharmacists experience ethical dilemmas in practice, predominantly in the community setting, relying on logical reasoning, practical skills and personal morals to manage the situation rather than consulting with a code of ethics. Also, of significance in this study, was the finding that financial pressure had a strong negative impact on the decision-making and application of ethical principles of younger pharmacists in practice.

Crnjanski e al., (2019) conducted a quantitative cross sectional multicenter study of Serbian community pharmacists with a self-administered survey instrument and concluded that younger pharmacists and less experienced ones (less than 15 years of working experience) assessed the majority of ethical issues as more frequent in their everyday work, than older and

more experienced pharmacists. These are ethical issues relating to problems of dispensing medicine, conflict of values, communication and violation of patients' privacy. Also, results indicated that patients' well-being had a high influence on pharmacists' behaviour. The familiarity with the Serbian Code of Ethics and the usefulness of Code to resolving ethical problems in everyday practice was negatively correlated. This study confirms many of the issues uncovered in my thesis that rules and regulations (such as Code of Ethics) had little impact on pharmacists' decision-making.

Sim et al. (2019), also in Australia, studied working pharmacists in comparison to pharmacy interns in terms of ethical reasoning in decision making. Sim et al. (2019) surveyed 121 pharmacy interns and 97 pharmacists. Interns were more likely to consult legislation and regulatory authorities whereas pharmacists were more likely to consult with colleagues. Responses to ethical vignette scenarios and exposure to privacy breaches varied between interns and pharmacists, with some scenarios revealing significant differences. The third author of this study also published a similar article of the same study (Hattingh, et al., 2019). Like the studies cited above, working pharmacists in this study took a practical approach to ethical decision-making relying on themselves or colleagues rather than a more authoritarian approach. Financial pressures on the profession impact on pharmacists' management of complex scenarios and highlight the need for ongoing development of ethical reasoning skills.

A study in Ontario reinforced the common-sense approach that pharmacists use to make decisions about medication dispensing, reinforcing that pharmacists experienced cognitive dissonance in attempting to reconcile a clear and confrontation-free conclusion to the case discussions. Strategies for resolving this cognitive dissonance included strong emphasis on the educational (rather than decision-making) role of the pharmacist, the value of strong

interpersonal relationships as a way to avoid conflict and achieve desired outcomes, the desire to seek external advice or defer to others' authority to avoid making a decision and the use of strict interpretations of rules to avoid ambiguity and contextual interpretation (Gregory, et al., 2016).

Perhaps the most relevant and recent study that supports the common-sense approach that pharmacists take to ethical decision-making is a study from Croatia (Vuković-Rodríguez & Juričić, 2017). Like this thesis and others cited herein, the authors make the point that there has been very little study in pharmacists' ethical decision-making. Nonetheless, the outcome of the survey of 252 Croatian pharmacists does emphasize the same points made by Cooper (2008) and this thesis in that more than half of pharmacists (62.7%) face ethical dilemmas in everyday work and most participants (84.5%) feel that they practice pharmacy in accordance with ethical values and that 36.9% think that they must justify their choices to colleagues (Vuković-Rodríguez & Juričić, 2017). Further, the Vuković-Rodríguez & Juričić (2017) study revealed the role conflict of working pharmacists as does this thesis. Vuković-Rodríguez and Juričić (2017) write that 54.8% of the respondents reported that some of their professional activities are in conflict with professional ethics and 47.2% of pharmacists reported that financial or commercial pressures influence their practice based on ethical values. These results are consistent with a previous study suggesting that Croatian community pharmacists still see themselves as working for the public via a social contract that emphasizes duties to the patient, rather than a business contract that emphasizes marketing and profit (Vuković-Rodríguez & Juričić, 2017). A study in Australia reiterates these findings in that ethics are integral to community pharmacists' practice and is influenced by their professional values and underlying personal values, cultures, morals and beliefs (Sims, et al., 2019; Hattingh et al., 2019).

Very little research has been conducted about pharmacomorality with the exception of research conducted by David Latif, currently a professor and department chair of Pharmaceutical and Administrative Sciences at the University of Charleston's School of Pharmacy. Latif (2001) surveyed 450 pharmacists in the south eastern United States, of which 130 responded. Latif's survey used the defining issues test (DIT), which was a surrogate measure of respondents' ethical reasoning skills (Rest & Nevarez, 1994). The DIT is a self-administered questionnaire that measures subjects' moral reasoning according to cognitive developmental theories posited by Piaget in 1932, Kohlberg in 1969, and Rest in 1994 (Latif, 2001). It consists of six hypothetical dilemmas. (A short-form version included three dilemmas.) Each dilemma is followed by a series of 12 statements about the dilemma. While the DIT has been criticized over the years and improved upon, it still is a reliable measure of moral reasoning skills (Thoma & Dong, 2014).

Latif (2001) concluded that the longer community pharmacists worked, the less ethical their moral reasoning. Latif posited:

> "Four plausible explanations for the results are given including: a) a selection of lower ethical reasoners and/or an exodus of higher ethical reasoner from the community setting; b) a retrogression in the moral reasoning skills as community pharmacists obtain tenure in this setting; c) differences between the low and high moral reasoning groups may be due to a cohort effect; and d) the obtained practitioner sample may not have been representative of the population of community pharmacists. (p. 131)

One academic study that bridges the pharmacoethical and pharmacomoral discussion is the work of Kruijtbosch et al. (2019). In a unique study methodology conducted in Holland, the authors asked pharmacy students who were practicing as interns and recent graduates to write narratives of recent ethical decision-making required in their practices. These 128 narratives

were then analysed to identify professional core values in moral dilemma narratives of pharmacists in community pharmacy and customised for their practice. Typical professional core values for pharmacists were identified in the narratives (i.e., commitment to the patient's well-being, reliable and caring, pharmaceutical expertise and responsibility to society). However, within each of these values, conflicts arose. For example, the 'other value' of autonomy of the patient could conflict with the core value commitment to the patient's well-being such as a patient who was prescribed a placebo. The 'other value' to protect life was also seen as part of this core value conflict with patient autonomy. For example, protecting life conflicts with patient autonomy in which a patient prefers care that aims to end his or her life (e.g., euthanasia) rather than to protect it (Kruijtbosch et al., 2019). Most importantly, the study revealed that pharmacists are aware of their responsibility to society (Kruijtbosch et al., 2019). Although worldwide pharmacy associations emphasise the importance of responsibility to society, only in a few studies among pharmacists is this value reported. For example, pharmacists reflected on the option to no longer freely dispense medication to patients who repeatedly cannot pay for expensive medication or on the decision to deliver additional care activities that are not reimbursed (Kruijtbosch et al., 2019). This is a significant finding and one that is the impetus of this study; that is that pharmacists are gatekeepers of medication but that the role conflict of "dispense to profit" may conflict with the role to society to be prudent dispenser of medication. In the U.S. based system, however, where others pay for the medication (i.e., taxpayers through government programs or employers through benefit programs), U.S. pharmacists often may not take into consideration the important gatekeeper role.

3.3 Chapter Summary

Prior academic work laid the foundation of my research, re-exploring and confirming that pharmacists make decisions in a common-sense approach. Earlier studies also confirmed that older pharmacists did not have as much concern for ethical issues as do more recently graduated pharmacists (Chaar, 2005). Prior research also laid down a methodology of quantitative, survey-based research with focus on the research question as an epistemological divide (Cooper, 2007). However, my research question (to what extent are U.S. pharmacists willing to fill ambiguous prescriptions or not fill prescriptions that are legal but may be morally offensive to the pharmacist, and what is the rationale behind the decisions) furthers the examination of pharmacists decision-making, by looking at the issues through the lens of the U.S. health care system, by understanding that the respondent cohort was not in agreement with how to fill ambiguous or moral-conflicting prescriptions and by providing rationales for decision-making tied to criminological theory.

The significant contribution, therefore, of this research is threefold. One, that none of these studies tied decision-making to the law or used criminological theory to discuss the rationale of decision-making. This study shows that pharmacists believe they are not paid adequately to dispense the medication that they do dispense (in the U.S.) and therefore that there is little time to *not* dispense medication (see Chapter 5.16). In turn, this leads to potential criminal activity as evidence by the general strain theory to neutralise the effects of bad decision-making (filling illegal prescriptions). Secondly, this study reveals the inconsistency between pharmacists regarding both pharmacoethical and pharmacomoral decision-making (see Chapters 5.8 and 5.12). Pharmacists' decisions as a cohort did not display a leaning to any one type of ethical typology. Further, there was considerable disagreement as to how to respond to moral

issues in the survey (Chapter 5.12). This leaves patients in moral distress and does not reflect positively on the "profession" of pharmacy. Lastly, this study is U.S.-based. It is important to look at the U.S. "brand" of pharmacy, with its complex and confusing payment rules and regulations and an increased emphasis in a capitalistic economy to dispense medication not advice or to simply not dispense medication. This study points out how this "U.S. brand" of pharmacy can lead particularly lead to a breakdown in the gatekeeper role, such evidenced by opioid crisis in America.

CHAPTER 4 : RESEARCH METHODOLOGY

4.1 Introduction

This chapter discusses the methodology of the current research which has been used to answer the research questions: To what extent are United States pharmacists willing to fill ambiguous prescriptions illegally, or not fill prescriptions that are legal but may be morally offensive to the pharmacist, and what is the rationale behind their decisions?

To achieve this, a survey was disseminated to 5,839 pharmacists which probed how pharmacists would make decisions concerning typical scenarios involving moral and ethical dilemmas. In this chapter, I explain the rationale for the methodological approach and describe the design and recruitment methods of the survey.

Research limitations are also discussed. These include survey dissemination methods, recruitment of survey participants, researcher bias and low response rates, typical in the pharmacy field (Hardigan et al., 2016). As a professional conducting research, there is a concern about researcher bias creeping into the research. Great care was taken to avoid such researcher bias, including numerous reviews of the survey instrument by other criminologists and pharmacists, including reviews by Deans of COPs, discussed in this chapter. The survey dissemination methods (online, no email addresses to the researcher) were also used to reduce bias. The findings of the survey developed the conclusions, and the conclusions were not drawn prior to the research. Had the survey results been different, had fewer respondents been willing to change prescriptions or did not agree to filling abortifacients or cared about confidentiality, this thesis would have still produced a meaningful contribution to knowledge, validating the status quo. The objective was truth, as defined by Aristotle: “To be a matter of scientific

knowledge, a truth must be demonstrated by a deduction from other truths" (Aristole, 1996, p. 150).

4.2 Survey Aims

In answering the research question, the aims of a survey were to answer the research question, specifically, to what extent are U.S. pharmacists willing to fill ambiguous prescriptions or not fill prescriptions that are legal but may be morally offensive to the pharmacist, and what is the rationale behind the decisions. The research question was broken into subparts. First, the survey included five pharmacoethical scenarios in which one option was to decide to break the law (but favoured the patient and/or pharmacist) and the other option was to follow the law (but disappoint the patient and forgo revenue opportunities). The five scenarios progressed with case one being the least severe to case five being very severe. Next, the rationale was explored in depth (both on a scenario-by-scenario basis and as a question response cohort) to determine if there was alignment with major ethical theories of virtue, deontological, and utilitarianism/consequentialism. Pharmacoethics was explored in the survey through 21 moral statements involving topics such as patient confidentiality, deception, forgery and asking pharmacists on a Likert scale to "strongly agree, agree, disagree or strongly disagree" with the statements.

4.3 Epistemological and Ontological Considerations

An important first step in social science research design is to understand if the study aim can be achieved in the same way as the natural sciences or, because social science studies humans, the study aim needs to view the research from the subject's viewpoint (Bryman, 2016, p. 24–27). This epistemological divide is referred to as either approaching the design from a natural science epistemology (i.e., positivist) or approaching the design from the subject's

viewpoint, or interpretivism. But this study's aim is also to understand how and why pharmacists make dispensing decisions. Therefore, the study, based on its aim, has a pragmatism epistemological viewpoint. This study's pragmatism viewpoint contains both observable facts combined with interpretive themes. Specifically, this study is concerned about an observable fact regarding how pharmacists make decisions which is the quantitative analysis. However, the study also looks at the rationale of those decisions taking on a qualitative approach. Therefore, this research is a mixed methods approach, using an embedded mixed method design (i.e., a single piece of research – the survey - with both quantitative and qualitative methods) which, according to Creswell (2002, p. 17), has both statistical and thematic interpretation and a pragmatism approach.

The mixed methods approach is a relatively new approach in social and human sciences (Johnson, et al., 2007) and an American perspective. However, elements of this type of research can now be categorised and identified by given characteristics such as both open ended and closed ended questions, which the survey for this research contained. The quantitative and quantitative forms of data should be integrated in the design analysis, which it was, and connected to or embedded in the data (Creswell, 2002, p. 217). The mixed method procedure is ideal for a pragmatism worldview (Creswell, 2002, p. 10) because of the pluralistic nature of the epistemological considerations.

A pragmatism orientation which is particularly conducive to research in health care research due to the complex nature of providing health care (Long et al, 2017). Rather than focusing on antecedent conditions, pragmatism focuses on a worldview that arises out of actions, situations and consequences. Pragmatists convey the importance of the research question in

social science and then using pluralistic approaches, derive knowledge about the problem (Tashakkori and Teddlie, 2010).

Prior research of this topic has all approached the topic primarily as a qualitative approach (Benson, 2006; Cooper, 2006; Deans, 2010). Cooper and Benson were only qualitative and Deans incorporated both a qualitative and quantitative approach. In this research, the role of the survey was similar to Deans' but would supplement a research gap because the survey results provide an easy tool to develop an ethical typology. Further, almost all of the academically published work in pharmacy has been based on surveys, such as in the case of Rabi (2006) and Ip (2016), which used surveys to test the ethics of pharmacy students.

4.4 Survey as a Research Method

An online survey allowed respondents to answer specific questions with answers that could be tabulated. This addressed the quantitative portion of the research question, namely, "to what extent are U.S. pharmacists willing to fill ambiguous prescriptions or not fill prescriptions that are legal but may be morally offensive to the pharmacist." However, an online survey, with open ended questions, also addressed the quantitative aspect of the research question: "and what is the rationale behind the decisions."

An online survey was a practical tool for doctoral research. A survey had the benefit of being able to survey many pharmacists, more than could be practically interviewed, which increased the reliability of the survey (Bachman & Schutt, 2014, p. 192). A survey provided the opportunity to reach a national footprint of pharmacists; face-to-face interviews could only be conducted in a small geographic area without extensive travel, which was also not practical for a doctoral research without significant funding. The survey results provided a way to test interrelationships between variables (such as gender and agreement/disagreement with the moral

statements). Bachman and Schutt (2014, p. 191) wrote that surveys are versatile and efficient, which was an advantage in doctoral research.

Experiments were not an appropriate method because the basic intent of an experimental design is to the test the impact of a treatment, or an intervention on an outcome, controlling all other factors that might influence the outcome (Creswell, 2014, p. 156). The research question did not entail a treatment or intervention. Face to face interviews were also not practical for pharmacists. As a researcher, I could not simply enter a pharmacy and ask a pharmacist to be interviewed. As mentioned herein, pharmacists are already too busy with the dispensing of medication and corporations might frown on this practice. Therefore, surveys that pharmacists could take in their leisure time seemed like the most practical vehicle to answer the research question. Creswell states that the selected method of data gathering should be based on costs, data availability and convenience which were all considerations in the selection of a survey (Creswell, 2014, p. 157).

In the Participant Information Sheet (and as was done in practice), survey respondents' email addresses were not provided to the researcher (solicitation was performed through the COPs), and by using an online survey company, respondents remained anonymous. Anonymity achieved in online surveys increases the reliability of the survey results (Chang & Vowles, 2013). An online survey allows the researcher to gather both descriptive data (which organizes and describes the results) and inferential statistics that allows making predictions or inferences about the data. Frankfort-Nachmias and Leon Guerrero (2015, p. 11) also stated that a survey is a suitable tool to ask people about their opinions and attitudes.

As mentioned, a survey tool was also an efficient way of gathering information from a geographically diverse group of working pharmacists. While these pharmacists may have all

attended school/work in one of the five locations, these pharmacists now literally lived anywhere in the United States, making interviews not possible. In fact, survey respondents were from 34 U.S. states.

4.5 Survey Development

Since this thesis concentrates on pharmacoethical and pharmacomoral decision-making, the survey paralleled the same issues. In Part One, I presented five cases relating to how willing the pharmacist would go to break the law. Specifically, for each of these cases, there were three subquestions that were queried:

1. How frequently did the pharmacoethical decision occur in practice?
2. What was the decision?
3. Why did the pharmacist make the decision?

The five cases were short descriptions of real cases that had occurred or were offered in a leading Pharmacy Law textbook, Pharmacy Practice and the Law (Abood & Burns, 2017). It is important to note that none of the cases involved situations where a pharmacist needed to exercise professional judgement, that is, provide expertise about the patient's administration of the drug. The cases in the textbook were meant to stimulate class discussion in a pharmacy law class, and clearly one could argue that the pharmacist had many options in each case. The author of the textbook (in the instructors' version) supplied the "answers" to the case studies which can be found in Appendix C. In addition, the publisher, Jones and Bartlett Publishing, was also contacted for permission to reprint the cases (see Appendix B). The actual cases can be found in Appendix E.

All five cases had the same series of answers from which respondents could select an answer including a "other" response. Because the survey allowed pharmacists to provide open-

ended reasons as to their decision-making (i.e., the "other" category), the survey provided some opportunity for qualitative information to be collected which has advantages as discussed by Bryman (2016) such as participants could answer in their own terms and provided some additional useful information discussed in Chapter 5.

Part Two of the survey presented 21 statements concerning the pharmacists' moral perspective and, using a Likert scale, pharmacists were asked to strongly agree, agree, disagree or strongly disagree with the statement. The survey required the respondent to take a position for each of these statements. Fence-sitting allows respondents to take the easy way out rather than really thinking about their feelings (Bachman & Schutt, 2014). In this situation, a firm decision was required. Topics regarding issues that might cause a pharmacist to not fill a prescription because of their moral implication contrary to their duties were covered in these moral statements and have been discussed extensively in this thesis. Topics concerning euthanasia, filling abortifacients, patient confidentiality, patients deceit/use of placebos, physician drug abuse/illegal activities, the use of deception to insurance companies/PBMs, and observing crime in the pharmacy were covered in part two of the survey. The 21 statements can be found in Appendix E.

Part Three collected demographic information about the respondent. Information was collected such as age, gender, year of licensure, state worked, type of pharmacy practice setting, and work status (full-time, part-time, retired).

Using the University of Portsmouth preferred survey tool, Jisc Online Surveys (Bristol, U.K.), the survey was developed online and a temporary site was created. The survey was then piloted with six professionals.[2] The purpose of the pilot group was to determine if the

[2] The pilot group consisted of six professionals from a variety of viewpoints such as a health care attorney, academia, a fraud investigator/pharmacist, and a health care policy expert.

cases/statements were biased in any way, if the survey was understandable and if the survey was not overly time consuming. The use of pilot groups, or pretesting, is an important step to ensuring reliability and understandability. Bachman and Schutt (2014) wrote “no questionnaire should be considered ready for use until it has been pretested” (p. 210). Bryman (2016) encouraged survey development to pilot the questions (p. 172). Oppenheim (1992) went further to state that “almost anything about a survey can and should be piloted”, and piloted surveys reduce participant confusion and researcher bias (p. 48).

4.6 Project Plan Submission Process and Ethical Approval

In September 2018, the project plan for this thesis was submitted to the University of Portsmouth for Ethical Approval. The project plan included the Deans’ Invitational Letter (email solicitation), Participant Information Sheet, Participant Consent Form, Survey Instrument Link, and all other information required by the University of Portsmouth.

After taking suggestions from Ethics Committee members, a second project plan was submitted and approved by the Ethics Committee on 20 November 2018, “Ethical Approval for Thesis” and is attached and Appendix D. All conditions for ethical approval were compiled prior to proceeding with the research.

There were minor changes to the survey based on the pilot group feedback and accommodations for the online survey formatting. The University of Portsmouth was contacted and made aware of the changes to the survey following peer view. Because it was the opinion that these changes were minor, additional ethical approval was not needed.

4.7 Survey Distribution and Data Retention

As a method to distribute the survey request, four Deans of COPs were recruited as well as a worksite Pharmacy Clinical Program manager at UMASS College of Medicine. I formed the

geographic diversity of these five entities (one west coast, two mid-western, one southern, and one eastern locations) in an attempt to provide a nationwide viewpoint. Each location used alumni lists (or in the case of UMASS, the current pharmacist employee roster) to recruit participants. The survey was opened on 9 January 2019. Requests to complete the survey were sent in January and February of 2019. In total, 5,839 emails were sent as follows:

Table 3

Number of Emails Sent to Solicit Survey Responses

Number of Email Solicitations Sent each in January and again in February 2019	
Touro University California College of Pharmacy	931
UMASS College of Medicine	56
University of Arkansas Medical School, College of Pharmacy	2,123
Midwestern University, College of Pharmacy	2,447
Roosevelt University, College of Pharmacy	282
Total	5,839

Since no actual research was being conducted by these universities, ethical approval was not needed from these universities. Each Dean sent the survey under their email. In addition to the survey hyperlink, the Participant Information and Consent Form sheet was attached. One participant indicated that they did not read the Participant Information and Consent Form; therefore, that response was eliminated. Based on the survey design, a unique number was assigned by Online Surveys for each response. However, total anonymity was promised to participants in the Information and Consent Form, and such anonymity was achieved as it was not possible to deduce the participants' identity in any way.

In total, I obtained 362 valid responses. There are approximately 300,000 pharmacists in the United States (Data USA, 2019). Therefore, approximately 2% of U.S. pharmacists were solicited, and of those 6% responded to the survey. The low response rate is discussed below.

The survey was closed on March 9, 2019. Data from the survey were stored on my computer and has been backed up nightly on a separate hard drive. Both the back-up and any hard copy results are stored in a locked cabinet. The research documentation created and gathered was subject to password protection, and will be destroyed in accordance with University of Portsmouth guidelines to ensure privacy and protection of the electronic and paper materials. The ethics and integrity of the research was upheld by throughout the investigative and formative processes, including confidentiality, anonymity, data safety and storage. I have not shared the data collected except in summary fashion contained in this thesis. Participant names and employment information were never provided (as designed), and an informed consent was executed with each participant before the survey commenced.

4.8 Data Analytics

Following the close of the survey, the survey results were analysed. The Online Surveys tool provides survey responses as an Excel file. This file was imported and uploaded into IBM Statistical Package for Social Sciences (SPSS) Version 25. SPSS is a tool used for statistical analysis. Following the approach of prior studies in data analysis (Pallant, 2016), I have used a codebook which documented how I coded data responses as either ordinal, nominal, or scale so as to better analyse survey results (see Appendix F for Survey Codebook) and to determine what statistical testing was needed for inferential statistical analysis. Any respondent that did not complete the Consent Form attached to the survey was eliminated (which was 1, leaving 362 valid responses). Any question that was not answered was left blank. There were no errors in the data file.

Each case was analysed to answer the research question by totalling the number of responses to each question for each case. Specifically, SPSS rendered tables (found in Chapter

5) that described the number of respondents that would and would not dispense the ambiguous prescription for the five cases, how frequently the case arose in the respondent's practice and the reason for making the decision. I supplemented the SPSS file by adding a typology to each reason using the following logic and using the assigned ethical typology by reason depicted in Table 4: "1" if the respondent chose a reason that was deontological, "2" if utilitarian/consequentialist, "3" if virtue ethics. This allowed me to determine if there was an ethical typology that was predominate for each case and for each dispensing decision.

Inferential statistical analyses were performed in SPSS to determine if training was a significant reason for decision-making. Inferential statistics also provided insight if gender or years as a pharmacist had an impact on decision-making ethical typologies. Standard deviation from the mean was used as an inferential statistic (rendered by SPSS) to determine if there was consistency with the moral statements. Further analysis was conducted to determine if age or gender had an impact on the moral statements or the ethical typology (see Section 5.3 and 5.14).

Basic algebraic calculations using Excel were used to determine the frequency of decision-making by pharmacists as well as if there was a consistency for each respondent in terms of the ethical typology.

Even though this was not considered solely a qualitative research project, there was formal analysis of the "other" reason option, specifically an inductive content analysis methodology as described by Lune and Berg (2017, p. 183). Inductive content analysis is appropriate for small, open-ended questions (Erlingsson and Brysiewicz, 2017). The "other" option allowed, in each of the five cases, respondents to type in an "other" reason if the pre-selected reasons did not fit why the respondent made the decision that was made. All "other"

responses are provided in Appendix H. Findings of the inductive content analysis and specific, relevant text are used to discuss these interesting details in Chapter 5.

4.9 Research Limitations

There were several limitations encountered by this research that were attempted to be resolved. The strength of a survey is that online surveys can be conducted at low cost and in a short period of time (Nayak, M. and Narayan K., 2019). This certainly was ideal for Professional Doctorate work. The challenges related to online surveys are the sampling, response rate, non-respondent characteristics (Nayak, M. and Narayan K., 2019). Those challenged were encountered in this research. However, Bachman and Schutt (2014, p. 196) write that on-line surveys are ideal when there is not a lot of open-ended questions. The only open-ended question were five "other" reasons out of 43 closed responses. Additional concerns are discussed below but on-line surveys provided the flexibility and time/cost effectiveness, while still allowing an in-depth understanding of how decisions were made by the respondents. Interviews were not needed to test the decision-making theories discussed in Chapter 2 and I could test the theories using the survey instrument by querying on the frequency, reasons and decisions made by respondents.

The first issue was the selection of a survey versus interviews. Academics approach research with certain "hunches" about the research methodology and research outcomes. But subjectivity, bias, and interpretation can seriously impact the acceptability of research (Cole et al., 2014). Therefore, care and concern were employed when embarking on this research, particularly in the design phase, that "subjectivity, bias and interpretation" were reduced as much as possible (Cole et al., p. 142). The very epistemological and ontological considerations were decided early on in an attempt to reduce researcher bias (i.e., selection of a quantitative survey as

a research method, as opposed to a qualitative methodology; interviews, ethnography). The online nature of the survey prevented the researcher from coming face-to-face with survey respondents to influence how respondents answered the survey questions. The method of dissemination of the survey, that is having COPs deans (and one pharmacy workplace manager) disseminate the survey, also prevented knowing who was sent the survey link and preserved respondent confidentiality.

The second issue was the recruitment of survey respondents. The Deans were used as a survey gatekeeper for several reasons. First, it is not possible to obtain a listing of email addresses of all pharmacists in the United States that is reliable and accurate. Professional bodies like the American Pharmacists Association do not release its membership, a listing cannot be purchased and if it were available, may include out-of-date contact information. It was believed that the COPs maintain more accurate lists for fundraising and other communication needs with alumni. Second, using a gatekeeper meant that the researcher had no access to the participants' email addresses directly and could therefore maintain strict confidentiality as to the respondents. Finally, it was believed that an email from a COP dean would have more credibility (and therefore solicit more responses) than an email from a random researcher.

The third issue was concerns with researcher bias. The most important facet of reducing "subjectivity, bias and interpretation" came in developing the actual cases and statements (Cole et al., 2014, p. 142). The cases were taken from a well-respected pharmacy law textbook, *Pharmacy Practice and the Law* (Abood and Burns, 2017). The pilot group provided feedback which was incorporated. At the urging of the pilot group feedback, the cases were reduced to five cases to keep the survey under 15 minutes. Pilot group feedback also determined that these specific five cases were identifiable by pharmacists, occurred often enough in various pharmacy

practice settings, broke a law that pharmacists should be able to recognize and agreed to the order as the least severe to most severe. Therefore, the cases were ordered from what was perceived as the least offensive and most frequent case (Case One) to the least frequent and most severe case (Case Five) in the survey.

Most important, however, three of the four deans reviewed the survey and provided comments, all of which were incorporated in the survey. Then the Dean of Midwestern University reviewed the survey word-by-word with the researcher in a meeting on 27 August 2018 at Midwestern University. Originally, the survey contained 10, then eight cases in Part One. Having a pharmacist (dean of the COP) rather than an investigator review these cases and statements and further eliminated biases in the cases/statements; these cases were described in the most neutral way as possible so as to not lead respondents, including Case Five, the most egregious but a realistic one based on the case of Robert Courtney (see Chapter 1).

In regards to the 21 moral statements, originally there were 15 statement, but reviewers believed it was important to include reasons that pharmacists became pharmacists. It was hypothesised by the Deans, and based on research by Ip (2016), that students who became pharmacists solely for the high salaries and prestige may be more likely to dispense prescriptions illegally. Therefore, seven statements were added regarding motivations to become a pharmacist.

The last issue was low response rates. The low response rate of 6.2% is a concern for sampling bias; that is, if the nonresponse is unequal among the participants to the population studied. While 5,839 emails were sent out by the dean's offices and workplace managers, it is difficult to determine the number of actual pharmacists who received the email solicitation. This is because of email addresses which changed and "bounce-backs" that occur indicating that the recipient did not receive the solicitation (which were not recorded as the bounce-backs often go

to the spam folders). For these reasons, the calculated response rates (those that completed the survey divided by those that actually received the survey times 100) could actually have been higher if adjusted.

Frankfort-Nachmais and Leon-Guerrero (2015) stated that sample sizes over 50 (i.e., N=50) are approximately normal (p. 268). The sample size for the survey was 362 (N = 362). There are approximately 300,000 pharmacists in the United States (Data USA, 2019). Approximately 2% of U.S. pharmacists (K = .02) were solicited and of those 6% responded to the survey (K =.06). A true random sample was not performed since only respondents of certain COPs were solicited, and of those, only a certain portion decided to take the survey.

If responses rates are low, it is important to review the sample parameters against available national statistics to determine if the sample were similar to the population being sampled (Frankfort-Nachmias & Leon-Guerrero, 2015, p. 206). The sample was compared against national norms in terms of gender, age and practice settings below. Other sample characteristics are described in this section and commented on but not compared since national statistics were not available. In other words, it is impossible to determine confidence levels of the sample compared to the population because a range of statistics are not available.

In addition, statistics for the sample are not available from the deans' offices and workplace managers to determine if either respondents and/or nonrespondents match in key demographics (e.g., age, gender, length as a pharmacist) or if respondents are similar in the population demographics.

Methodological changes to the survey dissemination could have increased response rates. For example, the survey could have been sent to 100 pharmacists I knew. Because of this acquaintance, almost all would have participated, and the response rate, for example, might have

been 98% with 98 surveys returned. However, a major consideration was confidentiality, so not knowing the respondents was considered more important than response rates because of the highly sensitive nature of the survey. I also could have passed surveys to "pharmacist friends" who could then pass them to other pharmacists that I did not know, but then I would not have known how many pharmacists considered the survey but never took it, making a response rate impossible to calculate. At the end, it was concluded that sending on line surveys would be more expedient, and gather more responses than other means of survey dissemination. It was also concluded that surveys would be better than interviews and garner more responses. In other words, it would have nearly been impossible for a single researcher to contact 362 pharmacists and conduct one on one interviews.

Also, pharmacists are generally a population that has an exceedingly low response rate. In 2019, to a survey of pharmacists in the U.K. conducted on behalf of the General Pharmaceutical Council, pharmacists' response rates were 22% (Brigg et al., 2019, p. 7). The survey response rate was 30% lower in 2019 than in the previous survey in 2013 where the response rate for pharmacists was 51.3%. In a U.S. survey of pharmacy educators, response rates were 22.7% (Conklin & Desselle, 2007), not an optimal rate of over 50%.

A seminal study on nonresponse bias and response rates for pharmacists concluded that email surveys produce a 6% response rate, identical to the response rate produce in this study (Hardigan et al., 2016). In this study, response rates to survey requests were equally divided among 1,700 pharmacists between surveys sent by post, surveys sent by email and "hybrid" (sent a postcard with a web-link directing them to an internet website). The results of the study were that "the empirical evidence revealed a much greater response rate from postal mailing (21.0%) than from emailing (6.8%) or the hybrid method (3.2%)" (p. 145). Because home addresses were

not available to the researcher nor were the Deans' offices willing to mail participants two or three sets of mailers because of cost and inconvenience, this option was not available. Costs in Hardigan et al. were $10.31 for each survey sent. Given that the sample size was 5,839, the costs of mailing to pharmacists would have been $60,200.

A comprehensive and more modern study of nonresponse rates indicate that the prior thinking that response rates produced biased samples is flawed (Singer, 2006). Groves wrote that recent empirical findings illustrate cases when the linkage between nonresponse rates and nonresponse biases is absent (Groves, 2006). Further, nonresponse rate alone is a weak predictor of nonresponse bias components. Other factors need to be taken into consideration. Survey respondents received the emails during the day at work; study findings indicate response rates are higher if respondents receive the solicitation at home during the weekend (Mindell et al., 2012). The ability to screen requests also lowers responsiveness (Brick, 2013). Further, women and in particular younger women are less responsive to surveys in the health care field (Howcutt et al., 2018). Women represent 56.7% of U.S. pharmacists.

In conclusion, while the response rate was not optimal, it is also not dismal. Pharmacists seem to have a particularly low rate of response and the response rate of this survey matches exactly to that of the Hartigan et al. study (Hardigan et al., 2016), response rates are not as highly considered as they were (Singer, 2006) and the survey was not meant to be generalisable as at was not randomly distributed.

Great consideration was given to the survey distribution methods, and even the use of an online survey versus in-person surveys. Considering the topic (ethical decision-making), face-to-face surveys were dismissed as it is unlikely that pharmacists would be as ready to admit to condoning or committing criminal acts face-to-face with a fraud investigator (my occupation)

plus this method would have been exceedingly time consuming. Postal surveys were dismissed due to cost and time constraints of a doctoral programme and the fact that home addresses are not available. Hybrid surveys actually produced less effective response rates. Using the Deans' offices was the best methodology to encourage response rates, providing the "cache" of a highly respected figure as well as anonymity in a sensitive topic. Decisions were also made to send to over 5,000 pharmacists in an effort to achieve a robust sample size, and this objective was achieved.

4.10 Chapter Summary

The methodology conducted for this research was appropriately met using a quantitative survey-based methodology because the aim of understanding the extent and rationale of pharmacists' decision-making was achieved. The method of the research (online survey) was used because construction versatility and ease of use was needed to obtain a broad array of geographically diverse pharmacists. The online nature of the survey also ensured confidentiality of respondents and reduced researcher bias. Further, the ease of use of an online survey as well as having Deans send the request encouraged response rates.

The combination of the epistemology of this research as positivist (a scientific approach) with an ontological consideration to focus on objectivism (how the pharmacist works within without regard for social order) and to use a survey as a method worked well to gain closure regarding the research objective.

CHAPTER 5 : FINDINGS AND DISCUSSIONS

5.1 Introduction

In this chapter, I discuss the findings of the survey in response to the research question as to the extent that U.S. pharmacists are willing to fill ambiguous prescriptions or not fill prescriptions that are legal but may be morally offensive and the rationale behind those decisions.

As Chapter 2 suggests, there are two interwoven theories that underpin this study: pharmacists' ethical decision-making theory and criminological theory, one supporting the "how" of decision making, the other the "why" and which directly answer the research question. These theories and this research are also set in the background provided in Chapter 2 on the role pharmacists play in the health care ecosystem and precisely the role that payment only occurs upon dispensing products and not advice. One of the gaps that this research fills is that these theories are supported in the findings discussed in this chapter. Pharmacists do make decisions with the patient in mind and little else, supporting Veatch's pharmacist decision-making theory and the general strain theory is evident in why these decisions break the law. The strain, or unmet need is that there is little time or financial reward to make a legal decision.

General sample demographic characteristics are discussed and when possible, compared to national statistics regarding pharmacists. Then, each case is explored and statistics and discussion are presented that answer how many pharmacists (i.e., the extent) were willing to fill the ambiguous prescriptions presented in each case and the ethical typology associated with each case. Ethical typology and reasons, the frequency of ethical decision-making and demographic impacts of ethical decision making are also presented and discussed.

Next, the moral statements are discussed, as well as pertinent statistical findings, to ascertain similarity or disagreement among pharmacists regarding these moral statements. This section answers the part of the research question around pharmacists' willingness to not fill prescriptions that are morally offensive to the pharmacist, or commit acts that are morally offensive. Additional statistics and discussions are provided that are comparative analyses between the moral statements and demographics.

Finally, criminological theory is discussed as it applies to the rationale of the decision-making. Throughout, the findings from this study are compared to research from prior studies.

As each case is discussed, a summary of the case is presented in this chapter, but the actual cases and moral statements, as presented in the survey, can be found in Appendix E. Further, after the six reasons supplied in the survey to respond to the question: "What is your primary basis for your decision?" respondents could supply an open-ended "other" response. This allowed the respondent to state in their own words why an ethical decision was made. This "other decision" included useful and interesting details regarding motivations. It was determined that providing all responses to "other" decision be placed in Appendix G due to its length. In addition to the actual narrative in Appendix G, the results of the key work analysis are provided, including a word cloud. Throughout this chapter, representative statements are used to supplement the discussions of each case so as not to lose this rich narrative.

5.2 Assigning an Ethical Typology

Based on survey responses discussed in this chapter, the decision selected by the survey respondents were typed, as shown in Table 4. As the findings reflect, these typologies are incomplete and in any one individual may overlap.

1. Virtuous: if respondents made decisions based on professional judgement or training;
2. Deontologist: if respondents made decisions based on not wanting to violate the rules of their company, a PBM, or the state board; or
3. Consequentialist; if respondents made decisions based on the patient's interest or "other"

Table 4

Reasons for Decisions Tied to Ethical Typology

Reason for Decision	Ethical Decision Maker Typology
In the interest of the patient's health	Utilitarian/Consequentialist
To avoid legal or Board of Pharmacy Sanctions	Deontological
To avoid violation of a company rule	Deontological
To avoid violation of the Pharmacy Benefit Manager rule	Deontological
My professional judgement	Virtue
Training/Education[3]	Virtue
Other	Utilitarian/Consequentialist

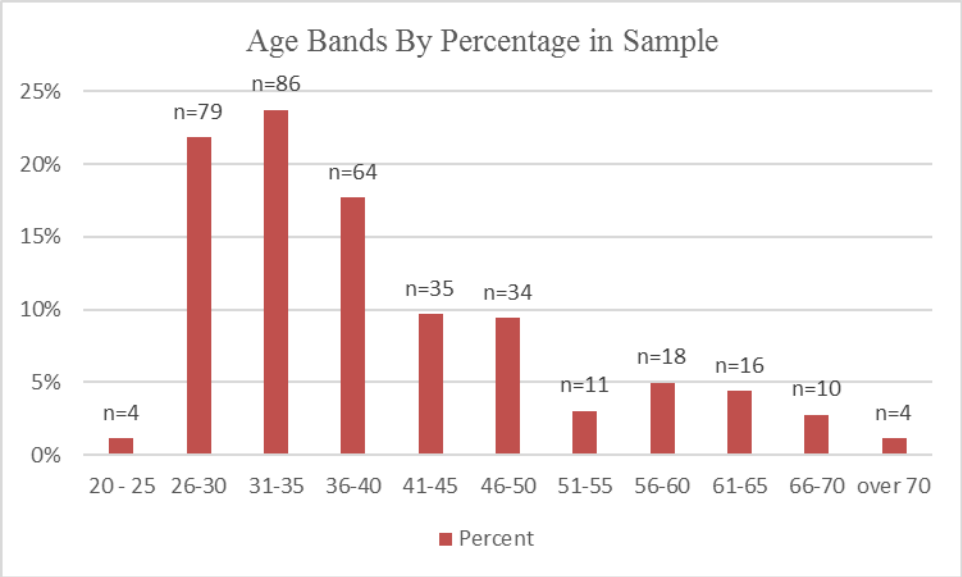
5.3 Survey Sample Characteristics

In terms of gender, the sample consisted of males (n = 130, 35.9%), females (n = 224, 61.9%), other/don't care to say (n = 6, 1.7%), and missing data (n = 2, .6%). Age was another characteristic captured for respondents. Figure 6.1 illustrates the age distribution of the sample respondents. The most predominant age group was ages 31 to 35 (n = 86, 23.8%).

[3] "Training" refers to an act of inculcating specific skills in a person. "Education" is gaining theoretical knowledge in the classroom or any institution. Training and education were terms not defined in the text as these are generally understood terms, meaning that education in this sense would be information learned from didactic or experiential formal education and that training would be considered continuing professional development (referred to in the United States as "continuing education") courses or corporate training.

Figure 5.1

Sample Age Distribution



An additional important statistic was to capture the practice settings in which the respondents worked. Most respondents worked in a retail pharmacy setting (n = 136, 37.6%), as depicted in Table 5.

Table 2

Sample Practice Settings

Practice Setting	Frequency	Percent
Compounding Pharmacy	5	1.4
Mail Order/Specialty Pharmacy	5	1.4
Long Term Care/Hospice Pharmacy	5	1.4
Consulting	6	1.7
Academia/Teaching Pharmacist	6	1.7
Pharmacy Benefit Manager	7	1.9
Managed Care/Insurance Company/HMO	13	3.6
Other	27	7.5
Independent Community/Retail Pharmacy	56	15.5
Hospital/Clinic Pharmacy	93	25.7
Chain Community/Retail Pharmacy	136	37.6
Subtotal	359	99.2
Missing	3	.8
Total	362	100.0

Statistics about the pharmacy profession are maintained by Data USA, a collaborative effort between Deloitte, Collective Learning, and Data Wheel (Data USA, 2019). Data USA reported that 56.8% of pharmacists are female, the average age is 41.9, and 60% (180,000 pharmacists of 300,000 pharmacists) are employed by retail pharmacies. These national statistics are compared to the survey sample in Table 6. The sample age was younger than the national age, perhaps because respondents were solicited from COPs and were more recent graduates than those reflected in national statistics.

Table 3

National Statistics Compared to Survey Statistics

	National Statistics	**Sample Statistics**
Gender	56.8% female	61.9% female
Age	41.9	31 to 35
Practice Setting	60% retail	53.1% retail

An additional sample descriptive statistic of note is that over half of the respondents (53.2%) were licensed as pharmacists within the last 10 years (n = 191). The mean years of practice for the sample respondents was 13.75 which purports a younger than average age in the survey compared to the national population and is of importance to the survey findings in that the findings are weighted in favour of younger respondents. (Refer to Appendix G for a detailed table of results.)

Only 70% of the sample respondents worked full-time, as reported in Table 7. As I review the cases and statements below, it is important to note that respondents are viewing these cases and statements in terms of full-time employment where cases would occur more frequently than if presented through part-time employment. Most pharmacists work full time, although about 1 in 5 worked part time in 2016 (ExploreHealthCareers.org, 2016). Because many pharmacies are open 24 hours, some pharmacists work nights and weekends

(ExploreHealthCareers.org, 2016). The 1 in 5 (20%) part-time pharmacists approximately match the survey results with 24.3% working less than 39 hours.

Table 4

Respondents' Weekly Work Hours

	Frequency	Percent
Retired/unemployed/not working by choice	15	4.1
Actively working less than 19 hours a week	9	2.5
Actively working between 20 to 39 hours a week	79	21.8
Actively working 40 or more hours a week	254	70.2
Total	357	98.6
Missing	5	1.4
Total	362	100.0

Respondents were represented in over 34 U.S. states with the most represented states as seen in Table 8. These states also correlate with the COPs that solicited respondents which were from Illinois, Arkansas, California and Massachusetts.

Table 5

Most Represented U.S. States for Survey Respondents

	Frequency	Percent
AR	121	33.4
IL	111	30.7
CA	29	8.0
MA	14	3.9
MI	12	3.3
TX	12	3.3
WI	10	2.8
AZ	9	2.5

The software package used for the survey, JISC Online Surveys, automatically reports the time the respondent starts and stops the survey. On average (mean), respondents spent 24 minutes, 18 seconds to complete the survey. The shortest amount of time was 3 minutes, 27 seconds, and the longest time to complete the survey was 10 hours, 24 minutes and 9 seconds. The survey was predicted to take 15 minutes; however, 34.5% of the sample took more than 15

minutes to complete the survey. Five participants took less than five minutes. These were not deleted assuming that respondents did not take the survey seriously because it was uncertain if the respondent read the survey, reflected on it and/or printed it out, exited, then went back in and quickly answered the survey.

In summary, the survey respondents were more female and younger than national averages. A majority of respondents worked full-time, although respondents worked less per week than expected with 21.8% working from 20– 39 hours a week. Respondents were also more recently graduated and licensed than national averages. While 34 U.S. states were represented, most respondents were from the same state as the COPs that solicited respondents. Nonetheless, the states represent a national and not regional footprint (e.g., Western, Midwest, Southern, North-eastern).

5.4 Case One

Case One involved the following situation:

A female patient visits your pharmacy at night and needs a refill on her birth control prescription, which she has been taking for 2 years. She has no refills remaining, the physician is unavailable, and she on a 6:00 am flight with her husband for a two-week trip out of the country. Assume you are in a state that does not allow emergency refills.

Of the respondents, 41.1% (n = 148) indicated that this type of situation arose in practice never, 33.9% (n = 122) indicated that it occurred once or twice a year. The results of the survey are that 49.4% of respondents (n = 177) would dispense the medication and 50.6% would not (n = 181). Of those who would not dispense, the most frequent reason was to avoid legal sanctions (n = 99), and of those who would dispense the medication, the most frequent reason was in the interest of the patient's health (n = 110). Table 9 illustrates the results.

Table 6

Case One, Reasons by Dispensing/Not Dispensing

Reason		Would you fill without an order: Not dispense the medication	Would you fill without an order: Dispense the medication	Total
Other	Frequency	9	2	11
	Percentage	81.8%	18.2%	100.0%
	Total	2.5%	0.6%	3.0%
Training/Education	Frequency	3	2	5
	Percentage	60.0%	40.0%	100.0%
	Total	0.8%	0.6%	1.4%
My professional judgement	Frequency	29	66	95
	Percentage	30.5%	69.5%	100.0%
	Total	8.1%	18.4%	26.5%
To avoid violating rules of the Pharmacy Benefit Manager	Frequency	19	0	19
	Percentage	100.0%	0.0%	100.0%
	Total	5.3%	0.0%	5.3%
To avoid violation a company rule	Frequency	15	0	15
	Percentage	100.0%	0.0%	100.0%
	Total	4.2%	0.0%	4.2%
To avoid legal or Board of Pharmacy sanctions	Frequency	100	1	100
	Percentage	99.0%	1.0%	100.0%
	Total	27.7%	0.3%	27.9%
In the interest of the patient's health	Frequency	3	110	113
	Percentage	2.7%	97.3%	100.0%
	Total	0.8%	30.7%	31.6%
Total	Frequency	178	181	359
	Percentage	49.5%	50.4%	100.0%
	Total	49.5%	50.4%	100.0%

As can be observed in Table 10 for this case, those respondents who would not dispense the medication were most often deontologists and those who would dispense, most likely utilitarian/consequentialists; however, overall, respondents' decisions were generally distributed

evenly over the type of decision maker they were in this case (virtue = 27.9%, deontological = 37.6% and util/consequentialists = 34.5%).

Table 7

Case One, Ethical Typology

			Would you fill without an order		Total
			Not dispense the medication	Dispense the medication	
	Virtue	Frequency	32	68	100
		Percentage	8.9%	18.9%	27.9%
	Deontological	Frequency	134	1	135
		Percentage	37.3%	0.3%	37.6%
	Util/Consequen	Frequency	12	112	124
		Percentage	3.3%	31.2%	34.5%
Total		Frequency	178	181	359
		Percentage	49.6%	50.4%	100.0%

Case One involved a patient's pressuring the pharmacist to provide a refill of a prescription when there were no refills left. Almost half of the survey respondents would fill the prescription without valid refills (n = 177, 49.4%). The ethical dilemma is a decision between providing what the patient is asking for and committing the crime of illegally filling an invalid or nonexistent order.

Pharmacists should not fill the prescription without a prescribed refill, as there may be medical reasons for the prescriber to have only written for the number of refills indicated and may have wanted to see the patient before prescribing more medication. Oral contraceptives are contraindicated for women over age 40, who are overweight, or smoke. According to Abood and Burns (2017), a pharmacy board would not regard this act as de minimis (see Appendix C).

Of those who would dispense the prescription, the majority (n = 110, 30.7%) indicated that they would do so because of the patient's health. However, the prescriber has access to the medical records to determine if filling the prescription is or is not in the patient's best health interest. The pharmacist does not have access to those records, and prescribing medication is outside the scope of what a pharmacist can do. These findings confirm Cooper's ethical passivity notion and favouritism to the patient, even if it may not really be in the best interest of the patient (Cooper et al., 2008).

The second most frequent reason for filling the invalid prescription was professional judgement. Professional judgement for the pharmacist is to determine if the drug is tolerable for the patient, not to diagnose the patient and prescribe. By exercising professional judgement beyond their scope, the pharmacist is overreaching into prescribing in allowing additional unauthorized refills.

In regard to ethical typologies, the case was evenly split between the three, with those that wanted to dispense as utilitarian (n = 112, 31.2%) and those that did not want to dispense as deontological (n = 134, 37.3%). Training was cited by only five out of 358 respondents.

Such cases as this occur from 7.4–9.8 times a year. While not the most frequent, it is an ethical dilemma that happens with some regularity.

Many of the survey respondents provided "rationale" in the "other" option. [4] Those that did not want to fill the medication knew that filling the prescription would be illegal and stated: "avoid legal/board repercussions", "many reasons exist, including state and federal laws, company laws, concern for patient's health etc. To fill a script without a valid prescription is illegal for many reasons" and "combination of legal and professional reasons". Some of the

[4] Note that rather than making multiple references, all "other" responses can be found in Appendix G.

respondents tried to find a work-around to the questions by filling, then contacting the prescriber at a later time, although it is not certain that the next day or days later such contact could be made. Those who did want to dispense could best be summed up by this comment:

> "Depends on the relationship I have with patient. I don't work retail pharmacy; however, if this was a patient that I was familiar with in terms of health aspect and the physician I had some familiarity with, I would give it. If this is a patient that I have no relationship with then absolutely not."

For those who did not want to fill the prescription, respondents blamed the patient for the problem: "Poor planning on your part does not justify an emergency on my part" and "patient needs to take responsibility for managing her care".

In summary, half of the respondents would fill an illegal prescription justifying the illegality of the situation, trying to find a work around, or finding some rationale to justify filing the medication. For those who would not fill, they blamed it on the patient's poor planning.

5.5 Case Two

Case Two involved the following situation:

A patient presents you with a prescription for Spondicin 20mg, a prescription only drug. As the patient is waiting for the prescription to be filled, the patient notices that Spondicin 10mg is available over the counter and asks you how can it be that one strength is prescription only and the other is over the counter. The patient wants to purchase double the quantity of the OTC medication which is less expensive than his co-pay through his company's insurance plan.

The results of the survey are that 78.5% of respondents (n = 274) would switch the medication to an over-the-counter drug and 21.5% would not (n = 75). Of the respondents, 28.6% (n = 103) indicated that this type of case has presented itself to them in practice never and

18.6% (n = 67) once or twice a year. Of those who would switch to the OTC drug, the most frequent reason was professional judgement (n = 130), and of those who would not switch, the most frequent reason was to avoid legal sanctions and professional judgement (both n = 21). Table 11 illustrates the results.

Table 8

Case Two, Switch to Over-the-Counter Drug

Reason		Switch without notifying MD		
		Switch	Not Switch	Total
Other	Frequency	51	7	58
	Percentage	87.9%	12.1%	100.0%
	Total	18.6%	9.3%	16.6%
Training/Education	Frequency	13	6	19
	Percentage	68.4%	31.6%	100.0%
	Total	4.7%	8.0%	5.4%
My professional judgement	Frequency	130	21	151
	Percentage	86.1%	13.9%	100.0%
	Total	47.4%	28.0%	43.3%
To avoid violating rules of the Pharmacy Benefit Manager	Frequency	0	8	8
	Percentage	0.0%	100.0%	100.0%
	Total	0.0%	10.7%	2.3%
To avoid violation a company rule	Frequency	0	4	4
	Percentage	0.0%	100.0%	100.0%
	Total	0.0%	5.3%	1.1%
To avoid legal or Board of Pharmacy sanctions	Frequency	1	21	22
	Percentage	4.5%	95.5%	100.0%
	Total	0.4%	28.0%	6.3%
In the interest of the patient's health	Frequency	79	8	87
	Percentage	90.8%	9.2%	100.0%
	Total	28.8%	10.7%	24.9%
Total	Frequency	274	75	349
	Percentage	78.5%	21.5%	100.0%
	Total	100.0%	100.0%	100.0%

As can be observed in Table 12, those respondents in this case who would not switch the medication were most often deontologists and those who would switch in this case, most likely virtue decision makers. In this case, less than 10% would be “follow the rules” deontological decision makers regardless of the decision made.

Table 9

Case Two, Ethical Typology

			Switch without notifying MD		Total
			Switch	Not Switch	
	Virtue	Frequency	143	27	170
		Percentage	41.0%	7.7%	48.7%
	Deontological	Frequency	1	33	34
		Percentage	0.3%	9.5%	9.7%
	Util/Consequen	Frequency	130	15	145
		Percentage	37.2%	4.3%	41.5%
Total		Frequency	274	75	349
		Percentage	78.5%	21.5%	100.0%

Case Two involved changing a prescription for Spondicin 20mg (prescription strength) to Spondicin 10mg (OTC strength). A majority of survey respondents would switch to the OTC version, specifically, 78.5% (n = 274). This case raises compliance issues and questions whether the patient will be able to follow the directions on the prescription when the labelled directions on the OTC drug differ from the prescriber's instructions. This case also involves profit motives. For an OTC product, the pharmacist (or pharmacy chain) would set the price and be able to reap all profits. As a prescription medication, the medication would be processed under the patient's insurance program, the price would be set by a PBM, and only a small profit would be realized. As reported in the survey, pharmacists strongly agreed that PBMs do not pay enough (M = 1.47, SD = .733).

While it is legal for a patient to purchase OTC medication, it is illegal for a pharmacist to fill a valid prescription with medication that is not the medication indicated on the order. Pharmacists are able to dispense a generic of the brand version of a drug under certain circumstances, but not switch the medication to an OTC version of the medication.

Many of the survey respondents who did not want to switch to an OTC medication realized this was illegal (n = 21, 95.5% of those not wanting to switch). Those who did want to switch indicated the rationale was "in the interest of the patient's health" (n = 79, 90.8% of those wanting to switch). But switching to an over-the-counter medication would have no better or worse outcome for the patient (the medication is the same with different dosing) so "in the case of the patient's health" is not a reasonable rationale for this situation. Training was cited as a reason for the decision infrequently (n = 19, 5.4%).

Unlike in Case One, respondents were for the most part either virtue ethicists or consequentialists. Only 9.7% were law abiding deontologists. This case or a case similar was also the most frequently occurring cases; this case occurred between 22.4 and 34.3 times a year.

Case Two generated the most (84) "other" responses of the five cases. Many of the "other" responses clarified concerns about patient health versus the patient's financial health. The "other" responses indicated: "best interest of the patient due to cost burden", "save the patient costs", and "in the interest of the patient's wallet, no point in needlessly paying more for medication".

Respondents also realized the illegality of what was being asked. One respondent indicated they "Would offer to fill the 20mg Rx to avoid acting outside the scope of my practice". Another indicated, "I would fill the original prescription, but inform the patient the OTC product would be cheaper for him. I would not change the prescription without authorization from the prescriber to protect from insurance audits".

Additional respondents realized that there was more profit for the pharmacy or pharmacy chain to fill the prescription as an OTC. Responses included, "Or in the interest of patient's out of pocket cost... especially when I worked for a corporation like Walmart. I wasn't as concerned

about our own bottom line," and, "Also insurance is probably paying for that strength and it would be more expensive to move (to) OTC".

Additionally, several of the respondents simply stated that they would not fill the prescription and would let the patient buy the OTC version. However, the prescriber should have been notified because unless notified, the physician has no idea the order was changed. Officially, the order should have been cancelled by the prescriber. Several respondents did realize that the case needed to be discussed with the physician. "I would not fill the prescription, I would council the patient to purchase the Spondocin over the counter, take 2 of the 10mg and inform the prescriber". Yet other respondents left it to the patient to discuss with the prescriber: "Dispense as written initially then tell patient to discuss changing to OTC product with his doctor".

To summarise this case, a majority would have filled the OTC due to the patient's financial well-being (although some did realise this was not actually in the patient's financial well-being if "insurance" covered the medication rather than the patient's paying the whole cost). Few realised the need to contact the prescriber to change the medication, and some delegated the conversation to the patient. The findings of this case, where profit is overridden for patient care, aligns with Kruijtbosch where pharmacists reflected on profits over or on the decision to deliver additional care activities that are not reimbursed (Kruijtbosch et al., 2019).

5.6 Case Three

Case Three involved the following situation:

It is late at night and a patient presents a prescription for Enbrel. The weekly injection is overdue by a few days. The patient has been taking Enbrel for many years with no adverse side effects. However, when the prescription is sent to the pharmacy benefit manager, the message

returned is the medication requires a Prior Authorization. The physician is not available, and the physician's office cannot be reached. The patient insists on obtaining the medication. You complete the Prior Authorization form for the physician and send the signed form to the Pharmacy Benefit Manager so that the prescription will adjudicate, and plan to contact the physician the next day to advise the physician.

The results of the survey are that 28.2% of respondents (n = 100) would complete the form with a forged signature and submit the form so that the claim can be processed and 71.8% would not (n = 255). Of the respondents, 48.6% (n = 173) indicated that this type of case has presented itself to them in practice never and 18.3% (n = 66) once or twice a year. Of those who would complete the form (n = 100), the most common reason was patient health (n = 70), and of those who would not complete the form, the most frequent reason was to avoid violation of PBM rules sanctions (n = 83). Table 13 illustrates the results.

Table 10

Case Three, Complete and Sign a PA Form

Reasons		Would you complete and sign a PA: Not complete and sign the form	Would you complete and sign a PA: Complete and sign the form	Total
Other	Frequency	29	9	38
	Percentage	76.3%	23.7%	100.0%
	Total	11.4%	9.0%	10.7%
Training/Education	Frequency	4	3	7
	Percentage	57.1%	42.9%	100.0%
	Total	1.6%	3.0%	2.0%
My professional judgement	Frequency	43	13	56
	Percentage	76.8%	23.2%	100.0%
	Total	16.9%	13.0%	15.8%
To avoid violating rules of the Pharmacy Benefit Manager	Frequency	83	3	86
	Percentage	96.5%	3.5%	100.0%
	Total	32.5%	3.0%	24.2%
To avoid violation a company rule	Frequency	21	1	22
	Percentage	95.5%	4.5%	100.0%
	Total	8.2%	1.0%	6.2%
To avoid legal or Board of Pharmacy sanctions	Frequency	74	1	75
	Percentage	98.7%	1.3%	100.0%
	Total	29.0%	1.0%	21.1%
In the interest of the patient's health	Frequency	1	70	71
	Percentage	1.4%	98.6%	100.0%
	Total	0.4%	70.0%	20.0%
Total	Frequency	255	100	355
	Percentage	71.8%	28.2%	100.0%
	Total	100.0%	100.0%	100.0%

As can be observed in the following table, those respondents in this case who would not complete the form were most frequently deontologists (50.5%, n = 178), and those who would complete the form in this case were most frequently utilitarian/consequentialists 22.5%, n = 80) decision-makers. For this case, a little over half (51.4%) were deontological decision makers.

Table 11

Case Three, Ethical Typology

			Would you complete and sign a PA		Total
			Not complete and sign the form	Complete and sign the form	
	Virtue	Frequency	47	16	63
		Percentage	13.2%	4.5%	17.7%
	Deontological	Frequency	178	5	183
		Percentage	50.0%	1.4%	51.4%
	Util/Consequen	Frequency	30	80	110
		Percentage	8.4%	22.5%	30.9%
Total		Frequency	255	101	356
		Percentage	71.6%	28.4%	100.0%

Case Three involved completing a Prior Authorization form and forging the signature of the provider. With the advent of very expensive medications, a prior authorization approval process has been implemented by health plans. The purpose of this process is for the insurance company (or its PBM) to discuss with the prescriber if all lesser cost medication options have been considered and if the patient meets the qualifications for the medication to work properly (i.e., correct genotype in the case of Hepatitis C medication or if the disease is sufficiently progressed in the case of multiple sclerosis therapy). Only a physician or a physician's authorized representative can sign these forms as only the physician has the complete medical history available for review. However, prior authorization programs work by stopping the prescription at the time of dispensing. The pharmacists must then notify the physician to call the insurance company or PBM to complete the form and have the PBM override the denial. It would be expedient to have the pharmacist simply complete the form while the patient is waiting

for the medication to be filled, but it is outside the scope of a pharmacists' duties to determine if the patient has met the criteria. Further, forging a signature is illegal no matter what the situation.

In the survey, 28.2% (n = 100) of the respondents indicated that they would complete the form, including signing the physician's name. For those who would complete the form, 98.6% (n = 70) indicated it was in the patient's health. However, drugs requiring prior authorization often have severe side effects. The drug in the example, Enbrel, has a side effect of lymphoma. Therefore, if the patient has not exhausted other options with less severe side effect issues, it would not be in the patient's health interest to take the medication. Also, because these drugs are expensive, the patient may be out a significant copay and there could be less costly therapy available, it would benefit the patient financially to consider alternatives. Not surprisingly, of the respondents who did not want to sign the form, the reason stated was to not violate the PBM rules. Only seven respondents (2.0%) gave the reason for either completing the form or not as "training/education".

The most common ethical typology for those that did not want to complete the form was deontologists, and the most common typology for those that did was consequentialist. The case like this occurred 17.6–23.5 times a year, the second most frequent.

The "other" response was revealing in this case. Most of the respondents realized forgery is a crime and completing the form would be unethical: "Professionally and legally cannot be completed without up-to-date information documented by the physician". "This is highly unethical as it involves potential forgery if the physician cannot be reached or the prescriber has suddenly passed away" and "I would never forge a document on behalf of a physician". In addition, pharmacists recognized that signing the form would be committing fraud: "We fax the

prior authorization form. We can't fill it out for the Dr nor do we contact the insurance. To do that would be fraud".

One respondent had no idea what to do in this case: "Never been in that situation not sure 100% what I would do". It would seem fairly obvious what to do in this situation although this particular respondent appeared to be confused and struggled with an answer. Another response was "Frustrated", also indicating that the respondent struggled with what to do.

For those that believed that completing the form was acceptable, typical comments were: "I would complete the PA form if allowed by the PBM. Most forms need to be signed by the provider, however in this scenario I would do what I can do to take care of my patient". Several respondents believed that signing the form was acceptable if the physician would later corroborate the decision: "If had relationship with physician" and "Actions would depend on relationship previously established with prescriber; based on that relationship would make decision to complete or not complete prior authorization" and "I would only do the above IF I know the patient AND the MD very well".

In summary, many respondents realized it was unethical to complete the form, but 28.2% did not and attempted to rationalise completing the form if the physician would later "back them up". This role conflict of beneficent and non-maleficence roles is discussed (and confirmed herein) in Wright et al.'s work (2019).

Rationalisation also included that it might be best for the patient although clearly if a drug could potentially harm a patient, no amount of expediency would be beneficial to the patient. Because prior authorization approvals disrupt the dispensing flow at the pharmacy, this comment represents the anger and frustration voiced by pharmacists when there is an impediment in the dispensing process:

"I make it a point to let the patient know that my primary focus is to be able to fill and provide the medication for them, but their insurance plan/PBM is not allowing me to do this. The patient, employers, and payors must understand that these decisions are based upon monetary gain for the PBM and in no way have the patient's best interest in mind. Denying payment, setting up closed formularies, and shuffling business away to specialty pharmacies are a detriment to our profession and until patients and payors suffer and have had enough--nothing will ever change".

5.7 Case Four

Case Four involved the following situation:

A patient presents you a complete and accurately written prescription by a dentist for Lisinopril.

The survey results were that 88.1% (n = 311) would not fill the Lisinopril prescription and 11.9% would fill the invalid prescription (n = 42). Of the respondents, 56.9% (n = 204) and 36.5% (n = 131) indicated that the case has presented itself to them in practice never or once or twice a year, respectively. The most common reason to fill and not fill the prescription was professional judgement. Of those who would not fill (n = 142) and those who would fill (n = 24) stated professional judgement as the reason to fill. Table 15 illustrates the results.

Table 12

Case Four, Fill an Out-of-Scope Prescription

Reason		Would you fill an out-of-scope Rx: Do not fill the prescription	Would you fill an out-of-scope Rx: Fill the prescription	Total
Other	Frequency	25	6	31
	Percentage	80.6%	19.4%	100.0%
	Total	8.0%	14.3%	8.8%
Training/Education	Frequency	23	1	24
	Percentage	95.8%	4.2%	100.0%
	Total	7.4%	2.4%	6.8%
My professional judgement	Frequency	142	24	166
	Percentage	85.5%	14.5%	100.0%
	Total	45.7%	57.1%	47.0%
To avoid violating rules of the Pharmacy Benefit Manager	Frequency	10	0	10
	Percentage	100.0%	0.0%	100.0%
	Total	3.2%	0.0%	2.8%
To avoid violation a company rule	Frequency	3	0	3
	Percentage	100.0%	0.0%	100.0%
	Total	1.0%	0.0%	0.8%
To avoid legal or Board of Pharmacy sanctions	Frequency	80	0	80
	Percentage	100.0%	0.0%	100.0%
	Total	25.7%	0.0%	22.7%
In the interest of the patient's health	Frequency	28	11	39
	Percentage	71.8%	28.2%	100.0%
	Total	9.0%	26.2%	11.0%
Total	Frequency	311	42	353
	Percentage	88.1%	11.9%	100.0%
	Total	100.0%	100.0%	100.0%

As can be observed in the following Table, those respondents' decisions in this case who would fill outside the scope were virtue ethical typology (7.1%, n = 25) and those who did not want to fill the prescription were also virtue decision makers (46.9%, n = 166), with slightly over half (54.0%) virtue decision makers in this case regardless of the decision made.

Table 13

Case Four, Ethical Typology

		Would you fill an out-of-scope Rx		Total
		Do not fill the prescription	Fill the prescription	
Virtue	Frequency	166	25	191
	Percentage	46.9%	7.1%	54.0%
Deontological	Frequency	93	0	93
	Percentage	26.3%	0.0%	26.3%
Util/Consequen	Frequency	53	17	70
	Percentage	15.0%	4.8%	19.8%
Total	Frequency	312	42	354
	Percentage	88.1%	11.9%	100.0%

Case Four involved a dentist writing a prescription for blood pressure medication (Lisinopril), which was an illegal and out-of-scope prescription. A majority of respondents (88.1%, n = 311) would not have filled the prescription although 11.9% would have filled the prescription. Interestingly, those who would not fill the prescription did so because of professional judgement. However, there was no professional judgement to be exercised. Professional judgement would have been an appropriate response if the medication had not been suitable for the patient (i.e., the pharmacist observed that the patient did not have the correct storage facilities, or could not swallow it, or in some other way the prescribed medication did not meet the patient's needs). The correct response would have been "to avoid legal sanctions" as the prescription was an invalid prescription. The most common reason stated for those who would have filled the prescription was that it was in the best interest of the patient's health. As stated

above, the pharmacist does not have access to the patient's medical records to determine if the medication is or is not in the patient's health interests.

Many respondents indicated in the "other" section that they would contact the dentist to determine why the prescription was written, many involving neutralisation or rationalisation of the situation, as described in the above cases. "Other" comments included: "I would be willing to fill this if the patient had been on the dose previously and the dentist felt it should be continued until they saw their PCP" and "I know that the mouth can tell a lot about a patient's overall health, and if the patient had a history of HTN or heart issues, I'd assume the dentist was a friend, family member, or just concerned about the patient". Some of the respondents would go out of their way to fill this relatively inexpensive prescription: "I may also perform a lit search about Lisinopril or HTN meds and dentistry to gain further insight into why they may be prescribing the drug".

This case did not happen very often in respondents' practices, only once or twice a year.

This case also strongly favours the patient over filling an illegally written prescription and supports resolving ethical dilemmas by a mode of ethical passivity discussed by Cooper (2006) and Rohraff (2010) who concluded that health care leaders make ethical decisions in a passive manner relying on themselves rather than a formal decision-making process, which would favour the law in this case.

5.8 Case Five

Case Five involved the following situation:

You recently graduated from Pharmacy School and are delighted to be employed by Super Compounding Pharmacy, Inc. so that you may begin to pay off your student loans. Your job is to supervise a group of technicians who are compounding ketamine and gel. You notice

that based on your calculations and the physician's orders, the technicians do not need as much ketamine as you anticipated. When you ask one of the technicians, she mentions that she was told by the owner, your new boss, to reduce the amount of ketamine in the compound. She also tells you that your predecessor was terminated over some dispute regarding compounding issues.

The survey results were that 95.7% (n = 336) would confront the boss at the risk of losing the job. However, 4.3% (n = 15) would look the other way and not confront the boss and allow the technicians to fill the shorted ketamine prescriptions. Of the respondents, 95.6% (n = 344) and 3.9% (n = 14) indicated that this situation had never happened or happened once or twice a year, respectively. Two respondents indicated this situation had occurred in their practices once or twice a month (n = 1) or once or twice a day (n = 1). The most frequent reason to confront the boss about the short fills (28.9%, n = 97) and not confront the boss about the short fills (33.3%, n = 5) was professional judgement. Table 17 illustrates the results.

Table 14

Case Five, Condone Short Filling Prescriptions

Reasons		Would you agree to short filling: Confront boss, not condone short filling	Would you agree to short filling: Condone short filling	Total
Other	Frequency	17	3	20
	Percentage	85.0%	15.0%	100.0%
	Total	5.1%	20.0%	5.7%
Training/Education	Frequency	12	0	12
	Percentage	100.0%	0.0%	100.0%
	Total	3.6%	0.0%	3.4%
My professional judgement	Frequency	97	5	102
	Percentage	95.1%	4.9%	100.0%
	Total	28.9%	33.3%	29.1%
To avoid violating rules of the Pharmacy Benefit Manager	Frequency	3	1	4
	Percentage	75.0%	25.0%	100.0%
	Total	0.9%	6.7%	1.1%
To avoid violation a company rule	Frequency	1	1	2
	Percentage	50.0%	50.0%	100.0%
	Total	0.3%	6.7%	0.6%
To avoid legal or Board of Pharmacy sanctions	Frequency	119	1	120
	Percentage	99.2%	0.8%	100.0%
	Total	35.4%	6.7%	34.2%
In the interest of the patient's health	Frequency	87	4	91
	Percentage	95.6%	4.4%	100.0%
	Total	25.9%	26.7%	25.9%
Total	Frequency	336	15	351
	Percentage	95.7%	4.3%	100.0%
	Total	100.0%	100.0%	100.0%

In this most egregious situation, most of the respondents would confront the boss and not look the other way (95.7%), but surprisingly 4.3% would not confront this situation. Nonetheless, the respondents' decisions in this case were almost equally distributed as to the types of decision makers they were regardless of the decision made.

Table 15

Case Five, Ethical Typology

		Would you agree to short filling		Total
		Confront boss, not condone short filling	Condone short filling	
Virtue	Frequency	110	5	115
	Percentage	31.3%	1.4%	32.7%
Deontological	Frequency	123	3	126
	Percentage	34.9%	0.9%	35.8%
Util/Consequen	Frequency	104	7	111
	Percentage	29.5%	1.9%	31.5%
Total	Frequency	337	15	352
	Percentage	95.7%	4.3%	100.0%

Case Five presents the challenge of the pharmacist's own financial difficulties conflicted with observed dilution of compounding drugs involving Ketamine, a compound that induces schizophrenia in humans (Stone et al., 2012). There were many situations in this last case to express concern about, and it was no wonder that very few respondents believed it appropriate to look the other way at a really inappropriate situation. This situation was presented as it closely resembled situations discussed in the Robert Courtney situation where compounded drugs were diluted.

While a vast majority of the respondents would not look the other way to such a practice, 4.3% (n = 15) would look the other way and allow technicians to mass produce a diluted version of a Ketamine compound (known as short-filling).

According to respondents, this type of case was presented very infrequently. Many respondents cited professional judgement and "in the patient's best health interest" as to not condone the situation although the correct response is that everything described in this case is illegal – filling bulk prescriptions of compound drugs (Abood & Burns, 2017, p. 160), filling

Ketamine as a topical compound, short filling the Ketamine prescriptions. Only 36.8% of the respondents cited “to avoid legal or Board sanctions” as a reason for not overlooking the situation.

One respondent accurately stated: “Ketamine is a controlled drug with a potential for abuse. It is unethical and illegal to reduce the amount in the prescription”.

Of the 15 respondents who would look away at this situation, younger pharmacists were more willing to look the other way. The case was developed specifically to trade off repayment of student loans versus getting fired and being unable to repay loans, and the issue was more on point with recent graduates.

Two of the 15 respondents who would look the other way provided “other” comments. These were:

Neither choice is a complete answer for what I would do. I would contact the physician to explain the situation and give them a chance to cancel their order if the change was unacceptable before the prescription was compounded. I would be afraid of doing something that would surely put my job at risk (since the last pharmacist was fired for sticking to the exact specifications of a similar prescription), but I would not give out a prescription that may be ineffective at treating a patient's condition. I would first confirm with the doctor that the lower strength prescription would be effective, and if it would not, I would give him/her a chance to order the product that the patient needs from somewhere else. I realize that creating an opportunity to lose a customer might also get me in trouble, but the risk is outweighed by my professional judgement and code of ethics, and “Lack of self confidence. Maybe I’m wrong in my calculations”.

These comments are revealing. The first long comment represents some rationalisation (neutralisation) of what was going on (“confirm that the lower strength would be effective”). The

respondent also wanted to push the decision away by having the patient "order the product somewhere else". The second comment reflects that even after graduating from pharmacy school and being a practicing pharmacist, the pharmacist might think that they are not competent enough to be able to accurately calculate the ingredients needed to formulate a compound. This case provides an excellent example of the fraud triangle. Unpaid student loans provide the motive (nonsharable financial need); means is provided that the situation is being "approved of" by the owner of the pharmacy and opportunity is that the pharmacist has been put into a position of trust. Fortunately, a majority of the respondents would not condone the situation although a small portion would. Even a small portion is a concern. Training was provided as a decision-making reason for only 12 respondents (3.4%).

5.9 Ethical Typologies and Reasons for Decision-Making

Combining Tables 9, 11, 13, 15 and 17 for the number of decisions that involved proceeding illegally was 612 (35.2%) decisions and 1,125 (64.7%) would not have proceeded illegally out of a total of 1,737 responses.

In regard to the ethical typology of the decision of the respondents, Table 19 depicts the difference of ethical types among the respondents. Given all respondents, for all five cases, there is not a predominant type of ethical decision maker and in fact, respondents' decisions were almost evenly divided among the three types of ethical decision-making. Out of the 362 respondents, 2 did not provide reasons, leaving 360 respondents who provided one or all 5 reasons. Of those, 17 (4.5%) were the same ethical typology for all five cases, 18 respondents had one or more reasons missing (5.0%). Of the 360 respondents, 144 (40%) were two typologies and 199 (55.2%) were all three typologies. This finding is important. It means that a vast majority of the respondents did not align as a single typology and looked at each case and

determined how they would proceed based on the facts presented. This purports to Teagarden's statement (2003) that pharmacists can be many ethical types. This finding also supports Veatch's model and theoretical framework that pharmacists evaluate situations on a case-by-case basis (2017, p. 15).

Table 16

Respondent Ethical Typologies for All Decisions

	Virtue	Deontologists	Util/Consequentialist	Total for all Decisions
Number of Ethical Typologies	638	570	567	1,775
Percentages	35.9%	32.1%	31.9%	

Table 20 illustrates the various combinations that each respondent selected. Ten respondents selected a Utilitarian decision in Case One, Virtue in Case Two, Deontologist in Case Three, Virtue in Case Four and Deontologist in Case Five as depicted by the combination below of UVDVD. Nine respondents had either the DVDUU or VVVVV combination. These findings also show how very different each respondent was and that respondents themselves did not have similar ethical typologies.

Table 17

Unique Combinations of Ethical Typologies

Frequency	Combination
10	UVDVD
9	DVDUU,VVVVV
7	DUDDD,DUDVV,DVUVU
6	DDDDD,DUDDV,DUDVU,DVVVV,UUUVU,VUVVV
5	UUDVV,UUUVD,UVDDV,UVUVD,VUDVD,VUDVU,VVUVV
4	DUDDU,DUUVV,DVDVU,DVDVV,UUUVV,UVDDU,UVDVU,UVUDD,UVUUD VUUUD,VUUUD,VVDVV,VVVVU
321	Remainder of Combinations
362	Total

While it was important to analyse the ethical typologies, it was also important to review the reasons associated with ethical decision-making. "Training" and "Company Rules" were not an important factor in decision-making, whereas, professional judgement was the most common reason. This finding supports other research (Deans, 2007, Cooper, 2006) that pharmacists rely on their own moral compass rather than company policy or rules or educational training in making ethical decisions. Ironically, as stated, professional judgement was not called for in the cases presented.

Table 18

Reasons for Decisions in Case Studies

	Frequency	Percent
Other	166	9.4%
Training/Education	67	3.8%
My professional judgement	571	32.2%
To avoid violating rules of the Pharmacy Benefit Manager	127	7.2%
To avoid violation a company rule	46	2.6%
To avoid legal or Board of Pharmacy sanctions	397	22.4%
In the interest of the patient's health	401	22.6%
Total	1,775	100.0%

"Other" was an optional reason and in many cases was used to further rationalise the decision. A complete listing of all the "other" responses can be found in Appendix H, by case.

An inductive content analysis revealed, shown in the below table, that the most common word was "patient."[5] Inductive content analysis allows researchers to systematically and objectively describe research phenomena at the theoretical level. Content analysis can be applied to various types of documents (interview transcripts, speeches, even images) and is used to create concepts, categories, and themes, which can be extended to create models, conceptual structures and conceptual maps that describe the subject under study (Elo & Kyngäs, 2008). This is an important analysis in that it supports Veatch's ethical framework that pharmacists favour the patient above all else in the decision-making process (Veatch, et al., 2017) and that pharmacists do pursue a five-step decision-making process as described by Veatch (Veatch, et al., 2017, p. 20):

[5] In inductive content analysis, "small" words were eliminated such as a, an, and, are, as, at, be, but by, can, do does, for from, had, has, have, he, her, him, his, I, I'd, I'll, I'm, if in, is, it, my, of, on, or, so, then, that, the, there them, then, they, this, to, was, we, were, what, will, with, would, you, your. This is recommended in NVivo, a software package using for keyword analysis and can be found at https://help-nv10.qsrinternational.com/desktop/procedures/run_a_word_frequency_query.htm#:~:text=Limit%20the%20number%20of%20words,to%20group%20related%20words%20together.

Table 19

Inductive Content Analysis of the "Other" Response

Word	Count
patient	127
not	112
otc	55
fill	48
prescription	40
rx	37
dentist	33
scope	30
practice	30
medication	29
Call	28
out	25
more	23
PA	22
no	20
could	20
take	18
get	18
prescriber	17
MD	17
Remaining words	2,125
Total	3,674

Case One: In general, the respondents wanted to call the physician to get permission or would call the physician the next morning after filling the prescription. However, the case stated the physician was unavailable. It can be concluded that respondents recognized the dilemma but chose to fill the prescription nonetheless.

Case Two: This case elicited the most "other" responses. In general, most respondents believed it was in the best financial interest of the patient to fill the OTC version; a few recognized that filling the prescription for OTC was changing the original order ("I might

recommend patient purchase OTC medication; would not change medication and dispense as RX".).

Case Three: This case elicited a dichotomy of responses. Many responses were in favour of completing the form ("Unfortunately, it's more important to keep the pharmacy out of financial jeopardy than delaying this particular treatment for another couple of days. Keeping the pharmacy open is, itself, patient care".). However, many of the respondents realized signing someone else's name was forgery and that this was fraud ("I feel I would be committing fraud by filling out a form intended for the physician", "I would not perpetrate a fraud on the company and doing so at the least could result in hundreds of lost dollars and suspension from the plan".).

Case Four: Most respondents would have called the physician prior to dispensing ("I would want to know why. It may be a relative or it may be needed for dental reasons".)

Case Five: Clearly, most of the respondents realized this was a most egregious situation ("It is better to lose your job than to lose your license and spend time in prison".). However, one respondent who was willing to look the other way in this egregious situation stated, "Determine that the more experienced technicians are filling the prescriptions correctly since there has been no patient complaints or harm". Another respondent stated, "Fear of defaulting on your loans" meaning that the respondent would look the other way because he was in fear of defaulting on loans/losing his job.

Training and education are an important mitigation factors for poor or illegal ethical decision-making (Valentine and Fleischman, 2004). It is concerning since training is so widely used to offset bad decision making (Chen et al., 1997; Izzo, 2000; Loe and Weeks, 2000; Minkes et al., 1999; Ponemon, 1996; Sims, 1991 in Valentine and Fleischman, 2004) and that the study results showed training as the least frequent reason. Therefore, I made a cross-tabulation table to

ascertain if training had any significance in the decision to fill or not compared to all other decisions. A chi-square test for independence was used with Yates' continuity correction for each case. The detailed results can be found in Appendix I. In each case, a chi-squared test for independence indicated no significant association between training and the decision to dispense or not to dispense in each case, Case One χ^2, (1, n = 358) = .01, p = .98, phi = .02, Case Two χ^2, (1, n = 349) = .66, p = .42, phi = -.06, Case Three χ^2, (1, n = 355) = .20, p = .65, phi = -.05, Case Four χ^2, (1, n = 353) = .78, p = .38, phi = .06, and Case Five χ^2, (1, n = 351) = .01, p = .98, phi = .04.

5.10 The Frequency of Ethical Decision-Making

As seen in the headline cases discussed in Chapter 1, impact of bad decision-making can be severe. The frequency of each case was queried to determine if the respondents were frequently confronted with ethical dilemmas. In total, over half of the types of cases or similar situations never happen to respondents. However, 45.9% (n = 826) of the respondents recognized that a similar ethical dilemma had occurred to them and indicated the frequency in which it happened. This finding supports Cooper's finding (2006) as to the ethical passivity of pharmacists. Pharmacists may not even see an opportunity to make an ethical decision. These findings, shown in the below Table, also support the Veatch et al. (2017) position that, "Pharmacists and other health care professionals often go through the process of determining the correct action in a specific case unconsciously" (p. 19).

Table 20

Frequency of Pharmacoethical Decisions

	Frequency	Percent
Never	972	54.1%
Once or twice a year	400	22.2%
Once or twice a month	263	14.6%
Once or twice a week	124	6.9%
At least once a day	39	2.2%
Total	1,798	100.0%

In the survey, responses to the frequency of these or similar ethical dilemmas occurring in respondents' practice were presented in a range within a time period (once or twice a year, once or twice a month, or once or twice a week). Therefore, range was calculated as a minimum number of occurrences (once a year) and a maximum (twice a year) to obtain an annual average of the ethical dilemma occurrences. Responses were converted for each of these categories so that the minimum (once a year) was converted to 1, twice a year was converted to 2, once a month to 12, twice a month to 24, once a week to 52, twice a week to 104 and once a day to 200 (which represents the number of work days in a year). If the response were "never", the response was converted to 0. For all five cases, 78 respondents consistently indicated these types or similar moral dilemmas never occurred in practice. By employing this methodology, the 972 "never" responses were properly accounted for (including the 78 respondents who had never faced any of the ethical dilemmas similar to the ones in the survey). Results of this analysis are that these or similar ethical dilemmas occurred at least 49.2 times a year at a minimum and at a high end, 76.8 times a year. Table 24 below illustrates the results.

Table 21

Annualised Occurrences of Ethical Dilemmas

Average Frequency for All Respondents	Minimum	Maximum
Case One	7.4	9.8
Case Two	22.4	34.3
Case Three	17.6	23.5
Case Four	1.5	2.4
Case Five	0.3	0.6
All Cases, All Respondents	49.2	76.8

Further analysis of the frequencies was performed to determine which case occurred most frequently and which cases had the most variance in terms of frequency. To obtain a numerical mean, frequencies were transformed in SPSS to Never = 1, Once or Twice a Year = 2, Once or Twice a Month = 3, Once or Twice a Week = 4 and At Least Once a Day = 5. Case Two, switching a brand drug to over-the-counter drug, occurred most frequently, and condoning short fills (Case Five) occurred least frequently. Respondents had the least variance in Case Five, expressed in the standard deviation (M = 1.06, SD = .303). The most variance was in Case Three (M = 2.06, SD = 1.232). Table 25 illustrates the results.

Table 22

Ethical Dilemma Frequency Variance by Case

	Case One - Filled without an order	Case Two - Switch order to OTC	Case Three - Complete and sign a PA form	Case Four - Filling an out-of-scope Rx	Case Five – Condoning shorting fills
Valid	360	360	360	358	360
Missing	2	2	2	4	2
Mean	1.90	2.53	2.06	1.50	1.06
Std. Deviation (SD)	.935	1.215	1.232	.643	.303
Variance (K)	.874	1.476	1.518	.413	.092

5.11 Demographic Effects on Ethical Decision-Making

One last analysis was performed to determine if certain characteristics had an impact on whether or not to fill the prescription and act illegally. Table 26 depicts the findings. As observed, gender has almost no differential in the mean findings. However, pharmacists who had been on the job longer were more apt to dispense the medication (act illegally) in Cases One, Three and Four. However, pharmacists with more year on the job were not apt to "look the other way" when it came to dispensing illegal compounds (Case Five).

Table 23

Comparison of Demographic Characteristics on Dispensing Decisions

	Characteristics Mean	
	Gender*	Years as a Pharmacist
Case One		
-Not dispense	1.4	10.6
-Dispense	1.4	16.3
Case Two		
-Not dispense	1.4	13.4
-Dispense	1.4	13.0
Case Three		
-Not dispense	1.3	13.3
-Dispense	1.3	14.3
Case Four		
-Not dispense	1.3	13.2
-Dispense	1.4	16.3
Case Five		
-Not dispense	1.3	13.7
-Dispense	1.5	11.0

* Gender stated as Females = 1, Males = 2

5.12 Moral Statements Findings and Ethical Agency

While the case studies were aimed at filing illegal prescriptions, the survey also contained 21 statements whereby respondents where provided the opportunity to strongly agree, agree, disagree, or strongly disagree with the statement on a Likert-type scale. These statements all involved some aspect of the practice of pharmacy or moral implications such as breaching patient confidentiality, dispensing abortifacients, dispensing end-of-life medications and duping patients by dispensing placebos without informing the patient. The question being asked in this part of the survey was that were pharmacists willing to not dispense certain medications or act in a way that placed the pharmacists' moral compass before the patient or the law. If pharmacists are involved themselves in illegal acts, or if patients are treated in a way that is inconsistent and in conflict with the Code of Ethics of the American Pharmaceutical Association (see Appendix

A), the effect is a diminishing of professionalism in pharmacy (Deans, 2007, p. 234). I refer to this issue as "ethical agency", that is which entity has agency in determining the moral debate, the patient or the pharmacist.

In exploring ethical agency, the aim in answering the research question was not to simply determine if moral situations are resolved, but to understand how these moral situations cause distress to patients. In other words, putting pharmacists' moral compasses in front of patient needs demeans the profession and the professional code of ethics. Deans (2007, p. 234) summarises the ethical agency issue as follows:

> "I ask why pharmacy tends to privilege decisions to carry out wrong actions that are made on the basis of incorrect metaphysical beliefs and values shared by the profession, over decisions to carry out wrong actions made in good faith on the basis of correct metaphysical and scientific beliefs, based on values that are not shared by the profession. I conclude that three conditions must be satisfied for a conscientious objection to stand:
>
> 1) The distress caused to the pharmacist must outweigh the harm or wrong to the Patient, or the rights of the patient. The relationship between the pharmacist and the patient is unequal, and the measure of distress must be of considerable magnitude to outweigh the harm or wrong to the patient, or the rights of the patient.
>
> 2) The conscientious objection must be based on core values of the profession.
>
> 3) There must be epistemic barriers to knowing the objective answer."

Cooper found some community pharmacists felt a conflict between the pressure to sell goods, best clinical practice, and the patient's independent choice (Cooper, 2006, p. 156-157). Both Deans (2007) and Cooper (2006) contend that moral conflicts between patient and

pharmacist must be resolved in favour of the patient, unless there is significant harm to the patient. These types of debates have also been held in the United States, as discussed in Chapter 2, involving Rachel Peterson who was "humiliated" when a pharmacist did not fill an abortifacient (Porter, 2018, para. 4). Ultimately, the pharmacy chain Meijer's was forced to implement policies that resolved these situations with the least amount of shaming to patients (Chicklas, 2019).

5.13 Moral Statement Agreements and Disagreements

Table 27 is a summary of the mean and standard deviation of respondent's results regarding these statements. Respondents most strongly agreed most that they would turn in a colleague who was acting illegally and most strongly disagreed that they would not reverse a prescription that was not picked up. The greatest standard deviation (i.e., where respondents agreed or disagreed less consistently) concerned the acceptability of filling a placebo and assigning a price for an ineffective drug. Respondents most disagreed with the statements that it is a waste of time to return drugs to stock and reprocess (reverse) the claim, that unopened medication should be returned to stock, and that PBMs pay enough for the work done by pharmacists. The most variance in the responses (indicated by the standard deviation to the mean) was that filling a placebo is acceptable (SD = .939), breaching confidentiality to tell a patient the medication found in a spouse's jacket (SD = .892) and filling a fatal dose for a hospice patient (SD = .886).

Table 24

Consistency of Moral Statements Among Survey Respondents

	N	Minimum	Maximum	Mean	Std. Deviation	Rank of SD
	Stat.	Strongly Disagree	Strongly Agree			
S6: Reporting a colleague over illegal behaviour	356	1	4	3.48	.643	2
S2: Fill legal abortifacient	351	1	4	3.23	.779	16
S21: Pharmacy is stressful and strained	357	1	4	3.16	.792	18
S1: Changing/completing a Rx order w/o prescriber approval	358	2	4	3.13	.763	12
S16: Became RPh to be with people	359	1	4	3.13	.730	10
S17: Became RPh because good in math/science	358	1	4	3.10	.715	6
S18: Became RPh for high salary/benefits	357	1	4	2.88	.712	5
S20: Career meets my expectations.	356	1	4	2.78	.779	17
S19: Became RPh for prestige and community/peer/family recognition.	358	1	4	2.66	.770	13
S3: Breaching non patient confidentiality	359	1	4	2.59	.892	20
S4: Filling a fatal dose for a hospice patient	356	1	4	2.18	.886	19
S15: Became RPh to be unsupervised/own boss	356	1	4	2.17	.775	15
S14: Forgiving copays is ok for compliance	356	1	4	2.13	.722	7
S8: Acceptable to fill a placebo and assign a price	357	1	4	2.11	.939	21
S7: Withholding information is ok for patient compliance	355	1	4	2.02	.725	8
S13: OK to alter patient/claim information to get the claim to process	356	1	4	1.90	.771	14
S9: Filling Rx for MD that is self-abusing meds	357	1	4	1.85	.728	9
S5: Reporting a colleague over immoral behaviour	357	1	4	1.73	.668	3
S10: Returning unopened meds to inventory after leaving pharmacy	356	1	4	1.52	.694	4
S12: PBMs pay enough	356	1	4	1.47	.733	11
S11: Reversing claims for Rxs not picked up	358	1	4	1.32	.603	1
Valid N (listwise)	339					

Table 28 summarises the statements and indicates what is commonly acceptable or legal practices then states the average of what respondents indicated.[6] The far-right column is the level of disagreement among respondents.[7] It is clear from the findings that there is not agreement is how moral decisions are reached by pharmacists and that there is unfortunate opportunity to put the pharmacists' moral compass in front of the patient. To note, respondents strongly agreed (M=1.47) that PBMs do not pay them enough for their services.

[6] If the mean were under 2.5, I deemed that the respondents agreed with the statement, if over 2.5, I deemed it as disagreed.

[7] The standard deviations (SD) were ranked between 1 to 21. The low SD ranged between .603 to .722, medium SD ranged from .725 to .779, and high ranged from /792 to .939.

Table 25

Moral Statement Responses Compared to Norms and the Amount of Disagreement

Statement	Acceptable Practice	What Respondents Stated	Disagreement in Answer (Standard Deviation)
S1.Changing/completing an Rx order w/o approval	It is not acceptable	It is not acceptable	Medium
S2.Fill a legal abortifacient	It is acceptable	It is acceptable	Medium
S3. Breaching nonpatient confidentiality	It is not acceptable	It is acceptable	High
S4. Filing a dose for a hospice patient (Ativan, Morphine)	It is acceptable, although controversial and few guidelines	It is not acceptable	High
S5. Report a pharmacist over immoral behaviour	This is not a requirement	Would not report	Low
S6. Report a pharmacists over illegal behaviour	This is not a requirement	Would report	Low
S7. Withholding inform to patient to improve compliance	Pharmacists should not withhold information for any reason	Would not withhold information	Low
S8. Acceptable to fill a placebo and assign a price	Not acceptable to fill a placebo and crime to assign a price	Disagreed that this was acceptable	High
S9. Filling a Rx for a MD self-abusing	Not fill for abusing MD	Disagreed to fill for abusing MD	Medium
S10. Returning unopened meds to inventory	Should not return unopened meds to stock	Disagreed that it is OK to return meds to stock	Low
S11. Don't waste time to reverse claims for Rxs not picked up	Should reverse claims not picked up	Disagreed that it is not a waste of time to reverse claims	Low
S12. PBMs pay enough	It is generally accepted that PBMs do not pay enough because counselling and research time is uncompensated	Disagreed that pharmacists are paid enough by PBMs	Low
S13. OK to alter information to get a claim processed	It is not acceptable	Disagreed that it is acceptable	Medium
S14. Forgiving copay OK for compliance	Should not forgive copays even to improve compliance	Disagreed to forgive copays	Low

In discussing the findings in Tables 27 and 28, respondents disagreed with many acceptable standards in the pharmacy field. There are two statements that fell into this category. The first involved a woman coming into the pharmacy asking the pharmacist to identify a tablet found in her husband's jacket pocket. Disclosing this information may be a breach of the Health

Information and Patient Protection Act (HIPAA). Abood and Burns (2017) advised that unless absolutely necessary it would be best to not provide PHI (personal health information such as a drug name or information about the drug) to an agent of a patient (p. 316). The statement purposely did not state that the wife was her husband's agent for medical purposes. This case also involved a high level of disagreement among respondents perhaps reflecting the dilemma in the law that allows a pharmacist to counsel agents of a patient, but no clear way of identifying the patient's authorized agent, such as having the patient complete a form. Nonetheless, pharmacists were willing to impart this information to a total stranger without regard to the agent status in the statement.

The second statement that conflicted with the law revolves around the controversial issue of physician assisted suicides and the role of pharmacists. The first issue is whether or not the pharmacist has any role in the decision-making. There are eight states with Death with Dignity Acts (DWDA) and where pharmacists are not liable for actively participating in physician assisted suicides (Fass & Fasss, 2011). The American Pharmacist Association (2020) supports informed decision-making based upon the professional judgement of pharmacists, rather than endorsing a particular moral stance on the issue of physician-assisted suicide, essentially leaving it up to the given pharmacist. As with abortion, patients who are terminally ill have reached a decision to die with dignity after careful consideration and in collaboration with physicians. Having pharmacists insert moral authority would not be providing the care and dignity associated with the profession. The fact that the surveyed pharmacists disagreed with dispensing a fatal dose of medication perhaps is because not all states provide immunity from the law. However, the specific statement indicated that the hospice patient had a valid prescription for morphine and Ativan, and these drugs are routinely dispensed to hospice patients for pain. For

this situation to have some resolution, there should be clear guidelines so that pharmacists are not in disagreement about how to handle these situations, causing additional patient distress in an already distressful situation.

An interesting finding of the survey was that although there is no requirement for pharmacists to report other pharmacists involved in illegal activities, survey respondents agreed that they would with a low level of disagreement. Apparently, pharmacists hold true that performing illegal activities does not reflect well on the status of the profession (which remained undefined in the statement and could range from simple professional infraction to serious criminal activity).

Similarly, another interesting finding was that survey respondents had a high level of disagreement around whether or not it was acceptable to fill a placebo and place a price on the drug. Veatch et al. (2017) wrote about filling placebos to potentially benefit a patient (p. 114–116). This situation is at the very heart of the deontologist versus consequentialist argument. Deontologists would assert that no lie should be told, even if beneficial to the patient, as truth is a value in any society. Consequentialists would argue that if taking the drug benefits the patient, there is no harm, as the patient's health is the ultimate goal. Veatch (2017, p. 116) concluded that health professionals have a higher standard to tell the truth to patients than ordinary citizens so that patients can make autonomous choices about treatment options. In this statement, there is also the part about "assigning a price". Whatever price that would be assigned would not be the actual "price" of the placebo medication, and this would be a serious health care crime. Here, the deception is calling one "medication" another medication with a price and submitting that cost for reimbursement to a PBM. This "fake" prescription submission would certainly result in an infraction to the pharmacist.

5.14 Age, Gender and Years on the Job Effects on Moral Statements

The demographic information collected as part of the survey findings allowed cross-tabulation with the moral statement findings to determine if there were any significant factors effecting the moral statement findings. In answering the research question concerning pharmacists' pharmacomoral decision-making, the demographic information such as gender, age, and years on the job could provide important insights.

An independent t-test was performed to determine whether gender had an impact on the 21 moral statements. Detailed results as to the group statistics including the mean, independent samples test, and the t-test for equality of means can be found in Appendix J. When the t-test was performed, gender had the following impact on the moral statements, as depicted below.

Table 26

Effects of Gender on Moral Statements

	Gender Difference	What was the Difference
S1: Changing/completing a Rx order w/o MD approval	Yes	Males Agreed More
S2: Fill legal abortifacient	No	
S3: Breaching confidentiality to non-patient	No	
S4: Filling a fatal dose for a hospice patient	No	
S5: Reporting a colleague over immoral behaviour	No	
S6: Reporting a colleague over illegal behaviour	Yes	Females Agreed More
S7: Withholding information for patient compliance	No	
S8: Acceptable to fill a placebo and assign a price	No	
S9: Filling MD self-abuse prescription	No	
S10: Returning unopened meds to inventory after leaving pharmacy	No	
S11: Wasting time to reversing claims for Rxs not picked up	No	
S12: PBMs pay enough for pharmacist work	No	
S13: OK to alter patient/claim information to get the claim to process	Yes	Males Agreed More
S14: Forgiving copays is ok	Yes	Males Agreed More
S15: Became RPh to be unsupervised	Yes	Males Agreed More
S16: Became RPh to be with people	No	
S17: Became RPh because good in math/science	No	
S18: Became RPh for high salary/benefits	Yes	Males Agreed More
S19: Became RPh for prestige and community/peer/family recognition.	No	
S20: Career meets my expectations.	Yes	Males Agreed More
S21: Pharmacy is stressful and strained	No	

Table 29 depicts the impact of the gender of pharmacists in the survey on responses. Gender played a part in the responses. Males agreed more than females about changing an order without prescriber approval, changing orders to allow them to process and get paid, forgiving copays, becoming a pharmacist to be the boss/working unsupervised, becoming a pharmacist for

high salary/benefits, and that the duties and salary and benefits meet expectations. Females agreed more than males about reporting illegal behaviour of a colleague. Male pharmacists agreed more that correcting an order was acceptable without prescriber input and that it was acceptable to alter prescriptions to get them to process through the PBM rules and edits. Males also agreed that it was acceptable to forgive copays to improve compliance. Therefore, the men were much more resentful than the women to "outside" interference by PBMs into the practice of pharmacy. This is an important finding and co-relates with the many articles in general on white-collar crime. Mary Dodge has written extensively on the role of gender in committing white-collar crime.[8] Dodge (2020b) stated that men commit more white-collar crimes than women even with the more predominant roles women play in business. In another article, Dodge cited significant white-collar crimes perpetrated by men such as the Madoff Ponzi scheme. With regard to health care fraud/crime, Dodge wrote (2020a) that in 2019, Dr Samirkumar Shah was found guilty of health care fraud. Shah's external counter pulsation (ECP) treatment was advertised as a fountain of youth able to treat angina, obesity, migraines, high blood pressure, low blood pressure, diabetes, and erectile dysfunction. Shah misled patients, who underwent unnecessary treatments, double-billed insurers, and made false statements about the ECP. His insurance fraud resulted in profits of over $3.5 million paid by private insurance companies, Medicaid, and Medicare, although he was found guilty of only two counts of health care fraud. Indeed, cases cited in Chapter 1as the worst case in pharmacy fraud were perpetrated by men, such as Robert Courtney.

Female pharmacists agreed that other pharmacists committing illegal acts should be reported. In summary, male pharmacists seemed more likely to bend PBM rules; females were

[8] See Mary Dodge's CV at https://www1.ucdenver.edu/docs/default-source/people-documents/spa-people-documents/cv-dodge-mary-02-2020.pdf?sfvrsn=bd5c34b9_2.

less tolerant of others' illegal activities. These findings explicitly support Gilligan's feminist decision-making perspective discussed in Chapter 2 in that women are concerned about damage to relationships or when people are hurt. Illegal activity would damage the image of pharmacists; therefore, it would be a feminist perspective that reporting such activity would rid the profession of damage.

A one-way between group analysis of variance was conducted to explore the impact of age on agreement/disagreement with the 21 moral statements with post hoc tests. Survey respondents were re-coded from the original 10 age groups to four age groups to facilitate the analysis (Group 1: age 20–35, Group 2: age 36–45, Group 3: 46–60, Group 4: over 60). There was a significant difference at the $p < .05$ level in agreement/disagreement for Statements 2 (filling abortifacients), 8 (filling a placebo), 12 (PBMs paying enough), 17 (becoming a pharmacist/good in math and science), and 18 (becoming a pharmacist for high salary/good benefits). Details regarding the findings can be found in Appendix K. Significance can be stated for these statements as follows:

Statement 2: $(3, 347) = 4.2$, $p = .01$

Statement 8: $(3, 351) = 7.6$, $p = .01$

Statement 12: $(3, 353) = 1.8$, $p = .02$

Statement 17: $(3, 353) = 1.7$, $p = .01$

Statement 18: $(3, 353) = 1.7$, $p = .01$

Age also played a part in responses. Younger pharmacists were more willing to fill an abortifacient and had less agreement about PBM pay not being sufficient. Age also played a role in why younger pharmacists chose pharmacy with younger pharmacists not agreeing that the

reason that they are pharmacists is because they were good in math and science and for the high salary and benefits.

A one-way between group analysis of variance was conducted to explore the impact of years as a pharmacist on agreement/disagreement with the 21 moral statements with post hoc tests. Survey respondents were re-coded from the exact number of years as a pharmacist to facilitate the analysis (Group 1: 1 – 10 years, Group 2: 11 – 20 years, Group 3: 21 – 30 years, Group 4: over 31). There was a significant difference at the $p < .05$ level in agreement/disagreement for Statements 2 (filling abortifacients), 6 (reporting a colleague over illegal behaviour), 8 (filling a placebo), and 18 (becoming a pharmacist for high salary/good benefits). Details regarding the findings can be found in Appendix L. Significance can be stated for these Statements as follows:

Statement 2: $(3, 344) = 45.8$, $p = .01$

Statement 6: $(3, 349) = 1.3$, $p = .01$

Statement 8: $(3, 350) = 10.6$, $p = .01$

Statement 18: $(3, 350) = 3.1$, $p = .01$

The years as a pharmacist impacted the results with fewer senior pharmacists agreeing to fill an abortifacient, reporting a colleague over illegal behaviour, and becoming a pharmacist for high salary/good benefits. Other demographic information collected in the survey, such as type of pharmacy in which the pharmacist worked, number of hours worked, U.S. COP, and state worked in did not have enough variance to determine if these factors impacted the mean of the 21 moral statements or were not germane to the research objective.

5.15 Moral Statements Regarding Job Satisfaction

Two of the moral statements involved job satisfaction. These two statements were purposely added to find if pharmacists did display poor decision-making, job satisfaction may contribute to unethical behaviour. Valentine et al., (2010) state that corporate ethical values are associated with increased job satisfaction. Specifically, Statement 20 queried if their career met their expectations, and Statement 21 queried if the respondent believed the practice of pharmacy was stressed or strained. Table 30 below presents a cross tabular comparison of the type of the decisions to relative satisfaction of that decision-maker with career expectations. As observed, there is little difference between ethical decision-makers' decision and their career satisfaction. However, it is interesting to note that 68.8% of pharmacists' career expectations were being met, yet 31.2% were not. It is of note that while not a majority, a significant percentage of pharmacists believe that the job does not meet their expectations.

Table 27

Comparison of Ethical Typology Decisions to Meeting Career Expectations

	All Cases					
	Strongly Disagree	Disagree	Agree	Strongly Agree	Sum	Percentage
Virtue	33	170	321	104	628	36%
Deontological	46	141	299	80	566	32%
Util/Consequentialist	31	125	314	88	558	32%
	110	436	934	272	1,752	
	31.2%		68.8%			

Table 31 presents a cross-tabular comparison of the decision type and the level agreement/disagreement with the statement that the practice of pharmacy was stressful and strained. Consistent with all of the survey findings, this is not a predominant type of decision in

relation to the feelings of stress and strain. However, 78.5% of respondents either agreed or strongly agreed that the practice of pharmacy is stressed and strained.

Table 28

Comparison of Ethical Typology to Stress and Strain in Pharmacy

	All Cases					
	Strongly Disagree	Disagree	Agree	Strongly Agree	Sum	Percentage
Virtue	13	146	249	227	635	36.0%
Deontological	8	100	220	240	568	32.2%
Util/Consequentialists	9	103	235	212	559	31.7%
	30	349	704	679	1,762	
	21.5%		78.5%			

In reviewing the three ethical typologies (virtue, deontological, and util/consequentialists) it could be useful to determine if each of the typologies answered similarly in response to the moral statements. In other words, is one typology more coherent (i.e., had less variance) as a group than the other two typologies when it came to the moral statements? If so, this would indicate that there were similar attitudes towards the pharmacy profession based on the reasons that pharmacists made decisions. Table 32 below illustrates the average score per respondent (ranging from 1 = Strongly Disagree, 2 = Disagree, 3 = Agree and 4 = Strongly Disagree) for the 21 moral statements, segregated by the ethical typology for that decision, by case. In reviewing the variance (S^2) within each group (i.e., virtue, deontological, and util/consequentialists), there is no significance within each group or between the groups. This lack of variance indicates that there is little difference between agreement/disagreement with the moral statements and what kind of ethical decision was made by the respondents.

Table 29

Variance Among Ethical Typology and Moral Statements

		Virtue	Deontologists	Util/Consequentialists
Case One	Total	239.38	319.62	294.81
	Avg/respondent	2.39	2.39	2.36
	Variance	0.05	0.06	0.16
Case Two	Total	406.14	81.57	354.33
	Avg/respondent	2.38	2.40	2.38
	Variance	0.11	0.07	0.07
Case Three	Total	151.14	435.57	260.29
	Avg/respondent	2.40	2.38	2.39
	Variance	0.04	0.08	0.08
Case Four	Total	457.62	220.19	165.00
	Avg/respondent	2.41	2.37	2.36
	Variance	0.04	0.12	0.07
Case Five	Total	267.10	307.95	268.14
	Avg/respondent	2.34	2.44	2.35
	Variance	0.10	0.05	0.11

5.16 Tying Job Satisfaction to the General Strain Theory

The survey results indicate that 31.2% of the respondents do not believe their career and duty meet their expectations and 78.5% believe the job has stress and strain. These results do not support the notion of job satisfaction and as a result ethical decision-making. The general strain theory posits that a prevention of goals, such as job satisfaction, would increase the likelihood of criminal behaviour. Anger and frustration are increased if there are low constraints, such as other colleagues who are equally stressed and strained (Cullen et al., 2014, p. 203-211). Crime likelihood is also increased if the strain is seen in high magnitude, such as the strain is seen as unjust (Cullen et al., 2014) p. 203-211). The tension of the co-beneficent practitioners' model of gatekeeper of medications against the primary beneficent practitioner's model in which the only concern is for patient care (Wright et al., 2019) can be considered unjust and unfair decisions that pharmacists must decide. Criminal activity can be considered a way of coping with the strain

(Cullen et al., 2014, p. 203-211). Bonding with corporate goals of increasing profits, because pharmacists are only paid when a product is dispensed and not paid when advise is dispensed, can increase criminality. Pharmacists also consistently disagreed that PBMs (insurance companies) pay them enough for what they do (M = 1.47).

Gottschalk (2017a) wrote that "facing strain, greed, or other situations, an illegal activity can represent a convenient solution to a problem that the individual or the organization otherwise find difficult or even impossible to solve". Cressey's fraud triangle explains white-collar criminals as having a perceived nonshareable financial need (motive), perceived opportunity (access at the workplace to financial records) and rationalization (means; Gottschalk, 2017b). Albrecht (2014) wrote that perceived pressure, perceived opportunity and some way to rationalize the compromise as not being inconsistent with one's code of conduct are all present in committing crime. Respondents strongly agreed (M=1.47) that PBMs do not pay them enough for their services.

The survey results described in this chapter with regards to how pharmacists responded to the survey and/or perceived their profession is the perfect storm for white-collar crime described by the three works referenced above by Gottschalk (2017b), Schuchter & Levi, 2016 et al. (2016), and Albrecht (2014). All five cases are discussed, and within each case, a percentage of pharmacists provided a response, that, had the situation been real, would have resulted in illegal behaviour. The first 14 moral statements also gave insight into how pharmacists would impose their own morals over patients' right to fill valid medication or a breach of other moral behaviour (i.e., patient confidentiality, filling placebos). The last two moral statements provided insight into career satisfaction and motivation.

5.17 Chapter Summary

The survey findings provided rich insight into pharmacists' decision-making. Demographically, survey respondents were more female and younger than national averages. A majority of respondents worked full-time and were also more recently graduated and licensed than national averages. With 34 U.S. states were represented by respondents, the survey provided a national and not regional footprint (e.g., Western, Midwest, Southern, North-eastern).

The five cases tested how pharmacists would respond to ethical decisions common in practice. Out of the total number of 1,737 responses, 612 (35.2%) decisions would have proceeded illegally and 1,125 (64.7%) would not have proceeded illegally.

Assigning an ethical typology allowed insight into if respondents aligned with any one particular ethical type in each case and the survey concluded there was not one ethical theory that was predominate. Further, within each respondent, ethical theory types were based on the case and for only a very few respondents was the ethical type the same in all five cases. Ethical dilemmas occur frequently, once or twice a week, but many respondents had no instances of similar ethical dilemmas occurring in their practice. Gender and years had an impact on some of the case findings.

Moral statements were used in the survey to determine how consistent respondents were in terms of putting their moral compass ahead of patient needs. It is clear from the findings that there is not agreement is how moral decisions are reached by pharmacists and that some respondents would put their own morals over patients' and prescribers' desires. Like the cases, age, gender and years on the job were analysed to determine the effect of these demographic characteristic on the moral statements.

Finally, the moral statements aimed at job satisfaction provided insight, combined with the theoretical frameworks of the general strain theory and other criminological theory, into the rationales of pharmacists' decision-making. These theories, overlaid with the complexity of the U.S. health care system, the role of pharmacists within this system and the economic considerations also provided insight into the respondents' rationale. The theoretical implications of this study is that the research findings support the theories used as the underpinning of this study. Specifically, Veatch's pharmacy decision-making theory is supported in that pharmacists take a very patient orientation (Veatch, et al., 2017, p. 9) and use a common-sense approach to decision-making as depicted in Veatch's decision-making steps (Veatch, et al., 2017, p. 20). In addition, there is support for the criminological theories that underpin this study, namely that there are motivations to commit crime (job dissatisfaction, low payment by PBMs).

CHAPTER 6: CONCLUSIONS AND IMPLICATIONS

6.1 Introduction

This thesis has examined ethical decision-making by pharmacists through a quantitative survey methodology. Using the theoretical decision-making framework established by leading bioethicists specialising in the pharmacy field, decisions are made by first recognising that there is a decision to be made, then applying principled virtues and values, establishing the rules contrasting what is right to do and then applying those rules-situations to individual cases (Veatch et al., 2017, p. 15). This research used the same theoretical framework by presenting cases and statements to pharmacists and collecting responses through an on-line survey.

Making ethical decisions are important, particularly in life and death situations involving prescription drugs. Through this thesis, numerous examples are presented that discussed the unfortunate circumstances when decisions by one or many pharmacists are bad, or worse, unlawful. Bad or unlawful decisions can result in financial loss to pharmacy chains or independently-owned pharmacies through settlements reached by regulatory agencies (e.g., the CVS Opioid filling case), loss of licensure to the pharmacist through Board of Pharmacy sanctions, patient humiliation (e.g., the Rachel Peterson case) and most importantly, patient lives (e.g., the Courtney case, see Chapter 1).

The lack of academic interest in pharmacy decision-making is surprising, given the national headline cases. States Deans, "Perhaps pharmacy's low profile in these matters is maintained because of the image of the profession, and because pharmacists are regarded as only one component of a larger healthcare team, or as being 'behind the scenes' so that doctors and policy makers are the ones in the limelight (Deans, 2010)." Indeed, pharmacists are one of the

few health care professionals that can have a dramatic impact on patient care, but in some cases, may never interact directly with the patient.

Most importantly, bad decisions demean the professional status of the perpetrator of the crime, in this case, pharmacists (Gottschalk and Gunnesdal, 2018). This professional status is already in question simply because of the sometimes less than altruistic role pharmacists play in the health care ecosystem (Deans, 2007, p. 219). The sticking point in the acceptance of pharmacy's professional status arises from a perceived incompatibility between personal financial gain and altruism. Pharmacists make money and stay in business if they dispense pharmaceutical products. Pharmacists do not make money if they dispense medication advice, essentially de-prescribing. Not dispensing a drug may be the "right answer" but does not keep the doors of the pharmacy open. Further, as observed in the survey results, respondents do not believe that even when they are paid by the PBMs, that the pay is sufficient and that stresses and strains keep them from getting their jobs done correctly.

This chapter examines the study outcomes, the research aims, provides a summary of survey findings, discusses implications of the research to theory and practice, outlines the valuable contributions of this study, and provides recommendation for future research based on the limitations of this study.

6.2 Research Aim

The aim of the research was to answer the research question: To what extent are U.S. pharmacists willing to fill ambiguous prescriptions or not fill prescription that are legal but are morally offensive to the pharmacist, and what is the rationale behind those decisions? Firstly, the problem to be addressed by this quantitative study was to examine the decision-making underpinnings by pharmacists when presented with five cases all involving the potential of

filling (albeit hypothetically) of a prescription in an illegal manner. Pharmacists are in a precarious situation amid a presumed trustworthy prescriber and an authentic patient in need of medication (Wright, et al., 2019). The study intended to present and explore the pharmacological decision mechanisms involved with these ambiguous prescription fulfilments and the frequency and reasoning for decision-making. Assigning an ethical typology to respondents' reasons provided a unique look at how pharmacists as a whole lean towards a specific ethical ideology.

Secondly, the research question probes the issue of when pharmacists are asked to fill a prescription but refuse to do so, such as when a pharmacist is presented with a prescription for an abortifacient, when presented with a lethal dose in an assisted suicide situation or are being presented with moral situations such as revealing medication to a person not designated as a patient's agent or filling placebos. The purpose behind this part of the research question aimed to uncover the role of the pharmacist's own moral compass as a trade-off against patients' rights to obtain legal medications and prescribers' rights to prescribe medication that fit the diagnosis or a determination of moral agency.

Lastly, the aim of the last part of the research question was to understand the rationales or motivations of the decisions. Understanding such motivations can then provide a road map for future research and intervention strategies.

The study objectives were achieved through a robust set of survey data that allowed numerous descriptive, statistical and demographical analysis of the responses. While the survey results are not generalizable, and the survey response rate was low, the survey did provide keen observations into decision-making. In addition to the quantitative findings, the "other" reason, a free-form text where survey respondents could provide their own reasons, gave voice to

respondents' frustrations at making decisions and provided useful and interesting details to supplement the quantitative results.

6.3 Summary of Findings

Responses from the five cases, in total, revealed 612 (35.2%) decisions would have been to proceeded illegally and 1,125 (64.7%) would not have proceeded illegally out of a total of 1,737 responses. Case Two involving switching to an over-the-counter medication provides the most respondents willing to act illegally (78.5% of respondents (n = 274). Case Five, involving an egregious act of short filling a dangerous prescription had the fewest responses to act illegally (4.3%, n = 15).

By converting the reasons for decision-making into ethical theory types, the survey revealed that there is not a single ethical type among the responses. Virtue theory held in 638 responses (35.9%), Deontological theory in 570 responses (32.1%) and Utilitarian/Consequentialist in 567 responses (31.9%), essentially an almost even split between the three theoretical ideologies. Only ten respondents selected the same ideologies in all five cases as such: Utilitarian decision in Case One, Virtue in Case Two, Deontologist in Case Three, Virtue in Case Four and Deontologist in Case Five, concluding that very few respondents answered the same way.

In examining the frequency of ethical decision-making, respondents indicated that the five cases or similar ethical dilemmas occurred at least 49.2 times a year at a minimum and at a high end, 76.8 times a year. However, this frequency includes the fact that 54.1% (n = 972) of the responses indicated that a similar ethical dilemma had never occurred to them. This finding supports Cooper's finding (2006) as to the ethical passivity of pharmacists. Pharmacists may not even see an opportunity to make an ethical decision. In terms of age and gender on ethical

decision-making, gender has almost no impact. However, pharmacists who had been on the job longer were more apt to dispense the medication (act illegally) in Cases One, Three and Four. However, pharmacists with more year on the job were not apt to "look the other way" when it came to dispensing illegal compounds (Case Five).

Respondents were inconsistent in the way they responded to the moral statements. Respondents most strongly agreed most that they would turn in a colleague who was acting illegally and most strongly disagreed that they would not reverse a prescription that was not picked up. Respondents most disagreed with the statements that it is a waste of time to return drugs to stock and reprocess (reverse) the claim, that unopened medication should be returned to stock, and that PBMs pay enough for the work done by pharmacists. The most variance in the responses (indicated by the standard deviation to the mean) was that filling a placebo is acceptable (SD = .939), breaching confidentiality to tell a patient the medication found in a spouse's jacket (SD = .892) and filling a fatal dose for a hospice patient (SD = .886).

As shown in Tables 27 and 28, respondents disagreed with many acceptable standards in the pharmacy field. There are two statements that fell into this category. The first involved a woman coming into the pharmacy asking the pharmacist to identify a tablet found in her husband's jacket pocket. The second statement that conflicted with the law revolves around the controversial issue of physician assisted suicides and the role of pharmacists. Filling an abortifacient had a medium level of disagreement.

Gender played a part in the responses to the moral statements. Males agreed more than females about changing an order without prescriber approval, changing orders to allow them to process and get paid, forgiving copays, becoming a pharmacist to be the boss/working unsupervised, becoming a pharmacist for high salary/benefits, and that the duties and salary and

benefits meet expectations. Females agreed more than males about reporting illegal behaviour of a colleague. Male respondents agreed more that correcting an order was acceptable without prescriber input and that it was acceptable to alter prescriptions to get them to process through the PBM rules and edits. Males also agreed that it was acceptable to forgive copays to improve compliance. Therefore, the men were much more willing than female respondents to go outside the bounds of the practice of pharmacy.

Age also played a part in responses to the moral statements. Younger pharmacists were more willing to fill an abortifacient and had less agreement about PBM pay not being sufficient. Age also played a role in why younger pharmacists chose pharmacy with younger pharmacists not agreeing that the reason that they are pharmacists is because they were good in math and science and for the high salary and benefits.

The years working as a pharmacist impacted the moral statement results with fewer senior pharmacists agreeing to fill an abortifacient, reporting a colleague over illegal behaviour, and becoming a pharmacist for high salary/good benefits.

Finally, motivations as to job satisfaction were examined in the survey to uncover if there was dissatisfaction. Valentine et al., (2010) state that corporate ethical values are associated with increased job satisfaction. Criminal activity can be considered a way of coping with the strain (Cullen et al., 2014, p. 203-211). 78.5% of respondents either agreed or strongly agreed that the practice of pharmacy is stressed and strained and that they do not believe there is time to get everything needed to be done correctly. Respondents strongly agreed (M=1.47) that PBMs do not pay them enough for their services. Nonetheless, respondents indicated that 68.8% of pharmacists' career expectations were being met, yet 31.2% were not.

6.4 Implications: Theory, Policy and Practice

The theoretical framework which was the underpinning for this study remains as a solid method for pharmacist decision-making and was confirmed (i.e., has theoretical implications). Both Veatch et al.'s (2017) and Wright's (2019) model for ethical decision-making are useful. Presenting case studies can also be useful as a way to grapple with ethical and moral dilemmas. Wright's model acknowledges the tension between the pharmacist's role of medication gatekeeper and benevolence to the patient, which is a key concept (Wright, 2019). Veatch et al. admit that additional steps could be added and much elaboration could be included in each step of the model, but the basic framework is sufficient to focus moral judgements and simple enough to recall and apply in actual practice (p. 20). For the most part, survey respondents recognized the ethical dilemma and sought to resolve the issue in a pragmatic way. Respondents also aligned themselves on the rules-situation stratum, with some respondents aligning as deontologist, some a consequentialist and some on their own moral compass or virtue-based ethical decision making. Case specific details realigned each respondent based on the facts and circumstances of the five cases or moral statements.

The implications of this research to policy and practice are a much more complex issue. Typical interventions to breaking the law are to institute more controls. It could be argued that the entire legal and criminal justice field is an intervention to lawlessness. In business, such as the business of dispensing medication, corporate controls could be a logical intervention. However, corporate rules accounted for only 2.6% (n=46) of the 1,775 decisions made by survey respondents. Large chain pharmacies like Walgreens, Rite-Aid and CVS/Caremark may have implemented controls, but controls and risk assessment models seek to assess *loss* to corporate entities, not inappropriately gotten gain through illegal activities (Association of Chartered

Certified Accountants website, 2020). It could be argued that these models in some way do account for gain, if that gain then results in loss due to payment for regulatory fines. However, as one respondent, who would have filled a prescription without a valid refill, stated in response to Case One, "I would get the doctors approval on Monday & transfer the prescription for the patient then (see Appendix H)." No matter if the corporate rules told this pharmacist to not fill without refills left, the pharmacists would have found a workaround.

Corporate controls may do little to prevent bad decision-making in small chain or independently-owned pharmacies. In the United States, independently owned community pharmacies continue to represent a large portion, or 35% of the retail pharmacy space, according to findings published in the 2018 *NCPA Digest* (National Community Pharmacy Association, 2020) or 22,750 pharmacies of the 67,000 pharmacies nationwide. To illustrate this point, one respondent stated (see Appendix H):

> "When I worked for Walmart in a big city, I would definitely not dispense the medication. But if I worked in my hometown at an independent pharmacy and had a working relationship with the local PCP, then I would probably dispense it. In my hometown, I probably had the doctor's cell number and could probably get it ok-ed after hours. But then again, the hometown doctor probably would probably not consider it necessary to even ask. I have seen these working relationships in action. For me, circumstance determines the answer."

Therefore, policies aimed at more control assessments are not recommended. These controls are likely to be ineffective and would not apply to over 30% of pharmacies as independently owned pharmacies would have no obligation to institute these controls or financial motivation.

Motivations did uncover what intervention strategies might be successful. Throughout this research, the notion that pharmacists are paid for dispensing pharmaceutical products and not for dispensing advice, which may include not dispensing medication, has been raised. The survey results indicate that pharmacists believe they are not paid adequately and do not have time to do their jobs correctly. One legislative change that could alleviate these concerns would be to give "provider status" to pharmacists so that pharmacists could at least bill Medicare and Medicaid for consultative services. Such an effort was tried by the Virginia Mason Medical Center (Woolf et al., 2016). Using collaborative drug therapy agreements, patients were referred to the pharmacist after a diagnosis had been made and a clinical care plan had been started. The pharmacist then managed the patient's care for the duration of the illness. Results indicated optimal medication outcomes and increased patient satisfaction scores, but also that less time was spent by the physician seeing the patient. In a closed health care setting like Virginia Mason, this means that a lower-salaried employee (a pharmacist) is spending more time with patients than a higher-salaried physician, which makes economic sense. However, such a change in an open setting would mean a decrease in physician revenue, not likely to be preferred by physicians or passed by state legislatures.

6.5 Study Limitations and Recommendations for Future Research

The survey results were not based on a national sample of pharmacists and were biased in that only four schools of pharmacy alumni and the personnel of one pharmacy workplace. The age and pharmacists' experience were less than national averages, and there were more female and fewer retail pharmacists responding than male or other pharmacy settings, such as hospital pharmacists, than national averages. A true random sample was not performed since only respondents of certain COPs were solicited, and of those, only a certain portion decided to take

the survey. Response rates to the survey were very low at 6% and could have been supplemented through mailers to pharmacists' home or workplaces if such contact information could be made available and had that option been economically viable.

Future research is needed to determine if generalisability of the research findings can be made. A truly national survey was impractical given the scope of a doctoral thesis and would be more appropriate if undertaken by a national organization. Nonetheless, the survey instrument provided an insightful backdrop against a discussion of ethical decision-making and keen insights. Similarly, a survey outside the U.S. on ethical decision-making would provide additional insights. A survey in the U.K. would be particularly valuable in that the NHS, rather than profit-motivated PBMs, sets pricing for prescription drugs. Additional interviews of pharmacists could have provided more in-depth narrative and could have better explored how pharmacists' decision-making theories are actually utilised by pharmacists.

Lastly, there were many other cases and moral situations that could have been explored as part of the survey and additional correlations to age, gender, length on the job and pharmacist work setting (and within work settings, at specific chains or hospitals). Making ethical decisions on issues like drug diversion, drug abuse by pharmacists, highly toxic specialty medications, opioid use by patients, data integrity, patient solicitation and implications of ethical decision making in a pandemic can and should be explored in future research.

6.6 Contributions to Knowledge

This study contributed significantly to the knowledge base around pharmacist ethical decision-making. The research furthered explorations of this topic by Deans (2006) and Cooper (2007) by exploring the issue from a U.S. perspective. Ethical decisions matter, particularly in life and death situations and this topic and research is important. Pharmacists are the first, last

and only gatekeeper to the national drug supply. If these important practitioners do not make good and lawful ethical decisions, national drug busts, sanctions and even death will continue to occur.

Based on the reasons selected by respondents, additional controls at the corporate level would have little effect on pharmacists' decision-making. Pharmacist do need to understand that their own judgement should not replace or overshadow corporate rules and certainly should not overstep or interfere with the prescriber-patient relationship. Pharmacist professional judgement does not mean physician professional judgement.

This study also examined moral issues. Little if no research (other than perhaps Latif (2001) in 2001, almost 20 years ago) has been conducted around pharmacomorality issue. Placing a pharmacist's morals in front of and more important than patients cause patient humiliation (Porter, 2018, para. 4). In turn, this demeans the profession and further calls into question the role of pharmacists as professionals (Deans, 2007).

Lastly, this study looked at ethical decision-making from a criminological theory perspective and framed decision-making in terms of the illegality of these decisions. This is an important concept. Ethical decision-making in prior studies (Deans, 2007; Cooper, 2006) and even seminal text books like *Case Studies in Pharmacy Ethics* (Veatch, 2017) simply explain the decision-making processes or provide tools or reasoning frameworks. This research looked at the *implications of bad decisions* which is that some bad decisions are illegal.

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APPENDIXES

Appendix A: American Pharmaceutical Association Code of Ethics

PREAMBLE
Pharmacists are health professionals who assist individuals in making the best use of medications. This Code, prepared and supported by pharmacists, is intended to state publicly the principles that form the fundamental basis of the roles and responsibilities of pharmacists. These principles, based on moral obligations and virtues, are established to guide pharmacists in relationships with patients, health professionals, and society.

I. A pharmacist respects the covenantal relationship between the patient and pharmacist.
Considering the patient-pharmacist relationship as a covenant means that a pharmacist has moral obligations in response to the gift of trust received from society. In return for this gift, a pharmacist promises to help individuals achieve optimum benefit from their medications, to be committed to their welfare, and to maintain their trust.

II. A pharmacist promotes the good of every patient in a caring, compassionate, and confidential manner.
A pharmacist places concern for the well-being of the patient at the center of professional practice. In doing so, a pharmacist considers needs stated by the patient as well as those defined by health science. A pharmacist is dedicated to protecting the dignity of the patient. With a caring attitude and a compassionate spirit, a pharmacist focuses on serving the patient in a private and confidential manner.

III. A pharmacist respects the autonomy and dignity of each patient.
A pharmacist promotes the right of self-determination and recognizes individual self-worth by encouraging patients to participate in decisions about their health. A pharmacist communicates with patients in terms that are understandable. In all cases, a pharmacist respects personal and cultural differences among patients.

IV. A pharmacist acts with honesty and integrity in professional relationships.
A pharmacist has a duty to tell the truth and to act with conviction of conscience. A pharmacist avoids discriminatory practices, behavior or work conditions that impair professional judgment, and actions that compromise dedication to the best interests of patients.

V. A pharmacist maintains professional competence.
A pharmacist has a duty to maintain knowledge and abilities as new medications, devices, and technologies become available and as health information advances.

VI. A pharmacist respects the values and abilities of colleagues and other health professionals.

When appropriate, a pharmacist asks for the consultation of colleagues or other health professionals or refers the patient. A pharmacist acknowledges that colleagues and other health professionals may differ in the beliefs and values they apply to the care of the patient.

VII. A pharmacist serves individual, community, and societal needs.
The primary obligation of a pharmacist is to individual patients. However, the obligations of a pharmacist may at times extend beyond the individual to the community and society. In these situations, the pharmacist recognizes the responsibilities that accompany these obligations and acts accordingly.

VIII. A pharmacist seeks justice in the distribution of health resources.
When health resources are allocated, a pharmacist is fair and equitable, balancing the needs of patients and society.

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Appendix C: Supplement Provided to Instructors

Chapter One, Case Three in your text book, Eighth Edition, page 6
A female patient visits your pharmacy at night and needs a refill on her birth control prescription, which she had been taking for 2 years. She has no refills remaining, the physician is unavailable, and she is flying on a 6 am flight with her husband for a two-week trip out of the country. Assume you are in a state that does not allow for emergency refills. What would you do?

Answer:

The pharmacist should attempt to evaluate the reason that no refills remain. For example, did the prescriber limit refills for a specific medical reason, or more likely because the prescriber routinely wrote OCs for one year at a time to prompt the patient to check in with the prescriber's office. Assuming, the former reason, the pharmacist would not dispense both because of law and patient risk. Assuming the later reason, a pharmacist acting in the best interests of the patient would likely dispense one month of the prescription and tell the patient to contact the prescriber on her return. However, a pharmacist pursuing this action should realize that he/she is violation the law and that there could be disciplinary consequences by some boards of pharmacy. A pharmacy board may or may not regard this act as de minimis. This would likely cause many pharmacists to choose not to dispense. Some pharmacists would take the position that the patient's lack of planning caused this situation and she will have to face the consequences.

Chapter Two, Case Five, page 82

A patient presents you with a prescription for Spondicin 20mg, a prescription only drug. As the patient is waiting for the prescription to be filled, the patient notices that Spondicin 10mg is available over the counter and asks you how can it be that one strength is prescription only and the other is over the counter. The patient wants to purchase double the quantity of the OTC medication which is less expensive than his copay through his company's insurance plan.

Answer:

The purpose of this scenario and questions is to have the class consider and discuss how a drug can be both Rx and OTC. The class should apply the information contained in the section "Misbranding." To provide a complete explanation to the patient, the pharmacist would tell the patient that the misbranding statute (§502(f)) requires that the drug's labelling must contain adequate directions for use for the lay person; and, whether a drug can be labelled as such depends upon the indication for which it is to be used. If the indication is one that the FDA has determined cannot be labelled with adequate directions for use, it becomes a prescription drug and is labelled with adequate information for use directed to the health care professional. The pharmacist would then point out that the 10 mg drug is intended for different indications than the 20 mg drug. The class should discuss examples of other drugs, such as meclizine and ibuprofen. Whether the pharmacist should direct the patient to take the OTC drug will probably in real life depend upon insurance coverage. However, insurance aside, it would not violate the FDCA for the pharmacist to suggest the OTC drug. The situation does raise ethical issues, however, such as the placebo value of a prescription versus OTC drug to some patients; and, whether the prescriber would object. It also raises compliance issues and whether the patient will be able to follow the directions on the prescription when the labelled directions on the OTC drug differ.

Chapter Two, Case Three, page 108

You are a member of a managed care formulary evaluation committee. The committee's task is to evaluate whether to include on the formulary a newly marketed drug. The drug is more expensive than the other drugs in the class and is rated by the FDA as type 5 (new formulation or new manufacturer) and S (standard, not priority or orphan). Would you include the drug on the formulary or not?

Answer:

The purpose of this scenario and question is to have the class consider and discuss the rating that the FDA applies to a new drug. The class should apply the information contained in the section “FDA Drug Rating and Classification System.” In reality, of course, a pharmacist in this situation would do much more research to determine whether to place this drug on the formulary. However, the rating is somewhat instructive. The class should discuss the FDA classification system and what the numbers and letters signify. Here, the FDA has rated the drug as a new formulation or new manufacturer without offering much improvement over existing therapies making it unlikely the drug would be included.

Chapter Two, Case Four, page 108

As a pharmacist, you inform a patient that the patient’s copay will be $15 less if the patient gets the generic drug rather than the brand prescribed. The patient is concerned about the quality. As a pharmacist, your company/you will make more money on the generic drug than the brand version based on the reimbursement policies of pharmacy benefit manager of the patient. Do you dispense the generic or do you dispense the brand even though it costs the patient more and lowers your profitability?

Answer:

The purpose of this scenario and question is to have the class consider and discuss the generic drug approval process including the historical background. The class should apply the information contained in the sections “Drug Efficacy Study Implementation,” “Paper New Drug Applications,” and “Drug Price Competition and Patent Term Restoration Act.” In order to completely discuss this issue, the critical marketing dates must first be noted which include Pre-1938, 1938—1962, 1962—1984, and post-1984. The date in which the generic drug was marketed is critical in determining how the drug was approved. In turn this explains why some generic drugs might not be bioequivalent to a parent or other generics leading to the Orange Book (discussed in another section of the book); and why some drugs, innovator and generic, are on the market today without FDA approval. Pre-1938 drugs were grandfathered; drugs marketed between 1938 and 1962 were subject to the DESI review process caused by the 1962 Kefauver-Harris Amendment, at which time the FDA administratively created the ANDA process for generics; generic drugs marketed between 1962 and 1984 were subject to NDA approval causing the passage of the DPC/PTRA in 1984 which legislatively created the ANDA. Post-1984 drugs are subject to the requirements of the DPC/PTRA. Within each of these time periods is a rich history of regulatory actions and litigation described in the sections, which should be discussed. Discussion of the differences between an ANDA and NDA is critical, as well as understanding the provisions of the DPC/PTRA.

Similar to Chapter Three, Case Three, page 151

You receive a prescription written by a dentist for lisinopril. Would you fill this prescription?

Answer:

As with the previous scenario, the purpose of this study scenario is to have the class consider and discuss the issue of the scope of practice of a prescriber. The class should apply the information contained in the section “Prescriptive Authority.” Ask the class what the scope of practice is for a dentist and what the pharmacist should do in this situation. A dentist has a more limited scope of practice than a physician. The class should discuss that the pharmacist should query the dentist and if it is determined that the prescription is not within the dentist’s scope of practice, the prescription would not be valid and should not be dispensed.

Study Scenario and Questions, Page 157

You are a hospital pharmacist making rounds with Dr. Jake. One of Dr. Jake’s patients has just been admitted to the hospital in premature labor. Unable to reduce the contractions, Dr. Jake consulted with

you about administering terbutaline sulfate. The drug has been FDA approved only for use in bronchial asthma but was also being widely used as a tocolytic agent because it relaxes smooth muscles. You have reservations because the labeling states terbutaline:

> …is indicated for the prevention and reversal of bronchospasm in patients with bronchial asthma and reversible bronchospasm associated with bronchitis and emphysema.***Terbtaline sulfate should not be used for tocolysis. Serious adverse reactions may occur after administration of terbutaline sulfate to women in labor. In the mother, these include increased heart rate, transient hyperglycemia, hypokalemia, cardiac arrhythmias, pulmonary edema and myocardial ischemia.

Nonetheless, you deferred to Dr. Jake as the prescribing physician as to the best course of therapy. After 48 hours of dosing, the contractions stopped. Shortly thereafter, the patient suffered a heart attack, delivered a healthy baby, and underwent open heart surgery. The patient sued you and Dr. Jake.

Answer:

The purpose of this scenario and the questions is to have the class consider and discuss the prescribing and dispensing of approved drugs for off-label uses. The class should apply the information contained in the section "Approved Drugs for Off-Label (Unlabeled) Indications. Answers are provided under each question below.

a. Did Dr. Bill or Dr. Jake violate the FDCA?
   The instructor will want to direct the class to differentiate promoting drugs for off-label uses from prescribing and dispensing drugs for off-label use. Clearly, there is no violation of the FDCA in this situation. This would also be a good time to have the class discuss why many drugs are prescribed off-label and why the drugs are not labelled with all indications. The issue in this scenario is not so much about law or regulation, but of what should be the proper standard of care from a civil liability perspective.
b. If you were Dr. Bill, what would you have done?
   The instructor will likely want to explore what it means to exercise good professional judgment in these types of situations. The instructor may want to direct the class to read the *Ramon v. Farr* case (3-2) at the end of the chapter. Note 3 after the case discussed how a pharmacist might apply professional judgment in these types of situations. We don't know if Bill acted appropriately here. We only know that despite his concerns and the labelling, he agreed with the prescriber. A court will want to know why he agreed - what steps did he take to make a determination that this was an acceptable course of action.
c. Should the patient have been told of the risks?
   Although the class will likely not have much background in negligence law or ethics, this question is directed at the patient's right of informed consent. The instructor might want to ask the class that assuming there is no other acceptable alternative drug therapy, should the mother have a right to choose not to use the drug, even though it might jeopardize the well being of her baby?
d. Should the patient have been told the drug was being used off-label?
   This is a different question than the previous one and really is a good question to ask anytime a drug is prescribed and dispensed off-label. A critical consideration might be determining how does it help the patient to know this information. If the off-label use of the drug presents a greater risk to the patient than alternative conventional drug therapies that might me available, perhaps the patient should be told. If telling the patient has no risk assessment value, but might simply alarm the patient, then maybe the patient should not be told.
e. When would you not dispense or prescribe a drug for an off-label use?
   Again, this is a risk assessment issue. If the pharmacist after researching the situation and discussing it with the prescriber determines the risk is greater than the benefit to the patient and could harm the patient, then a decision not to dispense might be appropriate and the prescriber must be informed.
f. How much evidentiary weight should the labeling be given in the malpractice lawsuit?
   Courts today tend to use labeling as evidence of the standard of care, along with the testimony of expert witnesses as to their opinion of the standard of care. The labeling alone will not likely be considered as the standard of care by itself (prima facie). The class should discuss, however, that

the labeling in this scenario specifically points out that the drug should not be used for tocolysis and the risks for doing so. Warnings and contraindications in the labeling will likely require more justification from the prescriber and pharmacist as to why the drug was used in spite of the labeling.

Chapter 4, Case 2, page 222

You receive a prescription from a physician employed at a large county hospital. The prescription was written on a prescription form that contained the DEA registration number of the hospital but not the physician. You call the physician who told you that he had no DEA number and that he just uses the hospital number. Would you fill the prescription? Would you answer change if the prescription was for a controlled drug?

Answer

The purpose of this scenario and question is to have the class consider and discuss what the requirements are for registration with the DEA, and exemptions under the law when individuals do not have to register. One of these exemptions includes an individual practitioner, such as a physician, who is an agent or employee of a hospital or institution registered with the DEA. The class should apply the information in the section "Registration—Exemptions—Individual Practitioners as Agents or Employees". In this section, there is a list of requirements that must be met for a prescription to be written by a physician using the DEA number of the hospital to be legal. If the requirements are met, the pharmacy may dispense the prescription. The class should discuss whose responsibility it is to assure the requirements are met and the resultant practical implications.

Study Scenario and Questions, Chapter 4, page 232

You receive a prescription for methadone. Upon calling the prescriber, you learn that the purpose of the prescription was to maintain the addiction. The physician informed you he was treating the patient under the Drug Addiction Treatment Act but was not knowledgeable about the requirements to do. You inform that prescriber that methadone cannot be prescribed under these conditions or fill the prescription as ordered.

Answer

1. How would you inform the physician of the requirements to be a qualifying physician under this program?
    - The purpose of this scenario and question is to have the class consider and discuss available options and requirements to treat opioid use disorder, including OTPs and DATA authorized prescribing. The class should apply the information in the section "Opioid Treatment Programs". To use methadone for addiction, it must be administered under a registered OTP, and pharmacies cannot dispense methadone in the community for addiction treatment. DATA allows other medications to be prescribed and dispensed at the outpatient level to treat addiction (currently buprenorphine products), but the prescriber must obtain a DATA 2000 waiver ID or "X" DEA number.
2. What drugs can be prescribed under this program?

Methadone cannot be prescribed under DATA, currently only buprenorphine products are approved. Methadone can be used in a registered OTP program.

Appendix D: Ethical Approval for Thesis Project

UNIVERSITY OF PORTSMOUTH

Professor Matthew Weait,
BA (Hons) MA MPhil DPhil FAcSS
Professor of Law and Society
Dean of the Faculty of Humanities and Social Sciences

T +44 (0)23 9284 6012
E matthew.weait@port.ac.uk

Faculty of Humanities and Social Sciences
Park Building
King Henry I Street
Portsmouth PO1 2DZ

T: +44 (0)23 9284 8484
port.ac.uk/fhss

FAVOURABLE ETHICAL OPINION (with conditions)

Name: Susan Hayes

Study Title: Blinded by the White: Recognising Pharmacy Dilemmas and Making Reasoned Pharmacoethical Decisions to Avoid Healthcare Fraud

Reference Number: FHSS 2018-072

Date: 20/11/2018

Thank you for resubmitting your application to the FHSS Ethics Committee and for making the requested changes/ clarifications.

I am pleased to inform you that FHSS Ethics Committee was content to grant a favourable ethical opinion of the above research on the basis described in the submitted documents listed at Annex A, and subject to standard general conditions (*See Annex B).*
With this there are a number of ethical conditions to comply with, and some additional advisory notes you may wish to consider, all shown below.

Condition(s)[1]

1. 8.1. The applicant will require additional ethical approval to either solicit in person and or conduct telephone interviews with pharmacists via direct email from the emailing list from the Dean's office.
2. 8.2. Replace DPA (1998) with GDPR (2018)

Advisory Note(s)[2]

A. The letter should be UoP headed and contain contact information regarding the supervisor and the HoD in case the Deans have objections, complaints or require more information

Please note that the favourable opinion of FHSS Ethics Committee does not grant permission or approval to undertake the research/ work. Management permission or approval must be obtained from any host organisation, including the University of Portsmouth or supervisor, prior to the start of the study.

[1] A favourable opinion will be dependent upon the study adhering to the conditions stated, which are based on the application document(s) submitted. It is appreciated that Principal Investigators may wish to challenge conditions or propose amendments to these in the resubmission to this ethical review.
[2] The comments are given in good faith and it is hoped they are accepted as such. The PI does not need to adhere to these, or respond to them, unless they wish to.

Appendix E: Copy of the Survey Administered

Determining How Routine Pharmacy Decisions are Made

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Page 1: Introduction

Thank you for participating in this survey. The purpose of the survey is to determine how pharmacists make decisions in ambiguous situations and how pharmacists' own beliefs influence their practice.

There are three parts. In Part One, you will be presented with five cases and asked the same three questions about the cases. You may only provide one answer to each question, so indicate the most likely action you would take. **If you have never encountered the situation, please respond as to what you *would do* in the situation.** You may want additional information about these cases, but assume no other information is available to you.

In Part Two, you will be asked your opinion regarding 21 statements.

In Part Three, you will be asked very generalized information about yourself which will not identify you personally but is intended to gather demographic information.

The survey should take you about 15 minutes to complete.

The results of this survey will be used as part of a Doctoral Thesis project on pharmacist decision-making with the University of Portsmouth, U.K. and has been given Ethical Approval (Institutional Review Board or IRB approval) by the University of Portsmouth. The findings may be useful in designing pharmacy curriculum or improving the standards for the practice of pharmacy.

This survey is totally anonymous and your identity will not be known to the researcher or anyone else, including your University. You understand that your participation is totally voluntary and you can stop taking the survey at any time. Please make sure to read and understand these conditions provided in the Participant Information Sheet that accompanied the email solicitation for this survey. You may withdraw at any time by simply exiting the survey. You may also skip a question by not answering and going to the next page/statement.

1. I have read the Participant Information Sheet attached to the email solicitation for this survey and I agree to participate. *Required*

☐ Yes

☐ No

Page 2

Part One - Case Studies

In this section, you will be presented with five case studies involving ethical issues. After reading each case, please respond to three questions.

Page 3: Case One

A female patient visits your pharmacy at night and needs a refill on her birth control prescription, which she had been taking for 2 years. She has no refills remaining, the physician is unavailable, and she is flying on a 6:00 am flight with her husband for a two-week trip out of the country. Assume you are in a state that does not allow for emergency refills.

2. How often has this situation or a similar situation happened to you in the last year?

- At least once a day
- Once or twice a week
- Once or twice a month
- Once or twice a year
- Never

3. What would you do?

- Dispense the medication
- Not dispense the medication

4. What is the primary basis for your decision?

a. If you selected Other, please specify:

Page 4: Case Two

A patient presents you with a prescription for Spondicin 20mg, a prescription only drug. As the patient is waiting for the prescription to be filled, the patient notices that Spondicin 10mg is available over the counter and asks you how can it be that one

strength is prescription only and the other is over the counter. The patient wants to purchase double the quantity of the OTC medication which is less expensive than his copay through his company's insurance plan.

5. How often has this situation or a similar situation happened to you in the last year?

- At least once a day
- Once or twice a week
- Once or twice a month
- Once or twice a year
- Never

6. What would you do?

- Dispense the Spondocin 20mg
- Fill the Over the Counter Spondocin 10mg, doubling the dose

7. What is the primary basis for your decision?

a. If you selected Other, please specify:

Page 5: Case Three

It is late at night and a patient presents a prescription for Enbrel. The weekly injection is overdue by a few days. The patient has been taking Enbrel for many years with no adverse side effects. However, when the prescription is sent to the pharmacy benefit manager, the message returned is the medication requires a Prior Authorization. The physician is not available and the physician's office cannot be reached. The patient insists on obtaining the medication. You complete the Prior Authorization form for the physician and send the signed form to the Pharmacy Benefit Manager so that the prescription will adjudicate, and plan to contact the physician the next day to advise the physician.

8. How often has this situation or a similar situation happened to you in the last year?

- At least once a day

- Once or twice a week
- Once or twice a month
- Once or twice a year
- Never

9. What would you do?

- Complete the Prior Authorization form
- Do not complete the Prior Authorization form and tell the patient to return when it is completed

10. What is the primary basis for your decision?

a. If you selected Other, please specify:

Page 6: Case Four

A patient presents you a complete and accurately written prescription by a dentist for lisinopril.

11. How often has this situation or a similar situation happened to you in the last year?

- At least once a day
- Once or twice a week
- Once or twice a month
- Once or twice a year
- Never

12. What would you do?

- Fill the prescription, there is no patient harm
- Do not fill the prescription

13. What is the primary basis for your decision?

a. If you selected Other, please specify:

Page 7: Case Five

You recently graduated from Pharmacy School and are delighted to be employed by Super Compounding Pharmacy, Inc. so that you may begin to pay off your student loans. Your job is to supervise a group of technicians that are compounding ketamine and gel. You notice that based on your calculations and the physician's orders, the technicians do not need as much ketamine as you anticipated. When you ask one of the technicians, she mentions that she was told by the owner, your new boss, to reduce the amount of ketamine in the compound. She also tells you that your predecessor was terminated over some dispute regarding compounding issues.

14. How often has this situation or a similar situation happened to you in the last year?

- At least once a day
- Once or twice a week
- Once or twice a month
- Once or twice a year
- Never

15. What would you do?

- Determine that the more experienced technicians are filling the prescriptions correctly since there has been no patient complaints or harm
- Confront your new boss at the risk of losing your job and defaulting on your loans

16. What is the primary basis for your decision?

a. If you selected Other, please specify:

Page 8: Part Two

This part of the survey uses a table of questions, view as separate questions instead?

17. In this section, please indicate the best response to the statements based on your own values.

	Strongly Agree	Agree	Disagree	Strongly Disagree
If an incomplete prescription is handed to a pharmacist, and the pharmacist can complete the information (like patient instructions for a drug always taken once a day) without contacting the prescriber, the pharmacist should do so.	☐	☐	☐	☐
A pharmacist should dispense Mifeprex/Misoprostol, if the drug and prescriber meet all other qualifications and regulations.	☐	☐	☐	☐
A woman comes into a pharmacy asking the pharmacist to identify a tablet found in her husband's jacket pocket. The pharmacist should provide the woman with the information.	☐	☐	☐	☐
A pharmacist should fill and dispense a prescription that he/she knew would be fatal (such as morphine and Ativan) if the hospice patient knew the risks and requested the medication from their physician.	☐	☐	☐	☐
A pharmacist should report a colleague to the State Board of Pharmacy if he/she was doing something in their practice that was legal but against some people's values.	☐	☐	☐	☐
A pharmacist should report a colleague to the State Board of Pharmacy if I knew he/she was doing something in their practice that was illegal.	☐	☐	☐	☐
A pharmacist should deliberately withhold information to a patient if it is in the best interest of the	☐	☐	☐	☐

patient and/or would allow the patient to be more compliant.				
It is acceptable to fill a prescription for a placebo (often written as "Obecalp" or placebo spelled backwards) and assign a price, if the medication benefits the patient.	☐	☐	☐	☐
If a physician is self-prescribing medication that is controlled and could be considered abusive, but is not illegal, a pharmacist should fill the prescription.	☐	☐	☐	☐
If a patient returns unopened, unused medication a day after the medication was dispensed, a pharmacist should return the medication to stock.	☐	☐	☐	☐
If a patient did not pick up a medication, a pharmacist should not waste the time to reverse the prescription in the claims processing system.	☐	☐	☐	☐
Insurance companies/Pharmacy Benefit Managers reimburse pharmacies/pharmacists enough for the work done and the medication dispensed.	☐	☐	☐	☐
If there is no patient harm, it is acceptable to alter prescription order information to allow a claim to process by the insurance company/Pharmacy Benefit Manager.	☐	☐	☐	☐
If a patient cannot afford their medication, a pharmacist should forgive a copay, so that the patient remains compliant with their medication.	☐	☐	☐	☐

I became a pharmacist because I like working unsupervised and being my own boss.	☐	☐	☐	☐
I became a pharmacist because I enjoy interacting with people.	☐	☐	☐	☐
I became a pharmacist because I excelled in science and math.	☐	☐	☐	☐
I became a pharmacist because of the high salary and benefit programs.	☐	☐	☐	☐
I became a pharmacist because of the prestige and community/peer/family recognition.	☐	☐	☐	☐
My career duties and salary/benefits meet my expectations.	☐	☐	☐	☐
The practice of pharmacy is stressful and I feel strained to get everything done correctly.	☐	☐	☐	☐

Page 9: Demographic Information

In this section, please provide the requested demographic information.

Page 10: Age

18. What is your age?

- ○ 20 - 25
- ○ 26-30
- ○ 31-35
- ○ 36-40
- ○ 41-45
- ○ 46-50
- ○ 51-55

- 56-60
- 61-65
- 66-70
- over 70

19. What is the year that you first became licensed to practice as a pharmacist?

- 1965
- 1966
- 1967
- 1968
- 1969
- 1970
- 1971
- 1972
- 1973
- 1974
- 1975
- 1976
- 1977
- 1978
- 1979
- 1980
- 1981
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- 1983

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- 2007
- 2008
- 2009
- 2010
- 2011
- 2012
- 2013
- 2014
- 2015
- 2016
- 2017
- 2018

20. What is your gender?

- Male
- Female
- Other/Don't care to say

21. Was the pharmacy school you graduated from located in the United States?

- Yes
- No

22. What is the primary state in which you work?

- AL
- AK
- AZ
- AR

- CA
- CO
- CT
- DE
- DC
- FL
- GA
- HI
- ID
- IL
- IN
- IA
- KS
- KY
- LA
- ME
- MD
- MA
- MI
- MN
- MS
- MO
- MT

- NE
- NV
- NH
- NJ
- NM
- NY
- NC
- ND
- OH
- OK
- OR
- PA
- RI
- SC
- SD
- TN
- TX
- UT
- VT
- VA
- WA
- WV
- WI

- WY
- Other, but U.S. (i.e. territory of the U.S.)
- Outside the United States

23. Which of the following best describes your primary practice setting?

- Independent Community/Retail Pharmacy
- Chain Community/Retail Pharmacy
- Long Term Care/Hospice Pharmacy
- Mail Order/Specialty Pharmacy
- Compounding Pharmacy
- Managed Care/Insurance Company/HMO
- Academia/Teaching Pharmacist
- Pharmacy Benefit Manager
- Consulting
- Hospital/Clinic Pharmacy
- Other:_____

24. What is your work status?

- Actively working 40 or more hours a week
- Actively working between 20 to 39 hours a week
- Actively working less than 19 hours a week
- Retired/unemployed/not working by choice

Conclusion

Thank you for taking this survey. Your responses will be very valuable in designing pharmacy curriculum and in advancing the professional standards of pharmacists.

Appendix F: Survey Codebook

Variable Name	Variable Label	Variable Values
ID	Survey Participant Number	None
Read Consent	Did Part Read Consent	1 = Yes, 2=No
C1F	Case One Frequency	0 = At least once a day, 1 = Once or twice a week, 2 = Once or twice a month, 3 = Once or twice a year, 4 = Never
C1D	Case One Decision	0 = Dispense Medication, 1 = Not Dispense Medication
C1R	Case One Reason	0 = In the interest of the patient's health, 1 = To avoid legal or Board of Pharmacy sanctions, 2 = To avoid violation a company rule, 3 = To avoid violating rules of the Pharmacy Benefit Manager, 4 = My professional judgment, 5 = Training/Education, 6 = Other
C2F	Case Two Frequency	0 = At least once a day, 1 = Once or twice a week, 2 = Once or twice a month, 3 = Once or twice a year, 4 = Never
C2D	Case Two Decision	0 = Dispense Medication, 1 = Fill Over the Counter
C2R	Case Two Reason	0 = In the interest of the patient's health, 1 = To avoid legal or Board of Pharmacy sanctions, 2 = To avoid violation a company rule, 3 = To avoid violating rules of the Pharmacy Benefit Manager, 4 = My professional judgment, 5 = Training/Education, 6 = Other

C3F	Case Three Frequency	0 = At least once a day, 1 = Once or twice a week, 2 = Once or twice a month, 3 = Once or twice a year, 4 = Never
C3D	Case Three Decision	0 = Complete the PA Form, 1 = Do Not Complete the PA form
C3R	Case Three Reason	0 = In the interest of the patient's health, 1 = To avoid legal or Board of Pharmacy sanctions, 2 = To avoid violation a company rule, 3 = To avoid violating rules of the Pharmacy Benefit Manager, 4 = My professional judgment, 5 = Training/Education, 6 = Other
C4F	Case Three Frequency	0 = At least once a day, 1 = Once or twice a week, 2 = Once or twice a month, 3 = Once or twice a year, 4 = Never
C4D	Case Three Decision	0 = Fill the Prescription, 1 = Do Not Fill the Prescription
C4R	Case Three Reason	0 = In the interest of the patient's health, 1 = To avoid legal or Board of Pharmacy sanctions, 2 = To avoid violation a company rule, 3 = To avoid violating rules of the Pharmacy Benefit Manager, 4 = My professional judgment, 5 = Training/Education, 6 = Other
C5F	Case Three Frequency	0 = At least once a day, 1 = Once or twice a week, 2 = Once or twice a month, 3 = Once or twice a year, 4 = Never

C5D	Case Three Decision	0 = Status Quo 1 = Confront Boss, Lose Job
C5R	Case Three Reason	0 = In the interest of the patient's health, 1 = To avoid legal or Board of Pharmacy sanctions, 2 = To avoid violation a company rule, 3 = To avoid violating rules of the Pharmacy Benefit Manager, 4 = My professional judgment, 5 = Training/Education, 6 = Other
S1 ComRx	Statement One - Completing an Incomplete Rx	0 = Strongly Agree, 1 = Agree, 2 = Disagree, 3 = Strongly Disagree
S2 Abort	Statement Two - Filling Legal Abort Rx	0 = Strongly Agree, 1 = Agree, 2 = Disagree, 3 = Strongly Disagree
S3 Conf	Statement Three - Breaching Confidentiality	0 = Strongly Agree, 1 = Agree, 2 = Disagree, 3 = Strongly Disagree
S4 Fatal	Statement Four - Filling Fatal Meds	0 = Strongly Agree, 1 = Agree, 2 = Disagree, 3 = Strongly Disagree
S5Anti Values	Statement Five - Report Colleague Anti Values	0 = Strongly Agree, 1 = Agree, 2 = Disagree, 3 = Strongly Disagree
S6Illegal	Statement Six - Report Colleague Doing Illegal Activities	0 = Strongly Agree, 1 = Agree, 2 = Disagree, 3 = Strongly Disagree
S7Withhold P Inform	Statement 7 - Withhold Patient Information for Compliance	0 = Strongly Agree, 1 = Agree, 2 = Disagree, 3 = Strongly Disagree
S8 Disp/Price Obecalp	Statement 8 - Dispense and Price Placebo Meds	0 = Strongly Agree, 1 = Agree, 2 = Disagree, 3 = Strongly Disagree
S9 PhysAbuse	Statement 9 - Fill Physician self-abuse medication	0 = Strongly Agree, 1 = Agree, 2 = Disagree, 3 = Strongly Disagree
S10UnopenRTS	Statement 10 - Return to Stock unopen meds	0 = Strongly Agree, 1 = Agree, 2 = Disagree, 3 = Strongly Disagree

S11RTS	Statement 11 - Reversing Return to Stock Meds	0 = Strongly Agree, 1 = Agree, 2 = Disagree, 3 = Strongly Disagree
S12PBM don't pay	Statement 12 - PBMs do not pay pharmacists enough	0 = Strongly Agree, 1 = Agree, 2 = Disagree, 3 = Strongly Disagree
S13 Alter Rx	Statement 13 - Acceptable to Alter Rx to process w/no patient harm	0 = Strongly Agree, 1 = Agree, 2 = Disagree, 3 = Strongly Disagree
S14 ForCopay	Statement 14 - Acceptable to forgive copay	0 = Strongly Agree, 1 = Agree, 2 = Disagree, 3 = Strongly Disagree
S15Work Unsuper	Statement 15 - Became RPh to work Unsupervised	0 = Strongly Agree, 1 = Agree, 2 = Disagree, 3 = Strongly Disagree
S16WorkPeople	Statement 16 - Became RPh to work with people	0 = Strongly Agree, 1 = Agree, 2 = Disagree, 3 = Strongly Disagree
S17S&M	Statement 17 - Became RPh b/c like math and science	0 = Strongly Agree, 1 = Agree, 2 = Disagree, 3 = Strongly Disagree
S18 $/Bene	Statement 18 - Became RPh b/c high salary and benefits	0 = Strongly Agree, 1 = Agree, 2 = Disagree, 3 = Strongly Disagree
S19 Prestige	Statement 19 - Became RPh b/c prestige	0 = Strongly Agree, 1 = Agree, 2 = Disagree, 3 = Strongly Disagree
S20 Meets Expect	Statement 20 - Being a RPh meets all my expectations	0 = Strongly Agree, 1 = Agree, 2 = Disagree, 3 = Strongly Disagree
S21 Feel Strained	Statement 21 - Practice is strained and stressful	0 = Strongly Agree, 1 = Agree, 2 = Disagree, 3 = Strongly Disagree
Age	Participant's Age	0 = 9-14, 1 = 15-20, 2 = 20-24, 3 = 25-30, 4 = 30-34, 5 = 35-40, 6 = 40-44, 7 = 45-50, 8 = 50-54, 00 = 55-60, 00 = over 60
YearLic	Year Participant Became Licensed as a Pharmacist	None
Gender	Participant's Gender	0 = Male, 1 = Female, 2 = Other
COPUS	College of Pharmacy in US	0 = Yes, 1=No
WrkST	What is the state participant works	None

WrkVen	What type of Pharmacy Does Participant work in	0 = Independent Community/Retail Pharmacy, 1 = Chain Community/Retail Pharmacy, 2 = Long Term Care/Hospice Pharmacy , 3 = Mail Order/Specialty Pharmacy, 4 = Compounding Pharmacy, 5 = Managed Care/Insurance Company/HMO, 6 = Academia/Teaching Pharmacist, 7 = Pharmacy Benefit Manager, 8 = Consulting, 00 = Hospital/Clinic Pharmacy, 00 = Other
WrkHrs	How many hours a week Does Participant work	1 = 40+, 2 = 20 - 39, 3 = less than 19 , 4 = Not working/retired

Appendix G: Table of Surveyed Pharmacist, Years in Practice

		Frequency	Percent	Cumulative Percent
Years	1	17	4.7	4.7
	2	26	7.2	12.0
	3	16	4.4	16.4
	4	23	6.4	22.8
	5	25	6.9	29.8
	6	18	5.0	34.8
	7	22	6.1	40.9
	8	20	5.5	46.5
	9	10	2.8	49.3
	10	14	3.9	53.2
	11	14	3.9	57.1
	12	11	3.0	60.2
	13	13	3.6	63.8
	14	6	1.7	65.5
	15	7	1.9	67.4
	16	9	2.5	69.9
	17	4	1.1	71.0
	18	7	1.9	73.0
	19	3	0.8	73.8
	20	10	2.8	76.6
	21	2	0.6	77.2
	22	10	2.8	79.9
	23	9	2.5	82.5
	24	3	0.8	83.3
	25	5	1.4	84.7
	26	2	0.6	85.2
	27	1	0.3	85.5
	28	2	0.6	86.1
	29	2	0.6	86.6
	30	5	1.4	88.0
	31	3	0.8	88.9
	32	3	0.8	89.7
	33	2	0.6	90.3
	34	3	0.8	91.1
	35	2	0.6	91.6
	37	4	1.1	92.8
	38	5	1.4	94.2
	39	1	0.3	94.4
	40	1	0.3	94.7
	41	3	0.8	95.5
	43	6	1.7	97.2

	45	2	0.6	97.8
	46	1	0.3	98.1
	47	1	0.3	98.3
	48	3	0.8	99.2
	49	2	0.6	99.7
	54	1	0.3	100.0
	Total	359	99.2	
Missing	System	3	0.8	
Total		362	100.0	

Appendix H: The "Other" Response

The "other" response gave respondents a chance to type in responses in their own words as to why a decision was made if the reasons in the survey were not sufficient. This Appendix is referred to in Chapter 4.8 as inductive content analysis was performed on these responses. Chapter 5, and in particular, Chapters 5.4 – 5.8 each have excerpts from the below responses. When each case is discussed in Chapter 5, the number of other responses are listed which will differ from the number listed below as respondents were able to provide multiple "other" responses on the same case.

Case One

1. not emergency medicine, would try to page MD.
2. Call dr on call for 1 month supply
3. avoid legal/board repercussions
4. It would depend on the patient - if I know the patient and have a good relationship with her doctor, and she is a regular patient at my pharmacy so that I can see a consistent refill history, I might be inclined to provide one refill and contact the doctor in the morning. If she was not a regular patient of mine or had an inconsistent refill history (missing days or weeks between refills), I would be more likely to err on the side of caution and not dispense.
5. For good measure, I'll also contact the MD and get a retro-approval for refill.
6. It's a chronic medication that most likely if the provider was available they would refill. Going without could cause patient harm.
7. Poor planning on your part does not constitute an emergency on my part
8. Ethically, I would want to fill the medication in the interest of the patient, but as a new pharmacist, I would be afraid of legal and state sanctions in this case.
9. When I worked for Walmart in a big city, I would definitely not dispense the medication. But if I worked in my hometown at an independent pharmacy and had a working relationship with the local PCP, then I would probably dispense it. In my hometown, I probably had the doctor's cell number and could probably get it ok-ed after hours. But then again, the hometown doctor probably would probably not consider it necessary to even ask. I have seen these working relationships in action. For me, circumstance determines the answer.
10. This may fall under training/education, but there are alternatives to the birth control pill, specifically other contraceptive methods over the counter (condoms). Were there no alternative, my answer would change to dispense. However, because there are and the cost is a minor inconvenience to the patient rather than a direct health risk, I would take the opportunity to educate the patient about the need to take responsibility for making her prescriptive care a higher priority. (My answer would change to dispense if she or her husband have a latex allergy or if the oral contraceptive were being used for another reason (hormonal modulation). If her use is for the purpose of oral contraception, then I would not risk the liability for her failure to take greater responsibility.
11. Many reasons exist, including state and federal laws, company laws, concern for patient's health etc. To fill a script without a valid prescription is illegal for many

reasons. The patient also has other options for avoiding pregnancy (assumes this is the primary reason for the medication), such as use of condoms or avoidance of sex.

12. I would page the on-call Doctor and get a script or get it first thing the following morning.
13. Pharmacy label at time of dispensing indicates how many refills remain. She new from the time she got her last Rx that she has no refills remaining. Patient needs to take responsibility for managint her care and needs and should have planned for refill renewal earlier than the day before!
14. Depends on the relationship I have with patient. I don't work retail pharmacy, however if this was a patient that I was familiar with in terms of health aspect and the physician I had some familiarity with, I would give it. If this is a patient that I have no relationship with, then absolutely not.
15. a combo of all the options
16. No obligation to solve her problem which should have been addressed by her at her doctor's days before.
17. I would get the doctors approval on Monday & transfer the prescription for the patient then.
18. Combination of legal and professional decision that birth control in not medically needed.

Case Two

1. I would advise buying the over the counter and counsel but I would not fill the Rx. I would also ask the patient about tiger payment, if the have an HSA/fsa w would do what I could do they could use that
2. I'm unsure if the "what would you do" question pertains to filling the rx with the OTC formulation of the medication or allowing the patient to purchase the OTC formulation and keep the rx. I am not filling a prescription with the OTC formulation. I give them the option of using the rx or purchasing the OTC.
3. Patient can choose to buy over the counter without me having to process through insurance.
4. I don't know if I understand it correctly. I wouldn't "fill" the OTC drug but I'd allow the patient to buy it if they wanted to save money.
5. I would not fill the prescription, I would council the patient to purchase the Spondocin over the counter, take 2 of the 10 mg and inform the prescriber
6. I would not fill the prescription and let her purchase it on her own.
7. I would fill the 20mg, but tell the patient they are more than welcome to double the 10mg over the counter, but it would not be by prescription
8. There should be an option for #6 that says neither option. We can tell the patient to buy the Spondocin 10 mg over the counter and write out instructions according to what the prescriber originally wrote on the Spondicin 20 mg. The prescription for the Spondicin 20 mg can be put on hold in the patient's file so that he can get it filled in the future without having to request a new prescription from the doctor, but through just a simple phone call to the prescriber's office. I only chose "Dispense the Spondocin 20 mg" because there is a possibility that the Spondocin 20 mg may become cheaper in the future, and the patient may want to pay his copay to pick up the prescription.

9. It is the same medication and it saves the patient money, it helps the patient out financially. Counsel to ensure they realize the correct dosing
10. Cost to patient
11. Best interest of patient due to cost burden
12. save the patient cost
13. I work in a hospital setting. This is not applicable to my practice
14. Would offer to fill the 20 mg rx to avoid acting outside of my scope of practice; would suggest pt call prescriber and get OK to use 2 x 10 mg OTC and cancel rx
15. verify same medication, reasons for Rx only vs OTC; benefit for patient if cost effective
16. Cost basis would have to come into play as well as copay
17. If Spondocin is oral and the active + excipients are equivalent & not harmful, I would OK the OTC version as equivalent. If I had any questions, or if the medication was topical, I would call the MD to see if the OTC strength doubled is sufficient to treat the ailment.
18. Depends on formulation PK, but if no issue with comparability, then it's in the interest of the patient
19. Assist patient in making a cost effective decision and ensuring that patient is educated on the prescribed dose, duration of therapy. Just to clarify -- patient would be purchasing the OTC out of pocket (I would not be filling the OTC product and bill it as prescription).
20. I would fill the original prescription, but inform the patient the OTC product would be cheaper for him. I would not change the prescription without authorization from the prescriber to protect from insurance audits.
21. Not fill the OTC, but let them purchase the OTC and give back the prescription or leave it on file
22. Makes more sense
23. Patient can simply purchase it over the counter with proper counseling and instruction, negating the need for me to fill the prescription product. Helping the patient achieve proper outcomes while also saving money is something patient's value and differentiates us from the competition.
24. Same medication and it cheaper. Please note I’m a pharmacist who is employed by a insurance company and do not have direct patient contact.
25. In the interest of the patients wallet; no point in needlessly paying more for medication.
26. I would actually do neither of the options for question 6. I would place the 20mg on Hold and "recommend" she buy the 10 OTC.
27. I wouldn't do either of these. I would recommend over the counter Spondocin 10mg at the double dose, but not "fill" it through the pharmacy. then put the Spondocin 20mg on file to be used later if needed.
28. I’d fill for what’s written and provide the patient with a choice. Let the know theirs an alternative otc that is more cost effective to them or fill at the pharmacy with the prescription. I’d rather my patient have access to more cost effective alternatives.
29. I would give the patient the option to buy the medication OTC. If they wanted me to fill it as a prescription, I would call the Dr to get the okay to switch it.
30. Cost/benefit analysis

31. My decision would be in the general interest of the patient (since both options have the same effect upon the patient's health). As long as the insurance approved it, I would not be violating any specific rules that could put my license at risk, so I would want to serve the patient's interests as best I can.
32. I do not know what SPONDOCIN is so I have difficulty with this queston. but from what I know, in gereral, there would be no harm to use 10 mg and double the dosage
33. If it is more cost effective to purchase OTC - they will just buy it OTC not fill it with an OTC product
34. Not dispense anything but let patient purchase otc med and hold the rx
35. Or in the interest of patient's out of pocket cost... especially when I worked for a corporation like Walmart. I wasn't as concerned about our own bottom line.
36. Patient will be taking the same dose but at a lower price
37. I would ask patients to buy over the counter and not fill Rx as it's cheaper for pt to get over the counter
38. I would give the patient the directions and have them purchase medication otc. (Return script to patient essentially)
39. There doesn't seem to be a reason not to, and it will be more economical for the patient (which may improve adherence).
40. I might recommend patient purchase OTC medication; would not change medication and dispense as rx
41. Wouldn't fill it. Would just have them by the OTC as they preferred.
42. Cost is a consideration in health care, and once sure that the patient understands the change in directions (2x10 vs. 20 mg), it is important to take a role in alleviating burdens associated with health care so as not to discourage patients from seeking health care.
43. I would review literature and verify that 1 x 20 mg = (2 x 10) mg. The patient has the right to make purchases of OTC meds and make their own financial decisions. I will not interfere with a patient's individual rights.
44. They are going to do it any way and there is no law precluding them from doing so.
45. there is no difference between 20mg rx and 2 x 10mg OTC. I cannot stop a patient from purchasing an OTC medication.
46. I would sell the OTC to the patient, but print off how they should be taking the 20 mg
47. I would provide the patient with the correct directions for the OTC but would not process it as an Rx.
48. Wouldn't patient buy OTC Spondocin vs filling through insurance based on the narrative?
49. if medication is over the counter, patient can just purchase w/o need to fill the prescription
50. only change if MD ok with OTC
51. I would offer the patient the otc - not filled on rx and let patient pay cash for cheaper alternative
52. I would sell the patient the over the counter medication without attaching an rx to it. leave it out of the pharmacy side
53. To increase the odds of the patient getting the medication.
54. Common sense! Same med, less cost. Win for the patient and win for their trust in the pharmacist.

55. Also, insurance is probably paying for that strength and it would be more expensive to do more OTC.
56. I would just have the patient buy the drug otc and not actually fill the Rx so they would save money and save me time.
57. The answer I'd actually choose was not available. I wouldn't "fill" the OTC drug; I'd not prevent the patient from purchasing it though. I'd do the same as a patient.
58. I wouldn't actually fill the prescription. Just assure the patient that yes it is the same med, and tell him that the prescribed dose is 20mg, allowing the patient to make their own decision.
59. I would do this because it is in the best interest of the patient. I would leave the choice up to the patient, but would encourage the patient to purchase the OTC option if it was cheaper after discussing safety, but I would not "fill" the OTC - that would be fraud in my professional opinion. If I were to "fill" anything, it would be the prescription as written.
60. I wouldn't fill as a prescription or bill insurance, but it is the patient's choice to make that decision to save themselves some money. I would still offer counseling as appropriate.
61. I would always choose the more affordable option for the patient given that they understand how to take the OTC dose.
62. If the med is a lot cheaper, depending on the difference in price, the patient is more likely to get it OTC at the cheaper price and take it.
63. Help the patient save money
64. In the interest of decreasing patient drug costs
65. I would not dispense anything. Patient can get 10mg otc and use it as directed by prescriber. Informed patient choice can't force them to get 20mg Rx if they don't want to pay for it
66. Act in the best financial interest of the patient, even though he has to take 2 pills, it is cheaper and he is more likley going to stay on therapy, as opposed to stop therapy due to high cost of rx. Patient choice is important in balancing convenience of 2 pills vs access that is fiscally responsible.
67. Again, not a retail pharmacist but I would tell the patient I can fill the 20mg version as an Rx or he can pay for the OTC version without filling it as a prescription. I would be in favor of the latter saving the system money.
68. I'd have a discussion with the patient.
69. To satisfy the patient who would be concerned for the cost of the medication
70. would sell the OTC with directions to take 2 units to attain the proper dose. Customer justice.
71. Patient can purchase otc on their own. Store 20mg rx.
72. I choose door number 3 ...patient can buy otc if they choose
73. I wouldn't do either of the choices in #6. I would advise the patient to buy the OTC and take double the dose.
74. I would just have them purchase OTC and explain the directions and counsel, not fill as RX
75. Dispense as written initially then tell patient to discuss changing to OTC product with his doctor
76. I would let them buy the OTC strength and they can take it as they wish

77. Patient’s choice
78. Patient more likely to adhere to therapy due to lower out of pocket cost.
79. OTC products are often available at lower strengths.
80. It is in the best financial interest of the patient to buy otc. I would explain the reasoning behind the Rx to Otc issue so the understood why this situation can occur.I would advise the patient to purchase the otc and counsel them on how to take it. I have had patients receive Rx items that are high$ and realize they can buy it OTC. Patients get very upset and see the pharmacists/industry and greedy and deceptive.
81. Let them buy it OTC and not dispense as a prescription
82. Could counsel pt they can buy the OTC and take as directed
83. I wouldn't fill the Spondocin 10mg, I'd just let them buy the Spondocin 10mg over the counter and counsel them on it.
84. I would not fill it as a prescription but tell them how to take it

Case Three

1. The way our system works, we are unable to perform the prior auth. The MD is the only one who can. Therefore, I would not be able to do it for the patient any way. Everything has to be sent to and completed by the doctor and then sent to the insurance where I work.
2. I would complete the PA form if allowed by the PBM. Most forms need to be signed by the provider, however in this scenario I would do what I can do to take care of my patient.
3. Prior authorization requires chart notes to be completed. Professionally and legally cannot be completed without up to date information documented by the physician.
4. This scenario makes no sense becuase it states that in the scenario that "you complete the PA form" but then asks if the PA form should be completed or not. The info is given that I already did so don't really know what I'm deciding about.
5. Unfortunately, it's more important to keep the pharmacy out of financial jeopardy than delaying this particular treatment for another couple of days. Keeping the pharmacy open is, itself, patient care.
6. I don't believe I can fill out the PA, if that was na option I would do that.
7. Prior Authorizations are to be filled out by the prescriber. The pharmacist does not have the time to do the prescriber's work. We do enough for the prescribers and patients already.
8. This is highly unethical, since it involves potential forgery if the physician cannot be reached or the prescriber has suddenly passed away. I have had patients and doctors notify us that a certain prescriber was no longer practicing after attending their funeral. If the prescriber has suddenly stopped practicing due to a loss of licensure or sudden retirement (due to disability, leaving the country, etc), then the prescription cannot be filled through most pharmacy computer systems.
9. It is not ethical to sign for another provider. I would try to contact the prescriber at the earliest possible.
10. If had relationship with physician
11. I feel I would be committing fraud by filling out a form intended for the physician, and honestly our company's system does not provide the resources/paperwork/websites to commit this kind of fraud (filling out PAs on behalf of an MD). I would call first thing

in the morning to initiate prior auth with MD. It will not cause undue harm to miss an additional 12 hours and most definitely is not worth the risk of fraud.
12. The patient is already overdue. Another day will not be critical
13. Actions would depend on relationship previously established with prescriber; based on that relationship would make decision to complete or not complete prior authorization
14. I would only do the above IF I know the patient AND the MD very well. The patient should be aware of the process. Did they change MD's? This is an expensive higher risk medication. The process should be followed.
15. Would call drug company and insurance specially line the next AM as they have resources. Drug has two week half life and another day or so isn't a therapeutic issue.
16. I make it a point to let the patient know that my primary focus is to be able to fill and provide the medication for them, but their insurance plan/PBM is not allowing me to do this. The patient, employers, and payors must understand that these decisions are based upon monetary gain for the PBM and in no way have the patient's best interest in mind. Denying payment, setting up closed formularies, and shuffling business away to specialty pharmacies are a detriment to our profession and until patients and payors suffer and have had enough--nothing will ever change.
17. Prior auto is designed to only be completed by physician.. patient would have to wait for physician to complete it
18. I initiate prior authorizations all the time with the prior auth department. It doesn't mean the process is still complete as the physician will need to complete the process. It creates less work for the doctor office staff and helps shorten turn around time in which patient has to wait for approval.
19. This medication is much too costly for me to gamble on getting an audit. I send the PA form to the physician and tell the patient to call the physician as soon as they can.
20. I don’t have access to the PA form, so I couldn’t complete it. However, I’d give the med to the patient, charge them with their previous copay, and send the PA to the prescriber, explaining to the patient that if the copay comes back higher this time once I can rerun the Rx through insurance, I’ll expect the difference in payment as soon as possible.
21. Can just give the medication and bill for the date of the completed PA. Otherwise may lose out on money if PA completed incorrectly.
22. My decision is based upon both my personal code of ethics and to avoid legal sanctions. I would never forge a practitioner's signature to make it look as if they were responsible for a decision that they did not make, because I would not want this done to me (and honestly I would also be afraid of sanctions). I would also counsel the patient on non-prescription birth control methods, like condoms, so that my ethics would remain intact and so that the patient would know how to protect herself from an unwanted health condition (pregnancy) while she is not protected by Enbrel.
23. Forging a signature is a big rule to break.
24. Patient has speciality pharmacy to go for this so it does not happen at retail
25. Patient could pay out of pocket or return when PA approved by physician/PBM
26. I would ensure prior auth completed prior to dispensing for assurance of reimbursement.

27. I do not know all events/diagnoses of the patient. That is the patient's and physician's joint obligation. I will not risk litigation against my license sue to lapses in other peoples judgement.
28. question pt intently on why he's late refilling, and if I agree on why he's late, fill it.
29. send filled out form to MD office to sign and submit - try to help patient speed needed process
30. The patient is already overdue so the wait for the PA should not affect the patient's outcome
31. Oh gosh where to start with this one. Enbrel has a ton of blood work for liver tests, ESR, vision tests, too many labs you would have to try to fudge. It could tick the doctor off and he could make your life a living pain. And to top it all off, that is some EXPENSIVE stuff. No way I would want to take a 2,000 to $3,000 reimbursement hit.
32. The question states I already completed the PA form then asks if I would complete it. Was it meant to be another set of choices?
33. I don’t have access to the patients medical files to adequately answer some of the questions on the prior auth.
34. Pharmacists don't always have all the info to fill out those forms in the first place (ie: diagnosis codes, lab values, etc.)
35. This question makes no sense. We fax the prior authorization form. We can't fill it out for the Dr nor do we contact the insurance. To do that would be fraud. Plus I wouldn't know how to do that anyways.
36. I would dispense one injection for immediate use and contact MD for PA completion the next day.
37. Frustrated
38. In the US, PBMs do not allow pharmacists to comlete prior authorizations
39. Patient has option to pay for the enbrel today if they really want the script now. Than get refund when and if it is approved by insurance. Not going to forge prior authorization form by signing off as the prescriber. Pt has valid script happy to fill it for them but they have to pay for it somehow
40. If the PBM is aksing for MD signature, forging RPH signature is a violation of law. I would not do it!
41. PAs are to be completed by the physician's office anyways. If the pharmacist was affiliated and worked with the physician, I could see the pharmacist completing it. Anything other than that is fraudulent and probably circumvents the PBMs rationale for the PA in the first place.
42. I would not perpetrate a fraud on the company and doing so at the least could result in hundreds of lost dollars and suspension from the plan.
43. This is not straight forward. Some physicians we have agreements where we can send in prior form for them, others do not. It depends on the physician. This does not seem to be an urgent PA either. Urgent PAs can still take 24 hours to get approved. I will not fill until I know PBM will pay us and this is an expensive medication.
44. Again I wouldn't do either choice in #9. I'd ask the patient to pay and deal with reimbursement later.
45. I would never forge a document on behalf of a physician
46. Never been in that situation not sure 100% what I would do.

47. Patient could pay cash for the medication if they are adamant about getting it and then the Rx can be rebilled through the insurance once PA is completed.
48. if medication is rejected even after pa is complete do not want to lose out on cost. patient needs to learn not to wait until last minute.
49. I would try if possible. A pharmacist, especially in a retail setting, does not always have access to the patient's chart with the information needed to complete the PA.
50. Must have Rx from physician or risk loss through audits. PBM does not usually allow pharmacies to complete P.A.
51. The PA is usually only done through the doctors office. Not the pharmacy
52. Very expensive drug. I work for a corporate chain. If we lose this claim (no reimbursement) I could face job sanctions.
53. Forward medication and work on PA next day. Risk of not PA going through

Case Four

1. I would follow up on this and call the MD before I refused
2. Question arises with scope of practice.
3. I would not fill it on the spot, but would call the dentist and ask why they are prescribing it to the patient, the nature of their relationship, what expertise or business they have in prescribing a HTN drug. I may also perform a lit search about lisinopril or HTN meds and dentistry to gain further insight into why they may be prescribing the drug.
4. Unless there was a reason the dentist was using lisinopril for his scope of practice, I would not fill it.
5. Out of scope of dental practice.
6. not in the scope of practice for dentist
7. Before even processing the prescription, call the dentist to ask about the patient's diagnosis and treatment to confirm that the prescription was meant to be lisinopril. This could be a stolen prescription pad, which happens more often than people think. Controlled substances are not the only medications written on stolen prescription forms. #12 should have an option for filling the prescription, but urging the patient to follow up with the prescriber and also follow up with the dentist by calling from the pharmacy.
8. Call office and see if reason is within scope of practice. Sometimes medications have off label uses that would fall within the scope of practice of a provider
9. I would call and verify reasoning for this script before deciding to fill it. It is not within this prescriber's scope of practice and would require more information from the prescriber, the patient, and the patient's primary provider before legally dispensing.
10. I'd call the Dentist to see why they were using it
11. That is out of his scope of practice I do not have this happen only because I work in a hospital
12. Outside providers scope of practice
13. verify with dentist, call MD
14. Would only fill Rx after consulting with prescriber and verifying legitimate medical purpose
15. I would contact the dentist and ask about the prescription.

16. A phone call to the dentist would be warranted. I have heard of some dentists (and other professionals in a similar field) who would not perform some procedures if the patient's blood pressure is too high.
17. I would contact dentist to see if transient elevated BP results from seeing the dentist. If so, then it would be in his scope of practice and I could fill Rx and counsel appropriately
18. Would contact the dentist and figure out why they're prescribing lisinopril
19. I would want to know why. It may be a relative or it may be needed for dental reasons.
20. I would call dentist and question why
21. Its beyond Scope of Practice.
22. I would be willing to fill this if the patient had been on the dose previously and the dentist felt it should be continued until they saw their PCP
23. outside of prescriber's limits
24. I know that the mouth can tell a lot about a patient's overall health, and if the patient had a history of HTN or heart issues, I'd assume the dentist was a friend, family member, or just concerned about the patient. I'd certainly question the patient before filling the Rx as to why a dentist wrote it and encourage the patient to see his PCP for follow up. I'd call the dentist as well to ask why he wrote it.
25. Outside their scope of practice. Inappropriate Rx.
26. There is not enough time/bigger things to worry about then this.
27. My decision is both for the patient's health and to protect myself from sanctions. Lisinopril is outside the scope of a Dentist's practice, so I would not blindly trust a Dentist to make an informed decision about the benefits and consequences of the medication to their patient's health. In all honesty, I would also be afraid of sanctions against myself for negligence.
28. Call provider
29. Not within the prescribers scope of practice
30. A dentist writing a prescription for blood pressure medication goes beyond the scope of their practice. They should not be writing this at all and should know better. I would give the patient their script back and then contact the office and explain why I would not fill this script.
31. It's outside the dentist's scope of practice. The patient is unlikely to experience harm by waiting to be seen by a PCP, but could possibly come to harm by having his blood pressure managed by a dentist.
32. Not within scope of practice for this provider
33. Call office to determine if is withing scope of practice for dentist (high bp due to procedure) then fill if correct
34. I recognize that a dentist may prescribe certain meds, and do not have enough detail to determine the propriety of his prescription of lisinopril. I would call the dentist and determine his expertise and risk before I make a final decision. I would need more information before making a final decision, but I would NOT fill it without more info.
35. Though convenient to have a friend write a Rx like this, I would prefer that I can be assured there is proper cardiac follow-up being done by a MD rather than a DDS
36. Ask pt who his PCP is and if he knows he's taking linsinopril. If pt cannot get appt c PCP & DDS was only person who could write, then I'd fill it. Otherwide, I would not.
37. It is out of the scope of practice for the dentist

38. I would first call and verify script before making final decision.
39. Call the dentist, and ask why he seems to be writing out of his scope of practice.
40. There may be a legitimate reason.
41. outside of his scope
42. I would fill the prescription for one month and instruct the patient to see their pcp for refills.
43. I would call dentist to confirm Rx Counsel to have f/u refills with Primary Care Physician.
44. Talk with patient about why dentist wrote Rx
45. Ask dds if patient only has hypertension when coming to dentist office
46. Outside of scope of practice. Dentists typically do not diagnose hypertension. Unless there is some off label use of lisinopril by dentists which I would contact prescribed to clarify and then possibly fill.
47. I cannot cite a primary...it is a collection of issues. In my state of practice, professions are limited in scope of practice. Unless the dentist can provide some rationale how the med helps with oral health, it is beyond their scope. This is my professional judgement and in the best interest of the patient. A dentist is no more qualified than a pharmacist to independently prescribe meds for circulatory matters.
48. this is not in their scope of practice
49. Outside scope of practice
50. I will ask questions to patient and contact MD to gather information pertaining to prescription
51. I would question patient on use or followup with Dentist for more information. I do not have enough clinical information to make a professional judgement based in the information presented.
52. There may be an off label use of med we're not aware of. Also class of med is not restricted for a dentist desire it being out of their area of expertise.
53. Dentists can not prescribe outside of their scope of practice. Im a pharmacist and I cant write prescriptions!
54. There are some dentist offices that monitor blood pressure. There are cases when this may be appropriate and also some that may not (ie: If it was a short supply vs an rx with refills). I would definitely call to verify and base my decision on my conversation with MD and patient.
55. I would call dds and confirm the indication
56. Not in scope of practice.
57. Would call DS and ask for medical justification for using lisinopril. If it is for hypertension would explain they are outside scope of practice. Could cause pt harm without appropriate monitoring.

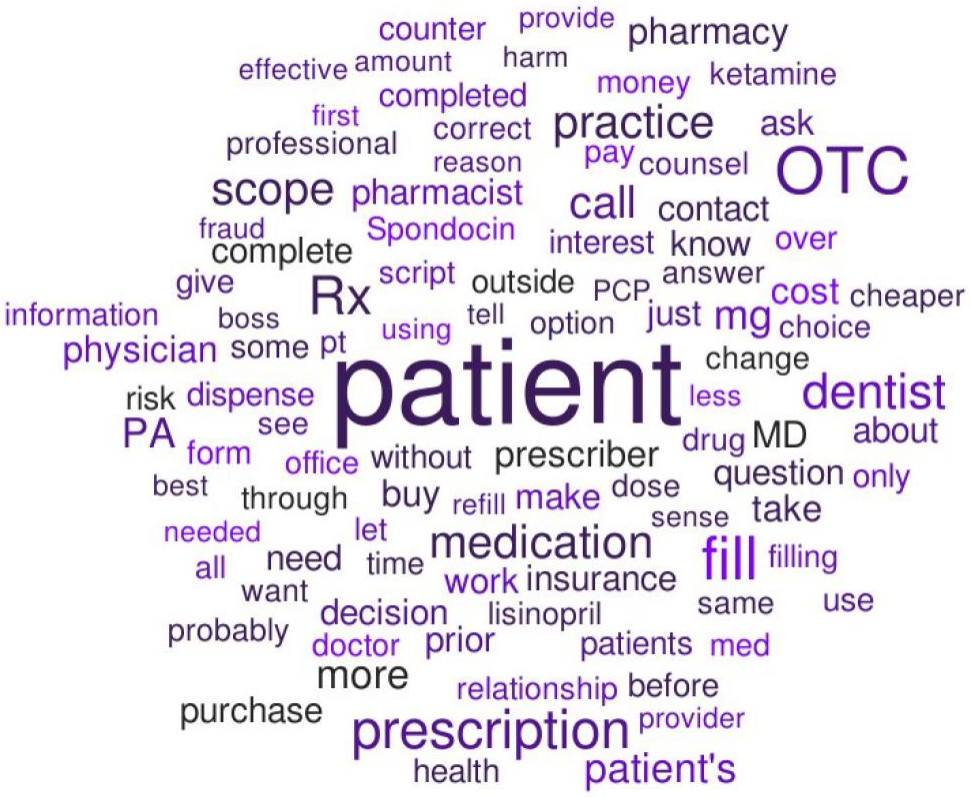
Case Five

1. All of the above: the patient's health (receiving the accurate dose), morality, legality, professional judgement, etc.
2. Don't understand the question; Are they using too much or not enough in this scenario? I notice they do not need as much as they thought, but when asked they say my boss told them to also reduce the amount they were using??

3. Ketamine is a controlled drug with a potential for abuse. It is unethical and illegal to reduce the amount in the prescription. You can opt to defer the loans rather than default so again, the scenario doesn't make the most sense as there are more reasonable options for action than what is stated.
4. It is better to lose your job than to lose your license and spend time in prison. Most state (Board of Pharmacy) and federal agencies (FDA, DEA) and lawyers who prosecute crimes have little to no tolerance for breaking the law. In response to #15, dead people can't complain.
5. as well as moral compass
6. Documentation/billing needs to be correct
7. These compounds would be missfilled if dispensed without the appropriate product as prescribed by the MD. I would not work for a boss that is intentionally asking me to dispense incorrect prescriptions.
8. I can't work for a company that promotes cheating patients.
9. Illegal to alter a controlled substance prescription. Again, never happened to me. I work in a hospital
10. Unethical practices need to be confronted.
11. If I noted illegal action, I would report the pharmacy to officials.
12. This case makes no sense. "The technicians do not need as much ketamine as you anticipated"...does this mean that they were using too much? Whatever the correct dose and concentration is determined should be what is utilized. Doesn't matter what the technician says or if the owner wants to reduce the amount--you have an obligation and duty to use what the prescriber intended and that it is calculated correctly.
13. "defaulting on your loans" is a bit extreme, I don't see that happening just from confronting your boss. Not a realistic answer to list.
14. Compounds need to be compounded accoridng to formula. It is morally and etically wrong to short a compound without a compelling therapeutic reason. Also, this question is confusing...Im assuming that the tech was told to FURTHER reduce the amount of Ketamine despite pharmacist calculations, but it doesn't state that explicitly.
15. Granted. My loans were 40K when i got out, not the 200K these poor students have now!
16. duh
17. Both integrity of the Rx and patient health
18. Neither choice is a complete answer for what I would do. I would contact the physician to explain the situation, and give them a chance to cancel their order if the change was unacceptable before the prescription was compounded. I would be afraid of doing something that would surely put my job at risk (since the last pharmacist was fired for sticking to the exact specifications of a similar prescription), but I would not give out a prescription that may be ineffective at treating a patient's condition. I would first confirm with the doctor that the lower strength prescription would be effective, and if it would not, I would give him/her a chance to order the product that the patient needs from somewhere else. I realize that creating an opportunity to lose a customer might also get me in trouble, but the risk is outweighed by my professional judgement and code of ethics.
19. Honestly, I would probably try to leave the company as quickly as possible without addressing the issue with the owner.

20. Lack of self confidence. Maybe I’m wrong in my calculations...
21. It's just the right thing to do. It could cause patient harm if not addressed.
22. This is also a legal and ethical situation if being "mislabeled" and filled incorrectly
23. My moral and ethical responsibility
24. There is no need to confront anyone. Simply provide your calculations in writing to your boss, and have them review and check the math. Jointly, a correct answer can be determined. If you are convinced you are right and your boss and technicians are wrong, make it clear that you will report the perceived transgressions to the board and then suffer the consequences. It is illegal and immoral to work at a place that is incorrect and possibly fraudulent.
25. My license is worth more than my first job.
26. This question is worded funny to me because it seems like the new pharmacist discovered less ketamine is needed and the boss tells the techs to use less ketamine, so they are in agreement.?.?
27. This question doesn't make sense either. They need less ketamine, but less ketamine is a problem? Does this mean that they need less AND the boss is directing them to lower that number even further?
28. This is an ethical decision for me. If the pharmacy is knowingly shorting patients, I would feel morally bound to bring up the issue.
29. the question is too vague. The amount is either correct or not. There is no gray area. I would not compound any products that I believe are not correct according to my calculations.
30. it is all these things. Protect patients, laws/rules, professional honor. You could probably involve the CMS and get money from them as a fraud whistleblower.
31. I didnt have student loans, so I cannot relate
32. Fear of defaulting on your loans
33. ethics
34. I'm confused about this question. It reads as though everyone is in agreement about reducing the amount of ketamine in the compound?
35. ethical and professional judgement

Word Cloud for Key Word Analysis of Other Response



Appendix I: Table of Cases and the Effect of Training on Decision-Making

Case One Would you fill without an order

			Training	All Else	
Would you fill without an order	Not dispense the medication	Count	3	174	177
		% within Would you fill without an order	1.7%	98.3%	100.0%
		Adjusted Residual	0.5	-0.5	
	Dispense the medication	Count	2	179	181
		% within Would you fill without an order	1.1%	98.9%	100.0%
		Adjusted Residual	-0.5	0.5	
Total		Count	5	353	358
		% within Would you fill without an order	1.4%	98.6%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.226[a]	1	0.634		
Continuity Correction[b]	0.001	1	0.980		
Likelihood Ratio	0.227	1	0.633		
Fisher's Exact Test				0.682	0.489

Linear-by-Linear Association	0.226	1	0.635
N of Valid Cases	358		

a. 2 cells (50.0%) have expected count less than 5. The minimum expected count is 2.47.

b. Computed only for a 2x2 table

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	0.025	0.634
	Cramer's V	0.025	0.634
N of Valid Cases		358	

Case Two - Would you fill without notifying MD

			Training	All Else	
Would you fill without notifying MD	Fill the Over the Counter Spondocin 10mg, doubling the dose	Count	13	261	274
		% within Would you fill without notifying MD	4.7%	95.3%	100.0%
		Adjusted Residual	-1.1	1.1	
	Dispense the Spondocin 20mg	Count	6	69	75
		% within Would you fill without notifying MD	8.0%	92.0%	100.0%
		Adjusted Residual	1.1	-1.1	
Total		Count	19	330	349
		% within Would you fill without notifying MD	5.4%	94.6%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.212[a]	1	0.271		
Continuity Correction[b]	0.662	1	0.416		
Likelihood Ratio	1.109	1	0.292		
Fisher's Exact Test				0.261	0.203
Linear-by-Linear Association	1.209	1	0.272		
N of Valid Cases	349				

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 4.08.

b. Computed only for a 2x2 table

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	-0.059	0.271
	Cramer's V	0.059	0.271
N of Valid Cases		349	

Case Three Would you complete and sign a PA

			Training	All Else	
Would you complete and sign a PA	Do not complete the Prior Authorization form and tell the patient to return when it is completed	Count	4	251	255
		% within Would you complete and sign a PA	1.6%	98.4%	100.0%
		Adjusted Residual	-0.9	0.9	
		Count	3	97	100

	Complete the Prior Authorization form	% within Would you complete and sign a PA	3.0%	97.0%	100.0%
		Adjusted Residual	0.9	-0.9	
Total		Count	7	348	355
		% within Would you complete and sign a PA	2.0%	98.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.761[a]	1	0.383		
Continuity Correction[b]	0.201	1	0.654		
Likelihood Ratio	0.703	1	0.402		
Fisher's Exact Test				0.407	0.311
Linear-by-Linear Association	0.759	1	0.384		
N of Valid Cases	355				

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 1.97.

b. Computed only for a 2x2 table

Symmetric Measures

		Value	Approximate Significance
	Phi	-0.046	0.383

Nominal by Nominal	Cramer's V	0.046	0.383	
N of Valid Cases		355		

Case Four Would you fill an out-of-scope Rx

			Training	All Else	
Would you fill an out-of-scope Rx	Do not fill the prescription	Count	23	288	311
		% within Would you fill an out-of-scope Rx	7.4%	92.6%	100.0%
		Adjusted Residual	1.2	-1.2	
	Fill the prescription, there is no patient harm	Count	1	41	42
		% within Would you fill an out-of-scope Rx	2.4%	97.6%	100.0%
		Adjusted Residual	-1.2	1.2	
Total		Count	24	329	353
		% within Would you fill an out-of-scope Rx	6.8%	93.2%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	1.468[a]	1	0.226		
Continuity Correction[b]	0.784	1	0.376		
Likelihood Ratio	1.869	1	0.172		
Fisher's Exact Test				0.334	0.193

Linear-by-Linear Association	1.464	1	0.226
N of Valid Cases	353		

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is 2.86.

b. Computed only for a 2x2 table

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	0.064	0.226
	Cramer's V	0.064	0.226
N of Valid Cases		353	

Case Five Would you agree to shortfilling

			Training	All Else	
Would you agree to shortfilling	Confront your new boss at the risk of losing your job and defaulting on your loans	Count	12	324	336
		% within Would you agree to shortfilling	3.6%	96.4%	100.0%
		Adjusted Residual	0.7	-0.7	
	Determine that the more experienced technicians are filling the prescriptions correctly since there has been no patient	Count	0	15	15
		% within Would you agree to shortfilling	0.0%	100.0%	100.0%
		Adjusted Residual	-0.7	0.7	
Total		Count	12	339	351
		% within Would you agree to shortfilling	3.4%	96.6%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.555[a]	1	0.456		
Continuity Correction[b]	0.000	1	0.985		
Likelihood Ratio	1.067	1	0.302		
Fisher's Exact Test				1.000	0.587
Linear-by-Linear Association	0.553	1	0.457		
N of Valid Cases	351				

a. 1 cells (25.0%) have expected count less than 5. The minimum expected count is .51.

b. Computed only for a 2x2 table

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	0.040	0.456
	Cramer's V	0.040	0.456
N of Valid Cases		351	

Appendix J: Effect on Gender and Moral Statements

This Table depicts the findings from an analysis of the effects of gender on the moral statements to determine if men or women were more or less in disagreement on these moral statements. The Mean (Column 4) was used as an average and then the Standard Deviation from the Mean (Column 5) was used to determine the amount of similarity between men and women. Discussion is presented in Chapter 5.14 that relate to this table.

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
S1: Changing/completing a Rx order w/o MD approval	Female	222	3.03	.727	.049
	Male	129	3.29	.785	.069
S2: Fill legal abortifacient	Female	216	3.24	.731	.050
	Male	129	3.28	.810	.071
S3: Breaching confidentiality to non-patient	Female	222	2.65	.814	.055
	Male	130	2.50	1.013	.089
S4: Filling a fatal dose for a hospice patient	Female	219	2.22	.851	.058
	Male	130	2.11	.942	.083
S5: Reporting a colleague over immoral behaviour	Female	221	1.71	.595	.040
	Male	129	1.76	.758	.067
S6: Reporting a colleague over illegal behaviour	Female	219	3.54	.629	.043
	Male	130	3.38	.650	.057
S7: Withholding information for patient compliance	Female	221	1.96	.649	.044
	Male	127	2.13	.836	.074
S8: Acceptable to fill a placebo and assign a price	Female	221	2.07	.924	.062
	Male	129	2.17	.969	.085
S9: Filling MD self-abuse prescription	Female	221	1.87	.721	.049
	Male	129	1.84	.748	.066
S10: Returning unopened meds to inventory after leaving pharmacy	Female	221	1.50	.658	.044
	Male	128	1.55	.762	.067
S11: Wasting time to reversing claims for Rxs not picked up	Female	221	1.32	.595	.040
	Male	130	1.33	.627	.055
S12: PBMs pay enough for pharmacist work	Female	220	1.44	.649	.044
	Male	129	1.53	.867	.076
S13: OK to alter patient/claim information to get the claim to process	Female	220	1.84	.734	.050
	Male	129	2.02	.824	.073

S14: Forgiving copays is ok	Female	220	2.04	.671	.045
	Male	129	2.29	.785	.069
S15: Became RPh to be unsupervised	Female	222	2.05	.703	.047
	Male	127	2.37	.853	.076
S16: Became RPh to be with people	Female	222	3.10	.720	.048
	Male	130	3.18	.755	.066
S17: Became RPh because good in math/science	Female	222	3.09	.703	.047
	Male	129	3.17	.708	.062
S18: Became RPh for high salary/benefits	Female	221	2.80	.692	.047
	Male	129	3.03	.728	.064
S19: Became RPh for prestige and community/peer/family recognition.	Female	222	2.63	.737	.049
	Male	129	2.76	.818	.072
S20: Career meets my expectations.	Female	220	2.69	.774	.052
	Male	129	2.95	.774	.068
S21: Pharmacy is stressful and strained	Female	222	3.21	.750	.050
	Male	128	3.07	.862	.076

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
S1: Changing/completing a Rx order w/o MD approval	Equal variances assumed	10.679	.001	-3.174	349	.002	-.263	.083	-.426	-.100
	Equal variances not assumed			-3.110	251.307	.002	-.263	.085	-.430	-.096
S2: Fill legal abortifacient	Equal variances assumed	2.123	.146	-.507	343	.613	-.043	.085	-.210	.124

	Equal variances not assumed			-.494	247.983	.622	-.043	.087	-.214	.128
S3: Breaching confidentiality to non-patient	Equal variances assumed	15.607	.000	1.554	350	.121	.153	.099	-.041	.347
	Equal variances not assumed			1.468	225.956	.143	.153	.104	-.052	.359
S4: Filling a fatal dose for a hospice patient	Equal variances assumed	.734	.392	1.183	347	.238	.116	.098	-.077	.309
	Equal variances not assumed			1.153	249.685	.250	.116	.101	-.082	.314
S5: Reporting a colleague over immoral behaviour	Equal variances assumed	3.509	.062	-.736	348	.462	-.054	.073	-.198	.090
	Equal variances not assumed			-.691	220.057	.490	-.054	.078	-.207	.100
S6: Reporting a colleague over illegal behaviour	Equal variances assumed	.391	.532	2.360	347	.019	.166	.071	.028	.305
	Equal variances not assumed			2.340	264.057	.020	.166	.071	.026	.307
S7: Withholding information for patient compliance	Equal variances assumed	20.091	.000	-2.072	346	.039	-.167	.080	-.325	-.008
	Equal variances not assumed			-1.937	213.752	.054	-.167	.086	-.336	.003

S8: Acceptable to fill a placebo and assign a price	Equal variances assumed	3.974	.047	-.985	348	.326	-.103	.104	-.308	.102
	Equal variances not assumed			-.972	257.727	.332	-.103	.106	-.311	.105
S9: Filling MD self-abuse prescription	Equal variances assumed	1.324	.251	.446	348	.656	.036	.081	-.123	.195
	Equal variances not assumed			.441	260.127	.659	.036	.082	-.125	.197
S10: Returning unopened meds to inventory after leaving pharmacy	Equal variances assumed	3.838	.051	-.576	347	.565	-.045	.078	-.197	.108
	Equal variances not assumed			-.554	235.100	.580	-.045	.081	-.203	.114
S11: Wasting time to reversing claims for Rxs not picked up	Equal variances assumed	.334	.564	-.209	349	.835	-.014	.067	-.146	.118
	Equal variances not assumed			-.206	259.005	.837	-.014	.068	-.148	.120
S12: PBMs pay enough for pharmacist work	Equal variances assumed	8.664	.003	-1.111	347	.267	-.091	.082	-.251	.070
	Equal variances not assumed			-1.032	212.456	.303	-.091	.088	-.264	.083
S13: OK to alter patient/claim	Equal variances assumed	.019	.892	-2.192	347	.029	-.187	.085	-.355	-.019

information to get the claim to process	Equal variances not assumed			-2.128	244.031	.034	-.187	.088	-.360	-.014
S14: Forgiving copays is ok	Equal variances assumed	16.092	.000	-3.199	347	.002	-.254	.079	-.410	-.098
	Equal variances not assumed			-3.072	235.981	.002	-.254	.083	-.416	-.091
S15: Became RPh to be unsupervised	Equal variances assumed	18.430	.000	-3.732	347	.000	-.316	.085	-.483	-.149
	Equal variances not assumed			-3.544	223.866	.000	-.316	.089	-.492	-.140
S16: Became RPh to be with people	Equal variances assumed	1.759	.186	-1.000	350	.318	-.081	.081	-.240	.078
	Equal variances not assumed			-.988	259.945	.324	-.081	.082	-.242	.080
S17: Became RPh because good in math/science	Equal variances assumed	.135	.713	-1.088	349	.277	-.085	.078	-.239	.069
	Equal variances not assumed			-1.086	266.098	.278	-.085	.078	-.239	.069
S18: Became RPh for high salary/benefits	Equal variances assumed	1.526	.218	-2.944	348	.003	-.230	.078	-.384	-.076
	Equal variances not assumed			-2.905	256.854	.004	-.230	.079	-.386	-.074

S19: Became RPh for prestige and community/peer/family recognition.	Equal variances assumed	.831	.362	-1.572	349	.117	-.134	.085	-.301	.034
	Equal variances not assumed			-1.529	245.641	.127	-.134	.087	-.306	.038
S20: Career meets my expectations.	Equal variances assumed	2.725	.100	-3.021	347	.003	-.259	.086	-.428	-.091
	Equal variances not assumed			-3.022	268.439	.003	-.259	.086	-.428	-.090
S21: Pharmacy is stressful and strained	Equal variances assumed	1.938	.165	1.555	348	.121	.137	.088	-.036	.310
	Equal variances not assumed			1.499	236.323	.135	.137	.091	-.043	.317

Appendix K: Effect on Age and Moral Statements

ANOVA—Tests for Age Differences

		Sum of Squares	df	Mean Square	F	Sig.
S1: Changing/completing a Rx order w/o MD approval	Between Groups	.265	3	.088	.151	.929
	Within Groups	207.299	354	.586		
	Total	207.564	357			
S2: Fill legal abortifacient	Between Groups	12.617	3	4.206	7.308	.000
	Within Groups	199.690	347	.575		
	Total	212.308	350			
S3: Breaching confidentiality to non-patient	Between Groups	1.743	3	.581	.728	.536
	Within Groups	283.065	355	.797		
	Total	284.808	358			
S4: Filling a fatal dose for a hospice patient	Between Groups	6.114	3	2.038	2.634	.050
	Within Groups	272.380	352	.774		
	Total	278.494	355			
S5: Reporting a colleague over immoral behaviour	Between Groups	2.265	3	.755	1.704	.166
	Within Groups	156.379	353	.443		
	Total	158.644	356			
S6: Reporting a colleague over illegal behaviour	Between Groups	1.716	3	.572	1.388	.246
	Within Groups	145.104	352	.412		
	Total	146.820	355			
S7: Withholding information for patient compliance	Between Groups	.534	3	.178	.337	.799

	Within Groups	185.286	351	.528		
	Total	185.820	354			
S8: Acceptable to fill a placebo and assign a price	Between Groups	22.731	3	7.577	9.184	.000
	Within Groups	291.224	353	.825		
	Total	313.955	356			
S9: Filling MD self-abuse prescription	Between Groups	.109	3	.036	.068	.977
	Within Groups	188.316	353	.533		
	Total	188.426	356			
S10: Returning unopened meds to inventory after leaving pharmacy	Between Groups	.908	3	.303	.627	.598
	Within Groups	169.991	352	.483		
	Total	170.899	355			
S11: Wasting time to reversing claims for Rxs not picked up	Between Groups	.750	3	.250	.686	.561
	Within Groups	128.949	354	.364		
	Total	129.698	357			
S12: PBMs pay enough for pharmacist work	Between Groups	5.351	3	1.784	3.387	.018
	Within Groups	185.368	352	.527		
	Total	190.719	355			
S13: OK to alter patient/claim information to get the claim to process	Between Groups	5.336	3	1.779	3.042	.029
	Within Groups	205.819	352	.585		
	Total	211.154	355			
S14: Forgiving copays is ok	Between Groups	1.211	3	.404	.772	.510
	Within Groups	184.100	352	.523		
	Total	185.312	355			

S15: Became RPh to be unsupervised	Between Groups	.811	3	.270	.448	.719
	Within Groups	212.411	352	.603		
	Total	213.222	355			
S16: Became RPh to be with people	Between Groups	1.593	3	.531	.996	.395
	Within Groups	189.254	355	.533		
	Total	190.847	358			
S17: Became RPh because good in math/science	Between Groups	5.109	3	1.703	3.401	.018
	Within Groups	177.271	354	.501		
	Total	182.380	357			
S18: Became RPh for high salary/benefits	Between Groups	5.237	3	1.746	3.515	.015
	Within Groups	175.340	353	.497		
	Total	180.577	356			
S19: Became RPh for prestige and community/peer/family recognition.	Between Groups	2.820	3	.940	1.592	.191
	Within Groups	208.957	354	.590		
	Total	211.777	357			
S20: Career meets my expectations.	Between Groups	.495	3	.165	.270	.847
	Within Groups	214.974	352	.611		
	Total	215.469	355			
S21: Pharmacy is stressful and strained	Between Groups	2.156	3	.719	1.148	.330
	Within Groups	221.059	353	.626		
	Total	223.216	356			

Multiple Comparisons

Tukey HSD

Dependent Variable	(I) AgeSum	(J) AgeSum	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
S1: Changing/completing a Rx order w/o MD approval	1	2	-.023	.089	.994	-.25	.21
		3	-.069	.130	.952	-.40	.27
		4	-.101	.213	.964	-.65	.45
	2	1	.023	.089	.994	-.21	.25
		3	-.045	.133	.986	-.39	.30
		4	-.078	.215	.984	-.63	.48
	3	1	.069	.130	.952	-.27	.40
		2	.045	.133	.986	-.30	.39
		4	-.032	.235	.999	-.64	.57
	4	1	.101	.213	.964	-.45	.65
		2	.078	.215	.984	-.48	.63
		3	.032	.235	.999	-.57	.64
S2: Fill legal abortifacient	1	2	.153	.089	.319	-.08	.38
		3	.466*	.131	.002	.13	.80
		4	.728*	.211	.003	.18	1.27
	2	1	-.153	.089	.319	-.38	.08
		3	.314	.135	.094	-.03	.66
		4	.576*	.214	.037	.02	1.13
	3	1	-.466*	.131	.002	-.80	-.13
		2	-.314	.135	.094	-.66	.03
		4	.262	.234	.678	-.34	.87
	4	1	-.728*	.211	.003	-1.27	-.18
		2	-.576*	.214	.037	-1.13	-.02
		3	-.262	.234	.678	-.87	.34
S3: Breaching confidentiality to non-patient	1	2	.109	.104	.719	-.16	.38
		3	.006	.151	1.000	-.38	.40
		4	.286	.248	.659	-.36	.93
	2	1	-.109	.104	.719	-.38	.16
		3	-.103	.155	.912	-.50	.30
		4	.177	.251	.895	-.47	.82

	3	1	-.006	.151	1.000	-.40	.38
		2	.103	.155	.912	-.30	.50
		4	.279	.274	.738	-.43	.99
	4	1	-.286	.248	.659	-.93	.36
		2	-.177	.251	.895	-.82	.47
		3	-.279	.274	.738	-.99	.43
S4: Filling a fatal dose for a hospice patient	1	2	.155	.103	.431	-.11	.42
		3	.006	.150	1.000	-.38	.39
		4	.619	.245	.057	-.01	1.25
	2	1	-.155	.103	.431	-.42	.11
		3	-.149	.155	.770	-.55	.25
		4	.464	.247	.240	-.17	1.10
	3	1	-.006	.150	1.000	-.39	.38
		2	.149	.155	.770	-.25	.55
		4	.613	.271	.108	-.09	1.31
	4	1	-.619	.245	.057	-1.25	.01
		2	-.464	.247	.240	-1.10	.17
		3	-.613	.271	.108	-1.31	.09
S5: Reporting a colleague over immoral behaviour	1	2	-.054	.078	.897	-.25	.15
		3	-.117	.113	.728	-.41	.17
		4	-.393	.185	.148	-.87	.09
	2	1	.054	.078	.897	-.15	.25
		3	-.063	.116	.949	-.36	.24
		4	-.339	.187	.271	-.82	.14
	3	1	.117	.113	.728	-.17	.41
		2	.063	.116	.949	-.24	.36
		4	-.276	.204	.531	-.80	.25
	4	1	.393	.185	.148	-.09	.87
		2	.339	.187	.271	-.14	.82
		3	.276	.204	.531	-.25	.80
S6: Reporting a colleague over illegal behaviour	1	2	.063	.075	.833	-.13	.26
		3	.207	.110	.235	-.08	.49
		4	.176	.179	.759	-.29	.64
	2	1	-.063	.075	.833	-.26	.13
		3	.144	.113	.577	-.15	.44
		4	.113	.180	.924	-.35	.58
	3	1	-.207	.110	.235	-.49	.08
		2	-.144	.113	.577	-.44	.15

		4	-.032	.198	.999	-.54	.48
	4	1	-.176	.179	.759	-.64	.29
		2	-.113	.180	.924	-.58	.35
		3	.032	.198	.999	-.48	.54
S7: Withholding information for patient compliance	1	2	.026	.085	.991	-.19	.24
		3	-.098	.124	.858	-.42	.22
		4	-.054	.202	.993	-.58	.47
	2	1	-.026	.085	.991	-.24	.19
		3	-.124	.128	.767	-.45	.21
		4	-.079	.204	.980	-.61	.45
	3	1	.098	.124	.858	-.22	.42
		2	.124	.128	.767	-.21	.45
		4	.045	.224	.997	-.53	.62
	4	1	.054	.202	.993	-.47	.58
		2	.079	.204	.980	-.45	.61
		3	-.045	.224	.997	-.62	.53
S8: Acceptable to fill a placebo and assign a price	1	2	-.266	.106	.059	-.54	.01
		3	-.712*	.155	.000	-1.11	-.31
		4	-.750*	.253	.017	-1.40	-.10
	2	1	.266	.106	.059	-.01	.54
		3	-.446*	.159	.028	-.86	-.03
		4	-.484	.255	.232	-1.14	.18
	3	1	.712*	.155	.000	.31	1.11
		2	.446*	.159	.028	.03	.86
		4	-.038	.279	.999	-.76	.68
	4	1	.750*	.253	.017	.10	1.40
		2	.484	.255	.232	-.18	1.14
		3	.038	.279	.999	-.68	.76
S9: Filling MD self-abuse prescription	1	2	-.020	.085	.995	-.24	.20
		3	.037	.125	.991	-.28	.36
		4	-.006	.203	1.000	-.53	.52
	2	1	.020	.085	.995	-.20	.24
		3	.057	.128	.970	-.27	.39
		4	.014	.205	1.000	-.52	.54
	3	1	-.037	.125	.991	-.36	.28
		2	-.057	.128	.970	-.39	.27
		4	-.043	.225	.997	-.62	.54
	4	1	.006	.203	1.000	-.52	.53

		2	-.014	.205	1.000	-.54	.52
		3	.043	.225	.997	-.54	.62
S10: Returning unopened meds to inventory after leaving pharmacy	1	2	.008	.081	1.000	-.20	.22
		3	-.151	.119	.581	-.46	.16
		4	-.038	.200	.997	-.55	.48
	2	1	-.008	.081	1.000	-.22	.20
		3	-.159	.122	.563	-.47	.16
		4	-.046	.202	.996	-.57	.48
	3	1	.151	.119	.581	-.16	.46
		2	.159	.122	.563	-.16	.47
		4	.113	.220	.956	-.46	.68
	4	1	.038	.200	.997	-.48	.55
		2	.046	.202	.996	-.48	.57
		3	-.113	.220	.956	-.68	.46
S11: Wasting time to reversing claims for Rxs not picked up	1	2	.051	.070	.884	-.13	.23
		3	.067	.102	.915	-.20	.33
		4	-.161	.168	.774	-.59	.27
	2	1	-.051	.070	.884	-.23	.13
		3	.015	.105	.999	-.26	.29
		4	-.212	.170	.595	-.65	.23
	3	1	-.067	.102	.915	-.33	.20
		2	-.015	.105	.999	-.29	.26
		4	-.227	.185	.610	-.71	.25
	4	1	.161	.168	.774	-.27	.59
		2	.212	.170	.595	-.23	.65
		3	.227	.185	.610	-.25	.71
S12: PBMs pay enough for pharmacist work	1	2	.239*	.085	.026	.02	.46
		3	.032	.123	.994	-.29	.35
		4	.363	.202	.276	-.16	.88
	2	1	-.239*	.085	.026	-.46	-.02
		3	-.207	.127	.360	-.53	.12
		4	.124	.204	.929	-.40	.65
	3	1	-.032	.123	.994	-.35	.29
		2	.207	.127	.360	-.12	.53
		4	.331	.223	.446	-.24	.91
	4	1	-.363	.202	.276	-.88	.16
		2	-.124	.204	.929	-.65	.40
		3	-.331	.223	.446	-.91	.24

S13: OK to alter patient/claim information to get the claim to process	1	2	.195	.089	.131	-.04	.43
		3	.291	.129	.114	-.04	.62
		4	.375	.213	.293	-.17	.92
	2	1	-.195	.089	.131	-.43	.04
		3	.096	.133	.890	-.25	.44
		4	.180	.215	.836	-.37	.74
	3	1	-.291	.129	.114	-.62	.04
		2	-.096	.133	.890	-.44	.25
		4	.084	.235	.984	-.52	.69
	4	1	-.375	.213	.293	-.92	.17
		2	-.180	.215	.836	-.74	.37
		3	-.084	.235	.984	-.69	.52
S14: Forgiving copays is ok	1	2	-.118	.084	.502	-.34	.10
		3	-.097	.124	.860	-.42	.22
		4	-.149	.201	.881	-.67	.37
	2	1	.118	.084	.502	-.10	.34
		3	.020	.127	.999	-.31	.35
		4	-.031	.203	.999	-.56	.49
	3	1	.097	.124	.860	-.22	.42
		2	-.020	.127	.999	-.35	.31
		4	-.051	.223	.996	-.63	.52
	4	1	.149	.201	.881	-.37	.67
		2	.031	.203	.999	-.49	.56
		3	.051	.223	.996	-.52	.63
S15: Became RPh to be unsupervised	1	2	-.036	.090	.979	-.27	.20
		3	-.148	.133	.680	-.49	.19
		4	-.100	.224	.970	-.68	.48
	2	1	.036	.090	.979	-.20	.27
		3	-.112	.136	.843	-.46	.24
		4	-.064	.226	.992	-.65	.52
	3	1	.148	.133	.680	-.19	.49
		2	.112	.136	.843	-.24	.46
		4	.048	.246	.997	-.59	.68
	4	1	.100	.224	.970	-.48	.68
		2	.064	.226	.992	-.52	.65
		3	-.048	.246	.997	-.68	.59
S16: Became RPh to be with people	1	2	.069	.085	.848	-.15	.29
		3	.144	.124	.650	-.18	.46

		4	-.190	.203	.785	-.71	.33
	2	1	-.069	.085	.848	-.29	.15
		3	.075	.127	.935	-.25	.40
		4	-.259	.205	.586	-.79	.27
	3	1	-.144	.124	.650	-.46	.18
		2	-.075	.127	.935	-.40	.25
		4	-.334	.224	.443	-.91	.24
	4	1	.190	.203	.785	-.33	.71
		2	.259	.205	.586	-.27	.79
		3	.334	.224	.443	-.24	.91
S17: Became RPh because good in math/science	1	2	.069	.082	.836	-.14	.28
		3	.144	.120	.627	-.17	.45
		4	.628*	.204	.012	.10	1.15
	2	1	-.069	.082	.836	-.28	.14
		3	.075	.123	.929	-.24	.39
		4	.559*	.206	.034	.03	1.09
	3	1	-.144	.120	.627	-.45	.17
		2	-.075	.123	.929	-.39	.24
		4	.484	.223	.134	-.09	1.06
	4	1	-.628*	.204	.012	-1.15	-.10
		2	-.559*	.206	.034	-1.09	-.03
		3	-.484	.223	.134	-1.06	.09
S18: Became RPh for high salary/benefits	1	2	.085	.082	.724	-.13	.30
		3	.360*	.120	.016	.05	.67
		4	.321	.196	.358	-.18	.83
	2	1	-.085	.082	.724	-.30	.13
		3	.274	.124	.121	-.05	.59
		4	.236	.198	.633	-.28	.75
	3	1	-.360*	.120	.016	-.67	-.05
		2	-.274	.124	.121	-.59	.05
		4	-.038	.217	.998	-.60	.52
	4	1	-.321	.196	.358	-.83	.18
		2	-.236	.198	.633	-.75	.28
		3	.038	.217	.998	-.52	.60
S19: Became RPh for prestige and community/peer/family recognition.	1	2	.072	.089	.851	-.16	.30
		3	.284	.131	.135	-.05	.62
		4	.012	.214	1.000	-.54	.56
	2	1	-.072	.089	.851	-.30	.16

		3	.212	.135	.394	-.14	.56
		4	-.060	.216	.992	-.62	.50
	3	1	-.284	.131	.135	-.62	.05
		2	-.212	.135	.394	-.56	.14
		4	-.272	.236	.657	-.88	.34
	4	1	-.012	.214	1.000	-.56	.54
		2	.060	.216	.992	-.50	.62
		3	.272	.236	.657	-.34	.88
S20: Career meets my expectations.	1	2	-.070	.091	.870	-.30	.17
		3	.004	.134	1.000	-.34	.35
		4	-.109	.217	.959	-.67	.45
	2	1	.070	.091	.870	-.17	.30
		3	.074	.137	.949	-.28	.43
		4	-.039	.220	.998	-.61	.53
	3	1	-.004	.134	1.000	-.35	.34
		2	-.074	.137	.949	-.43	.28
		4	-.113	.240	.966	-.73	.51
	4	1	.109	.217	.959	-.45	.67
		2	.039	.220	.998	-.53	.61
		3	.113	.240	.966	-.51	.73
S21: Pharmacy is stressful and strained	1	2	.033	.092	.985	-.20	.27
		3	.051	.135	.982	-.30	.40
		4	.421	.228	.252	-.17	1.01
	2	1	-.033	.092	.985	-.27	.20
		3	.018	.139	.999	-.34	.38
		4	.389	.230	.330	-.20	.98
	3	1	-.051	.135	.982	-.40	.30
		2	-.018	.139	.999	-.38	.34
		4	.370	.250	.452	-.28	1.02
	4	1	-.421	.228	.252	-1.01	.17
		2	-.389	.230	.330	-.98	.20
		3	-.370	.250	.452	-1.02	.28

*. The mean difference is significant at the 0.05 level.

Appendix L: Effect on Years as Pharmacist and Moral Statements

ANOVA—Test for Years as Pharmacist and Moral Statements

		Sum of Squares	df	Mean Square	F	Sig.
S1: Changing/completing a Rx order w/o MD approval	Between Groups	.507	3	.169	.290	.833
	Within Groups	204.789	351	.583		
	Total	205.296	354			
S2: Fill legal abortifacient	Between Groups	17.400	3	5.800	10.245	.000
	Within Groups	194.747	344	.566		
	Total	212.147	347			
S3: Breaching confidentiality to non-patient	Between Groups	2.647	3	.882	1.122	.340
	Within Groups	276.712	352	.786		
	Total	279.360	355			
S4: Filling a fatal dose for a hospice patient	Between Groups	.144	3	.048	.061	.980
	Within Groups	274.887	349	.788		
	Total	275.031	352			
S5: Reporting a colleague over immoral behaviour	Between Groups	2.014	3	.671	1.553	.201
	Within Groups	151.300	350	.432		
	Total	153.314	353			
S6: Reporting a colleague over illegal behaviour	Between Groups	4.194	3	1.398	3.537	.015
	Within Groups	137.970	349	.395		
	Total	142.164	352			
S7: Withholding information for patient compliance	Between Groups	.575	3	.192	.370	.775

	Within Groups	180.354	348	.518		
	Total	180.929	351			
S8: Acceptable to fill a placebo and assign a price	Between Groups	26.159	3	8.720	10.664	.000
	Within Groups	286.180	350	.818		
	Total	312.339	353			
S9: Filling MD self-abuse prescription	Between Groups	.793	3	.264	.500	.682
	Within Groups	184.860	350	.528		
	Total	185.653	353			
S10: Returning unopened meds to inventory after leaving pharmacy	Between Groups	2.844	3	.948	1.978	.117
	Within Groups	167.247	349	.479		
	Total	170.091	352			
S11: Wasting time to reversing claims for Rxs not picked up	Between Groups	.344	3	.115	.313	.816
	Within Groups	128.687	351	.367		
	Total	129.031	354			
S12: PBMs pay enough for pharmacist work	Between Groups	.568	3	.189	.349	.790
	Within Groups	189.477	349	.543		
	Total	190.045	352			
S13: OK to alter patient/claim information to get the claim to process	Between Groups	3.251	3	1.084	1.837	.140
	Within Groups	205.870	349	.590		
	Total	209.122	352			
S14: Forgiving copays is ok	Between Groups	2.429	3	.810	1.558	.199
	Within Groups	181.333	349	.520		
	Total	183.762	352			

S15: Became RPh to be unsupervised	Between Groups	1.056	3	.352	.598	.617
	Within Groups	205.375	349	.588		
	Total	206.431	352			
S16: Became RPh to be with people	Between Groups	2.202	3	.734	1.390	.245
	Within Groups	185.854	352	.528		
	Total	188.056	355			
S17: Became RPh because good in math/science	Between Groups	4.366	3	1.455	2.870	.036
	Within Groups	177.983	351	.507		
	Total	182.349	354			
S18: Became RPh for high salary/benefits	Between Groups	9.506	3	3.169	6.562	.000
	Within Groups	169.025	350	.483		
	Total	178.531	353			
S19: Became RPh for prestige and community/peer/family recognition.	Between Groups	4.654	3	1.551	2.681	.047
	Within Groups	203.103	351	.579		
	Total	207.758	354			
S20: Career meets my expectations.	Between Groups	1.551	3	.517	.852	.466
	Within Groups	211.770	349	.607		
	Total	213.320	352			
S21: Pharmacy is stressful and strained	Between Groups	2.546	3	.849	1.351	.258
	Within Groups	219.908	350	.628		
	Total	222.455	353			

Post Hoc Results

Multiple Comparisons
Tukey HSD

Dependent Variable	(I) SumYrsRPh	(J) SumYrsRPh	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	95% Confidence Interval Upper Bound
S1: Changing/completing a Rx order w/o MD approval	1 to 10 years	11 to 20 years	-.033	.100	.988	-.29	.23
		21 to 30 years	-.046	.132	.985	-.39	.29
		More than 30 years	-.120	.132	.800	-.46	.22
	11 to 20 years	1 to 10 years	.033	.100	.988	-.23	.29
		21 to 30 years	-.014	.146	1.000	-.39	.36
		More than 30 years	-.087	.146	.933	-.46	.29
	21 to 30 years	1 to 10 years	.046	.132	.985	-.29	.39
		11 to 20 years	.014	.146	1.000	-.36	.39
		More than 30 years	-.073	.169	.973	-.51	.36
	More than 30 years	1 to 10 years	.120	.132	.800	-.22	.46
		11 to 20 years	.087	.146	.933	-.29	.46
		21 to 30 years	.073	.169	.973	-.36	.51
S2: Fill legal abortifacient	1 to 10 years	11 to 20 years	.238	.099	.080	-.02	.50
		21 to 30 years	.269	.132	.179	-.07	.61
		More than 30 years	.713*	.134	.000	.37	1.06

	11 to 20 years	1 to 10 years	-.238	.099	.080	-.50	.02
		21 to 30 years	.030	.146	.997	-.35	.41
		More than 30 years	.474*	.148	.008	.09	.86
	21 to 30 years	1 to 10 years	-.269	.132	.179	-.61	.07
		11 to 20 years	-.030	.146	.997	-.41	.35
		More than 30 years	.444*	.172	.049	.00	.89
	More than 30 years	1 to 10 years	-.713*	.134	.000	-1.06	-.37
		11 to 20 years	-.474*	.148	.008	-.86	-.09
		21 to 30 years	-.444*	.172	.049	-.89	.00
S3: Breaching confidentiality to non-patient	1 to 10 years	11 to 20 years	.200	.116	.313	-.10	.50
		21 to 30 years	-.030	.153	.997	-.42	.36
		More than 30 years	.067	.153	.971	-.33	.46
	11 to 20 years	1 to 10 years	-.200	.116	.313	-.50	.10
		21 to 30 years	-.231	.169	.522	-.67	.21
		More than 30 years	-.133	.169	.860	-.57	.30
	21 to 30 years	1 to 10 years	.030	.153	.997	-.36	.42
		11 to 20 years	.231	.169	.522	-.21	.67
		More than 30 years	.098	.196	.959	-.41	.60
	More than 30 years	1 to 10 years	-.067	.153	.971	-.46	.33

		11 to 20 years	.133	.169	.860	-.30	.57
		21 to 30 years	-.098	.196	.959	-.60	.41
S4: Filling a fatal dose for a hospice patient	1 to 10 years	11 to 20 years	-.038	.117	.988	-.34	.26
		21 to 30 years	.004	.154	1.000	-.39	.40
		More than 30 years	.029	.154	.998	-.37	.43
	11 to 20 years	1 to 10 years	.038	.117	.988	-.26	.34
		21 to 30 years	.042	.171	.995	-.40	.48
		More than 30 years	.067	.171	.980	-.37	.51
	21 to 30 years	1 to 10 years	-.004	.154	1.000	-.40	.39
		11 to 20 years	-.042	.171	.995	-.48	.40
		More than 30 years	.025	.198	.999	-.49	.54
	More than 30 years	1 to 10 years	-.029	.154	.998	-.43	.37
		11 to 20 years	-.067	.171	.980	-.51	.37
		21 to 30 years	-.025	.198	.999	-.54	.49
S5: Reporting a colleague over immoral behaviour	1 to 10 years	11 to 20 years	-.144	.087	.342	-.37	.08
		21 to 30 years	-.178	.113	.394	-.47	.11
		More than 30 years	-.130	.113	.662	-.42	.16
	11 to 20 years	1 to 10 years	.144	.087	.342	-.08	.37
		21 to 30 years	-.034	.126	.993	-.36	.29

		More than 30 years	.015	.126	.999	-.31	.34
	21 to 30 years	1 to 10 years	.178	.113	.394	-.11	.47
		11 to 20 years	.034	.126	.993	-.29	.36
		More than 30 years	.049	.145	.987	-.33	.42
	More than 30 years	1 to 10 years	.130	.113	.662	-.16	.42
		11 to 20 years	-.015	.126	.999	-.34	.31
		21 to 30 years	-.049	.145	.987	-.42	.33
S6: Reporting a colleague over illegal behaviour	1 to 10 years	11 to 20 years	.084	.083	.740	-.13	.30
		21 to 30 years	.298*	.108	.032	.02	.58
		More than 30 years	.241	.109	.124	-.04	.52
	11 to 20 years	1 to 10 years	-.084	.083	.740	-.30	.13
		21 to 30 years	.214	.120	.285	-.10	.52
		More than 30 years	.157	.121	.566	-.16	.47
	21 to 30 years	1 to 10 years	-.298*	.108	.032	-.58	-.02
		11 to 20 years	-.214	.120	.285	-.52	.10
		More than 30 years	-.057	.140	.977	-.42	.30
	More than 30 years	1 to 10 years	-.241	.109	.124	-.52	.04
		11 to 20 years	-.157	.121	.566	-.47	.16
		21 to 30 years	.057	.140	.977	-.30	.42

S7: Withholding information for patient compliance	1 to 10 years	11 to 20 years	-.011	.095	1.000	-.26	.23
		21 to 30 years	-.111	.125	.814	-.43	.21
		More than 30 years	-.086	.125	.904	-.41	.24
	11 to 20 years	1 to 10 years	.011	.095	1.000	-.23	.26
		21 to 30 years	-.100	.139	.888	-.46	.26
		More than 30 years	-.075	.139	.949	-.43	.28
	21 to 30 years	1 to 10 years	.111	.125	.814	-.21	.43
		11 to 20 years	.100	.139	.888	-.26	.46
		More than 30 years	.025	.161	.999	-.39	.44
	More than 30 years	1 to 10 years	.086	.125	.904	-.24	.41
		11 to 20 years	.075	.139	.949	-.28	.43
		21 to 30 years	-.025	.161	.999	-.44	.39
S8: Acceptable to fill a placebo and assign a price	1 to 10 years	11 to 20 years	-.115	.119	.768	-.42	.19
		21 to 30 years	-.640*	.156	.000	-1.04	-.24
		More than 30 years	-.704*	.157	.000	-1.11	-.30
	11 to 20 years	1 to 10 years	.115	.119	.768	-.19	.42
		21 to 30 years	-.525*	.173	.013	-.97	-.08
		More than 30 years	-.589*	.174	.004	-1.04	-.14
	21 to 30 years	1 to 10 years	.640*	.156	.000	.24	1.04

		11 to 20 years	.525*	.173	.013	.08	.97
		More than 30 years	-.064	.201	.989	-.58	.45
	More than 30 years	1 to 10 years	.704*	.157	.000	.30	1.11
		11 to 20 years	.589*	.174	.004	.14	1.04
		21 to 30 years	.064	.201	.989	-.45	.58
S9: Filling MD self-abuse prescription	1 to 10 years	11 to 20 years	-.031	.096	.989	-.28	.22
		21 to 30 years	-.139	.125	.684	-.46	.18
		More than 30 years	.037	.126	.991	-.29	.36
	11 to 20 years	1 to 10 years	.031	.096	.989	-.22	.28
		21 to 30 years	-.108	.139	.864	-.47	.25
		More than 30 years	.067	.140	.963	-.29	.43
	21 to 30 years	1 to 10 years	.139	.125	.684	-.18	.46
		11 to 20 years	.108	.139	.864	-.25	.47
		More than 30 years	.176	.162	.698	-.24	.59
	More than 30 years	1 to 10 years	-.037	.126	.991	-.36	.29
		11 to 20 years	-.067	.140	.963	-.43	.29
		21 to 30 years	-.176	.162	.698	-.59	.24
S10: Returning unopened meds to inventory after leaving pharmacy	1 to 10 years	11 to 20 years	.026	.091	.992	-.21	.26
		21 to 30 years	-.126	.119	.718	-.43	.18

		More than 30 years	-.259	.122	.145	-.57	.05
	11 to 20 years	1 to 10 years	-.026	.091	.992	-.26	.21
		21 to 30 years	-.152	.132	.659	-.49	.19
		More than 30 years	-.286	.134	.147	-.63	.06
	21 to 30 years	1 to 10 years	.126	.119	.718	-.18	.43
		11 to 20 years	.152	.132	.659	-.19	.49
		More than 30 years	-.134	.155	.823	-.53	.27
	More than 30 years	1 to 10 years	.259	.122	.145	-.05	.57
		11 to 20 years	.286	.134	.147	-.06	.63
		21 to 30 years	.134	.155	.823	-.27	.53
S11: Wasting time to reversing claims for Rxs not picked up	1 to 10 years	11 to 20 years	-.031	.080	.981	-.24	.18
		21 to 30 years	-.096	.104	.796	-.36	.17
		More than 30 years	-.047	.104	.970	-.32	.22
	11 to 20 years	1 to 10 years	.031	.080	.981	-.18	.24
		21 to 30 years	-.065	.116	.943	-.36	.23
		More than 30 years	-.016	.116	.999	-.31	.28
	21 to 30 years	1 to 10 years	.096	.104	.796	-.17	.36
		11 to 20 years	.065	.116	.943	-.23	.36
		More than 30 years	.049	.134	.983	-.30	.39

	More than 30 years	1 to 10 years	.047	.104	.970	-.22	.32
		11 to 20 years	.016	.116	.999	-.28	.31
		21 to 30 years	-.049	.134	.983	-.39	.30
S12: PBMs pay enough for pharmacist work	1 to 10 years	11 to 20 years	.030	.097	.990	-.22	.28
		21 to 30 years	.080	.128	.924	-.25	.41
		More than 30 years	.115	.127	.801	-.21	.44
	11 to 20 years	1 to 10 years	-.030	.097	.990	-.28	.22
		21 to 30 years	.051	.142	.984	-.32	.42
		More than 30 years	.085	.141	.930	-.28	.45
	21 to 30 years	1 to 10 years	-.080	.128	.924	-.41	.25
		11 to 20 years	-.051	.142	.984	-.42	.32
		More than 30 years	.035	.164	.997	-.39	.46
	More than 30 years	1 to 10 years	-.115	.127	.801	-.44	.21
		11 to 20 years	-.085	.141	.930	-.45	.28
		21 to 30 years	-.035	.164	.997	-.46	.39
S13: OK to alter patient/claim information to get the claim to process	1 to 10 years	11 to 20 years	.078	.102	.869	-.18	.34
		21 to 30 years	.212	.132	.378	-.13	.55
		More than 30 years	.261	.132	.201	-.08	.60
	11 to 20 years	1 to 10 years	-.078	.102	.869	-.34	.18

		21 to 30 years	.134	.147	.798	-.25	.51
		More than 30 years	.183	.147	.599	-.20	.56
	21 to 30 years	1 to 10 years	-.212	.132	.378	-.55	.13
		11 to 20 years	-.134	.147	.798	-.51	.25
		More than 30 years	.049	.170	.992	-.39	.49
	More than 30 years	1 to 10 years	-.261	.132	.201	-.60	.08
		11 to 20 years	-.183	.147	.599	-.56	.20
		21 to 30 years	-.049	.170	.992	-.49	.39
S14: Forgiving copays is ok	1 to 10 years	11 to 20 years	-.130	.095	.521	-.37	.12
		21 to 30 years	-.237	.125	.235	-.56	.09
		More than 30 years	-.012	.125	1.000	-.34	.31
	11 to 20 years	1 to 10 years	.130	.095	.521	-.12	.37
		21 to 30 years	-.107	.139	.867	-.47	.25
		More than 30 years	.118	.139	.831	-.24	.48
	21 to 30 years	1 to 10 years	.237	.125	.235	-.09	.56
		11 to 20 years	.107	.139	.867	-.25	.47
		More than 30 years	.225	.161	.503	-.19	.64
	More than 30 years	1 to 10 years	.012	.125	1.000	-.31	.34
		11 to 20 years	-.118	.139	.831	-.48	.24

		21 to 30 years	-.225	.161	.503	-.64	.19
S15: Became RPh to be unsupervised	1 to 10 years	11 to 20 years	.070	.101	.898	-.19	.33
		21 to 30 years	-.115	.132	.821	-.46	.23
		More than 30 years	-.052	.135	.981	-.40	.30
	11 to 20 years	1 to 10 years	-.070	.101	.898	-.33	.19
		21 to 30 years	-.185	.146	.585	-.56	.19
		More than 30 years	-.122	.149	.845	-.51	.26
	21 to 30 years	1 to 10 years	.115	.132	.821	-.23	.46
		11 to 20 years	.185	.146	.585	-.19	.56
		More than 30 years	.063	.172	.983	-.38	.51
	More than 30 years	1 to 10 years	.052	.135	.981	-.30	.40
		11 to 20 years	.122	.149	.845	-.26	.51
		21 to 30 years	-.063	.172	.983	-.51	.38
S16: Became RPh to be with people	1 to 10 years	11 to 20 years	.072	.095	.875	-.17	.32
		21 to 30 years	.252	.125	.184	-.07	.58
		More than 30 years	.033	.125	.994	-.29	.36
	11 to 20 years	1 to 10 years	-.072	.095	.875	-.32	.17
		21 to 30 years	.180	.138	.562	-.18	.54
		More than 30 years	-.039	.138	.992	-.40	.32

	21 to 30 years	1 to 10 years	-.252	.125	.184	-.58	.07
		11 to 20 years	-.180	.138	.562	-.54	.18
		More than 30 years	-.220	.160	.520	-.63	.19
	More than 30 years	1 to 10 years	-.033	.125	.994	-.36	.29
		11 to 20 years	.039	.138	.992	-.32	.40
		21 to 30 years	.220	.160	.520	-.19	.63
S17: Became RPh because good in math/science	1 to 10 years	11 to 20 years	.043	.093	.968	-.20	.28
		21 to 30 years	.247	.123	.185	-.07	.56
		More than 30 years	.299	.124	.077	-.02	.62
	11 to 20 years	1 to 10 years	-.043	.093	.968	-.28	.20
		21 to 30 years	.204	.136	.436	-.15	.55
		More than 30 years	.256	.137	.242	-.10	.61
	21 to 30 years	1 to 10 years	-.247	.123	.185	-.56	.07
		11 to 20 years	-.204	.136	.436	-.55	.15
		More than 30 years	.052	.158	.988	-.36	.46
	More than 30 years	1 to 10 years	-.299	.124	.077	-.62	.02
		11 to 20 years	-.256	.137	.242	-.61	.10
		21 to 30 years	-.052	.158	.988	-.46	.36
S18: Became RPh for high salary/benefits	1 to 10 years	11 to 20 years	.127	.091	.505	-.11	.36

		21 to 30 years	.287	.120	.079	-.02	.60
		More than 30 years	.495*	.121	.000	.18	.81
	11 to 20 years	1 to 10 years	-.127	.091	.505	-.36	.11
		21 to 30 years	.160	.133	.623	-.18	.50
		More than 30 years	.367*	.134	.032	.02	.71
	21 to 30 years	1 to 10 years	-.287	.120	.079	-.60	.02
		11 to 20 years	-.160	.133	.623	-.50	.18
		More than 30 years	.207	.154	.537	-.19	.61
	More than 30 years	1 to 10 years	-.495*	.121	.000	-.81	-.18
		11 to 20 years	-.367*	.134	.032	-.71	-.02
		21 to 30 years	-.207	.154	.537	-.61	.19
S19: Became RPh for prestige and community/peer/family recognition.	1 to 10 years	11 to 20 years	.122	.100	.614	-.14	.38
		21 to 30 years	.289	.131	.123	-.05	.63
		More than 30 years	.278	.132	.156	-.06	.62
	11 to 20 years	1 to 10 years	-.122	.100	.614	-.38	.14
		21 to 30 years	.168	.145	.655	-.21	.54
		More than 30 years	.156	.146	.710	-.22	.53
	21 to 30 years	1 to 10 years	-.289	.131	.123	-.63	.05
		11 to 20 years	-.168	.145	.655	-.54	.21

		More than 30 years	-.012	.169	1.000	-.45	.42
	More than 30 years	1 to 10 years	-.278	.132	.156	-.62	.06
		11 to 20 years	-.156	.146	.710	-.53	.22
		21 to 30 years	.012	.169	1.000	-.42	.45
S20: Career meets my expectations.	1 to 10 years	11 to 20 years	-.070	.102	.903	-.33	.19
		21 to 30 years	.129	.134	.773	-.22	.48
		More than 30 years	.112	.136	.841	-.24	.46
	11 to 20 years	1 to 10 years	.070	.102	.903	-.19	.33
		21 to 30 years	.199	.148	.539	-.18	.58
		More than 30 years	.182	.150	.616	-.20	.57
	21 to 30 years	1 to 10 years	-.129	.134	.773	-.48	.22
		11 to 20 years	-.199	.148	.539	-.58	.18
		More than 30 years	-.016	.173	1.000	-.46	.43
	More than 30 years	1 to 10 years	-.112	.136	.841	-.46	.24
		11 to 20 years	-.182	.150	.616	-.57	.20
		21 to 30 years	.016	.173	1.000	-.43	.46
S21: Pharmacy is stressful and strained	1 to 10 years	11 to 20 years	-.133	.104	.577	-.40	.14
		21 to 30 years	-.212	.136	.408	-.56	.14
		More than 30 years	.054	.139	.980	-.31	.41

11 to 20 years	1 to 10 years	.133	.104	.577	-.14	.40
	21 to 30 years	-.079	.151	.954	-.47	.31
	More than 30 years	.187	.154	.617	-.21	.58
21 to 30 years	1 to 10 years	.212	.136	.408	-.14	.56
	11 to 20 years	.079	.151	.954	-.31	.47
	More than 30 years	.266	.177	.439	-.19	.72
More than 30 years	1 to 10 years	-.054	.139	.980	-.41	.31
	11 to 20 years	-.187	.154	.617	-.58	.21
	21 to 30 years	-.266	.177	.439	-.72	.19

* The mean difference is significant at the 0.05 level.

Appendix M: Form UPR16

FORM UPR16

Research Ethics Review Checklist

UNIVERSITY OF PORTSMOUTH

Please include this completed form as an appendix to your thesis (see the Research Degrees Operational Handbook for more information

Postgraduate Research Student (PGRS) Information			Student ID:	UP793463
PGRS Name:	Susan Allene Hayes			
Department:	ICJS	First Supervisor:	Branislav Hock	
Start Date: (or progression date for Prof Doc students)	2016			
Study Mode and Route:	Part-time ☑ Full-time ☐	MPhil ☐ PhD ☐	MD ☐ Professional Doctorate ☑	

Title of Thesis:	Exploring U.S. Pharmacists' Willingness to Fulfill Prescriptions They Find Not to Fill (Refusals that are Legal but Morally Offensive to Them): And the Rationale Behind Their Decision Making
Thesis Word Count: (excluding ancillary data)	42,672

If you are unsure about any of the following, please contact the local representative on your Faculty Ethics Committee for advice. Please note that it is your responsibility to follow the University's Ethics Policy and any relevant University, academic or professional guidelines in the conduct of your study

Although the Ethics Committee may have given your study a favourable opinion, the final responsibility for the ethical conduct of this work lies with the researcher(s).

UKRIO Finished Research Checklist:
(If you would like to know more about the checklist, please see your Faculty or Departmental Ethics Committee rep or see the online version of the full checklist at: http://www.ukrio.org/what-we-do/code-of-practice-for-research/)

a) Have all of your research and findings been reported accurately, honestly and within a reasonable time frame?	YES ☑ NO ☐
b) Have all contributions to knowledge been acknowledged?	YES ☑ NO ☐
c) Have you complied with all agreements relating to intellectual property, publication and authorship?	YES ☑ NO ☐
d) Has your research data been retained in a secure and accessible form and will it remain so for the required duration?	YES ☑ NO ☐
e) Does your research comply with all legal, ethical, and contractual requirements?	YES ☑ NO ☐

Candidate Statement:

I have considered the ethical dimensions of the above named research project, and have successfully obtained the necessary ethical approval(s)

Ethical review number(s) from Faculty Ethics Committee (or from NRES/SCREC):	FHSS 2018-072

If you have *not* submitted your work for ethical review, and/or you have answered 'No' to one or more of questions a) to e), please explain below why this is so:

Signed *(PGRS)*:	Susan A Hayes	Date: 10/6/2021

UPR16 – April 2018