Doctors with Borders: Professional Disputes in Times of Deregulation

Doctors with Borders:

Professional Disputes in Times of Deregulation

Petra Adolfsson, University of Gothenburg, Sweden & Ylva Ulfsdotter Eriksson, University of Gothenburg, Sweden

Abstract: The pharmacy market in Sweden is undergoing huge changes, going from a state-owned monopoly chain to a deregulated market with many actors. The aim of this study is to describe and analyze how professional representatives are arguing about the introduction of selling self-tests, such as celiac test, at the pharmacies in Sweden. We study how demarcations and boundaries are created between pharmacist and physicians as a result of the launching of self-test. The concepts of social closure by exclusion and usurpation are used. This implies taking a neo-Weberian perspective on professions and professional knowledge. In understanding professional knowledge and how the boundaries between professions are negotiated in this context of political and market changes, a qualitative media analysis is used that includes articles from both newspapers and trade press. The analysis show how pharmacists use intrusive strategies such as pushing market strategy and supplementing care, while physicians create closure grounded in professional knowledge and the profession's altruistic traits.

Keywords: Knowledge, Professional Boundaries, Intrusion

Introduction

The knowledge society requires professionals; such a society depends upon advances in knowledge and science to develop new ideas in, for instance, technology, organization, and culture. According to Sullivan (2000, 673), "The professions have never been more important to the well-being of society. Professional knowledge and expertise are at the core of contemporary society." However, development of new technologies creates opportunities for new solutions and practice changes in everyday and professional work life. When areas of knowledge are changing, the mere jurisdiction for a profession may be challenged–giving opportunity for nearby professions to expand their areas of expertise. Negotiations of jurisdiction may thus give rise to boundary conflicts between professions.

In the wake of New Public Management, ideas on how to deliver traditionally public services, such as education and health care, has travelled across the globe and transformed the management by, for instance, changed regulations or the use of soft laws (Hood 1991; Djelic and Sahlin-Andersson 2006). In health care, the work and status of the professionals have sometimes been questioned and other ways to organize and evaluate work have been introduced. These

changes have sometimes limited the discretion of the professions. However, changes has also led to an increased scope for professions to manage different logics or to expand their area of expertise, and, hence, challenge or even cross boundaries to other professional groups (Edmunds and Calnan 2001; Arman et al. 2014).

The global trend, of changed public management, raises questions about how boundaries between professions evolve on a local level in times of deregulations. This article explores a recent dispute between two professions, executed in mass media during the fall and winter of 2012–13. The backdrop of the study is that in recent years, the state-owned pharmacy Apoteket AB released a series of self-tests not previously provided to customers. Pharmacies in Sweden have had self-tests as only a small part of their product range (e.g., pregnancy tests). The new self-tests, or health tests as the company prefers to call them, cover several other symptoms (e.g., chlamydia, celiac, allergies). According to Apoteket AB, the tests are "simple, safe, and available" (Apoteket AB 2013), and in the annual report from 2011, the company highlights the customer market and the launch of new self-tests (Apoteket AB 2011).

The introduction of self-tests into the Swedish pharmacy market, as well as the debate that followed, needs to be considered in light of other changes that may have affected the pharmacy profession and the actions taken. One must acknowledge the possible implications of the deregulation of the pharmacy market in Sweden. As shown in previous studies, pharmacists in many countries have gone through many changes in the last century. Once the prime producer and distributor of pharmaceuticals, the pharmacists have lost their importance when it comes to producing medicines. Instead, the pharmaceutical industry has taken over the production of medicine, and the pharmacists in pharmacies have increasingly had to cope with distribution, sales, and information. As several studies show, the relations between pharmacists and other professionals in the health care sector have also changed, possibly affecting the boundaries between them (e.g. Bush et al. 2009).

The aim of the study is to investigate challenges and changes of professional boundaries in times of deregulation. To meet the purpose, the following questions will be answered: How does a professional group respond when its jurisdiction is threatened by the actions of another

profession? Can the concepts of intrusion and social closure improve the understanding of interprofessional negotiation and boundary breaking?

In order to fulfill the aim of the study, the debate between two professions in times of reregulation is theoretically analyzed and discussed within the framework of the sociology of professions. By using a neo-Weberian perspective (Parkin 1979), focusing on how professions act strategically in order to increase or maintain the profession's autonomy, status, power and wealth, we reveal the disputes between pharmacists and physicians regarding Apoteket AB's decision to introduce a product line of self-tests. We show how the debate can be understood as a (re)construction of professional boundaries. The central argument is that the release of this technological solution of self-tests can be viewed as pharmacists intruding on the medical field; the physicians counteract by using the strategy of social closure by exclusion in order to protect their jurisdiction and professional knowledge and practice. From the study's results, we can see the implications that affect both the relationships between different health care professionals and between professionals and customers.

The disposition of this article is as follows: since the pharmacist belongs to the profession that challenges the established order and the division of labor between pharmacists and physicians, we depart from the pharmacists and how the profession has been affected by recent societal changes. The first section is a review of previous research on pharmacists, which is followed by a description of the theoretical concepts used in this study. A note on methods and materials follows, whereby the analytic approach is explained before we report the findings of the analysis in the third section. The article ends with a discussion and some concluding remarks.

The Challenged Role of the Pharmacist

Anderson (2002, 391) says that, "Pharmacist is the health profession that has the responsibility for ensuring the safe, effective, and rational use of medicines." It is a profession with long traditions; in many countries, including Sweden, the profession has been (re)positioning itself to align with other health care professions, such as physicians (Claesson 1989; Edmunds and Calnan 2001; Bryant et al. 2009). However, during the last decades, the traditional role of pharmacist has been challenged by developments in organization, technology, finance, division

of labor, and commercialism (Birenbaum 1982; Motulsky et al. 2011; Adolfsson 2014). The transformation of health care services has led to a re-evaluation of various health care professions; for the pharmacists, this had led to a larger focus on health, offering advice, and efforts in expanding their role (Bush, Langley, and Wilson 2009; Edmunds and Calnan 2001).

The role of the pharmacist varies depending on context. In a hospital or primary health care setting, the acceptance of recommendations made by pharmacists among other professional groups seems to be fairly positive (Farrell et al. 2010). Also, in many countries, the traditional system of separating prescribing and dispensing has been challenged, which can have an effect on the boundaries between physicians and pharmacists. For example, pharmacists have been able to extend their role as prescribers (Tonna et al. 2007; Yuksel et al. 2008; Weiss and Sutton 2009). This indicates rapid changes for the profession. However, to what extent this will affect traditional roles among health care professionals is yet to be seen; studies indicate that there seem to be limitations on how far the pharmaceutical role can expand. A study of Canadian pharmacists' perceptions of their role on primary care teams indicated that pharmacists see treatment of minor illnesses as part of their role (Dobson et al. 2009). Edmunds and Calnan (2001) also claimed that both doctors and pharmacists attribute ultimate authority to doctors.

There are other aspects that affect the working situation for pharmacists, such as providing pharmaceutical care. In a longitudinal study of the changes of pharmacists working in the United States, Goodrick and Reay (2011) show that corporate logic has increased. In other words, income targets can be seen as a possible threat to the profession's autonomy if the market continues to be corporatized (McDonald et al. 2010; Dobson and Perepelkin 2011; Singleton and Nissen 2014; Bush et al. 2009). There may also be ethical implications when pharmacists are responsible for both sales and patient care (Vitell et al. 1991; Malmstig 2001). At the same time, in a society in which information and various forms of consulting activities are offered on the Internet and drugs are sold in many places outside of the pharmacy, the role of the customer is relevant as well. Hibbert et al. (2002) showed for example that pharmacists need to negotiate their role as experts when customers visit the pharmacy to buy a product rather than to receive professional service.

In Sweden, after centuries in a system with private, pharmacist-owned pharmacies, a stateowned pharmacy chain was established in 1971. However, for many years, a new deregulation of the pharmacy market was discussed. Criticisms of the monopoly were presented by different parties, even by pharmacists themselves. In 2009, part of the state-owned company, Apoteket AB, was sold to private actors, which were often large chains but also included some independent entrepreneurs. At the same time, many nonprescription drugs were allowed to be sold outside pharmacies. These changes challenged pharmacists' professional role in Sweden (Rubensdotter et al. 2012), as well as their relationships with other health care professionals.

Social Closure and Jurisdiction

In order to understand the media dispute and how boundaries are created between pharmacists and physicians in conjunction with the launch of self-tests, we depart from a neo-Weberian perspective on professions (Saks 2012), emphasizing the concepts of social closure (Parkin 1979) and jurisdiction (Abbott 1988). The notion of social closure captures the process through which occupational groups strive to maximize control over resources by restricting access to a field, whereas jurisdiction defines the area of knowledge in which the professional work is based.

Social Closure as Exclusion and Usurpation

The core characteristic of a profession, and also what primarily distinguishes a profession from an occupation, is that the professional practice is based on scientific knowledge (Brante 2011; Svensson 2011; Abbott 1988). Thus, there are solid reasons for professional groups to protect their area of expertise—a process that has been defined as social closure by Weber (1983). A closed social relation aims to ensure a monopoly of a certain resource (i.e., the knowledge), but also maintains the quality of the professional practice, prestige, and/or economic benefits. Membership in a professional occupation is obtained through the required education and training. Larson (1977, xvii) states that, "Professionalization is thus an attempt to translate one order of scarce resources–special knowledge and skills–into another–social and economic awards. To maintain scarcity implies a tendency to monopoly; monopoly of expertise." The concept of social closure has most thoroughly been developed by Parkin (1979). In this article, we focus on two aspects: social closure as exclusion and social closure as usurpation, as they are the main types of social closure and are the means through which to establish and mobilize power.

Social closure by exclusion can be defined as attempts made by one group to ensure and maintain their privileged position at the expense of another group being kept in a subordinate position. “Exclusionary closure represents the use of power in a ‘downward’ direction” (Parkin 1979, 45). In the present study, social closure by exclusion should, at least theoretically, be the strategies that physicians use against pharmacists, as the former is higher in the occupational pecking order and assigned more power and prestige (Reiss 1961; Treiman 1977; Ulfsdotter Eriksson 2006). By launching the self-tests, the actions taken by the pharmacists can, in the medical profession's perspective, be interpreted as an act of intrusion on their work and field of expertise—their monopoly.

Credentialism is a strategy of social closure by exclusion (Weber 1983; Parkin 1979) that also relates to the concept of jurisdiction; it emphasizes the need for educational certificates and diplomas in a well-defined area of expertise. It is a strategy used by several white-collar occupations in order to gain professional status, with pharmacists being one of them. The advantages of credentialism as a strategy of closure is that it clarifies that those with the right education and training are considered competent and holders of the skills and knowledge necessary for carrying out tasks within the profession. This clarifies that laymen and other occupational groups lack the skills in question; they cannot do qualified and skilled assessments according to professional standards (Parkin 1979). Credentialism is an important aspect of professions and, according to Parkin (1979, 56), it “protects the learned professions from the hazards from the marketplace.”

Parkin (1979) states that social closure by usurpation is always a consequence of exclusion and is a collective reaction to a subordinate position. Usurpation is defined as “the use of power in an upward direction” (Parkin 1979, 74) and refers to intruding strategies that aim at inclusion in a certain field or area. When an occupational group practices usurpation strategies, they rely not only on themselves, but also on public support in claiming their right. They may use strategies such as demonstrations, strikes, and public debates in mass media. The launch of selftests can be interpreted as a usurpation strategy with the purpose of enhancing the scope of practice for pharmacists. Conflicts between professions are triggered by intrusions on work and thus the knowledge and field of expertise (Abbott 1988). Professions use monopolizing strategies

to control the content of work to strive to maintain jurisdiction.

Jurisdiction—Protection from Intruders

According to Abbott (1988), the core value for a profession is jurisdiction (Brante 2011). Jurisdiction describes a profession's area of knowledge: knowledge they master, monitor, and have demarcated from related occupations in the division of labor. A profession must maintain control over its area of scientific knowledge, which is the professional practice, and be prepared to suppress any overtures from nearby professions. The history of professions shows the battle for jurisdiction. The demarcations are ongoing and give rise to continuous disputes between professions. The ultimate proof of a successful jurisdiction is a state-sanctioned license or professional certificate. In Sweden, both pharmacists and physicians are licensed by the state—a certificate that regulates access to the professional practice and protects the field of knowledge. Professional groups can control knowledge and skills in two ways (Abbott 1988). One method in which professional groups can control knowledge and skills is through the control of the technology in itself, which is common in the skilled trades; that is simply "how to do it." The second approach is control over the abstract, academic knowledge. The abstract, scientificallybased knowledge is a characteristic of professions (Brante 2011; Saks 2012); from this, they form professional skills and practices. The level of abstraction is the resource through which the profession claims priority over others.

When new areas are added, or when a profession leaves a particular activity, other professions may attempt to assert control in order to develop their own profession. Control over work and work content leads to conflict between professions. The launch of self-tests is about new, possible technological solutions; one profession (pharmacists) sees an opening to make a new demarcation toward the medical profession. Pharmacists and physicians both work in the field of health care. The practical knowledge, as well as the abstract, is different for these professions, which makes it an extraordinarily interesting case of social closure to study. Abbott (1988, 19) states that, "The central phenomenon of professional life is thus the link between a profession and its work, a link I shall call jurisdiction." The link under scrutiny is self-tests and the interpretation of test results. For physicians, both testing and interpreting results could be seen as central tasks—the link between the work itself and the profession. With the launch of

self-tests, pharmacists intrude upon the medical profession in a way that can be interpreted as usurpation. Moreover, self-tests are contrary to one of the medical ethics paragraphs: “The doctor shall not without examination or other adequate knowledge of the patient communicate advice or regulations” (Swedish Medical Association 2013 § 9, our translation).

A Note on Methods

In understanding professional knowledge and how boundaries between professions are negotiated, a qualitative content analysis was conducted. Content analysis is often used to analyze written communication in different media (Altheide 1996; Elo and Kyngäs 2008). Journalistic artifacts are suitable to analyze in an argument analysis; the linchpin in media logic is to portray different stakeholders' interests. In this article, journalistic articles from both news media and trade press have been studied; they are good sources for tracing the arguments and statements that practitioners from the studied occupations stress.

We did a systematic search on an online database containing journalistic media publications in Sweden (Media Archives), including the largest daily newspapers as well as hundreds of trade magazines. We searched for articles about self-tests and selected those that concerned the debate between physicians and pharmacists. The largest news provider in Sweden, TT (Tidningarnas telegrambyrå), had a short note about the launching of self-tests, and this was published in many local newspapers in Sweden. Therefore, several articles about the tests have similar content. Some articles include interviews with physicians and pharmacy representatives. The final empirical data consists of forty-four unique articles published in news media and trade press between September 26, 2012, and March, 5, 2013.

We conducted an analysis of arguments to describe the dispute, but also to find the norms upon which the professions relied (Boréus and Bergström 2005): to describe aims to reconstruct the arguments and put them in context, and to derive the arguments from professional norms to examine closing strategies between the professions. In a *pro et contra* analysis, we sought arguments and statements in the texts to find and understand different expressions of social closure. In the initial examination, the material was read several times and then openly coded by marking quotes that were argumentative from pharmacists and physicians respectively (Elo and

Kyngäs 2008). Arguments from both professions were then analyzed separately to capture the normative positions expressed. We studied the profession's arguments separately, then thematically discriminated and categorized: (1) the profession's main motives; and (2) how boundaries between the professions were (a) negotiated, (b) intruded, and (c) closed. The findings are presented in two overall themes that were distinguished: The first covers the debate of pharmacists and self-tests as an alternative to primary health care, and the second theme discusses arguments relating to markets strategies and the reliability of tests and potential self-diagnosis.

Crossing the Line?

Pharmacy—An Alternative to Absent Primary Health Care?

An argument for self-tests is, according to representatives from Apoteket AB, that the primary health care providers are considered absent and hard to reach. Another motive is that some customers prefer to take tests at home since they feel uncomfortable seeing a doctor. The pharmacies can provide products for the customers, whether or not they need to consult a physician. By having a positive test result, customers, who perceive doctors as hard to convince that further investigations of their symptoms are needed, can support their arguments and make it easier to require treatment.

> If one just asks for a test, for example a celiac test, then you doesn't get it. Then you have to show that you have the right symptoms. Many might think that it is hard to call the health care, and then you are prepared to pay just to check. *Brand Manager, Apoteket AB* ("Självtest kan bli dyrt," TT and several local newspapers, March 5, 2013)

The physicians state that tests can create uncertainty among people who are not actually ill. The self-tests are not regarded as trustworthy enough; the situations in which the tests are taken, at the pharmacy or at home, are considered to lack competence since no doctor or medically trained professionals are available. According to the physicians, the competence of working with testing and diagnoses belongs to the physicians. This seems to be especially vital when it comes to diagnoses like celiac that is, even with support of reliable tests, difficult to identify:

> A blood test is not enough to show if you are celiac intolerant or not. When the blood test we use in the health care sector shows an increased value I recommend a tissue

> sample of the small intestine. Not even then it might be easy to make a diagnosis. *Physician and Researcher* ("Apotekets självtester döms ut," November 9, 2012, Dagens Nyheter)

An argument by the pharmacists is that the tests can exclude some diseases and make it possible for lay people to start treating their symptoms themselves. They do recognize the resistance from the physicians:

> We were not surprised of the critic against these tests. There is always resistant initially. We do not make a diagnosis, but the tests can give people, who think of the possibility that they might have lacto or celiac intolerance, an answer. If the test shows that it is not the problem, they can treat their symptoms in other ways. *Brand Manager, Apoteket AB* ("Läkare kritiserar test på Apoteket," November 10, 2012, TT and local newspapers)

The physicians argue that the problem of having primary health care that is not readily available to people should not be solved by self-tests at pharmacies, but by a better prime health care service. The solution is not to let people self-administer tests without a competent doctor with whom to discuss the results. One physician argues that letting healthy people start looking for illness or farfetched diagnoses is also a concern:

> It is unfortunate that a serious actor as Apoteket AB has entered such a questionable business. If you feel fine, you should not really look for diseases. If you are worried about your health, you should visit the primary health care. *President of the Swedish General Practitioner Association* ("Läkare kritiserar test på Apoteket," November 10, 2012, TT and local newspapers)

Rather than selling tests and making people insecure about their health condition, physicians think that the pharmacists should prioritize what they are supposed to do, which is provide patients with prescribed medicine. One of the interviewees says that as long as this is not achieved, self-tests should perhaps not be an issue for the pharmacies:

> I just get tired when I hear about it. The pharmacies can start with making sure that they

> have pharmaceuticals in place when the patients come [to the pharmacy]. *Physician* ("Kritik mot Apotekets satsning på självtester," September 19, 2012, Svensk Farmaci, web version)

However, the brand manager at Apoteket AB responds to the criticisms stated by the general practitioners. She says that self-tests are a serious and scientifically-based activity and that the company does not want to take over part of health care:

> It is important that this is not seen as quackery or that we want to take over anything from the health care sector. There were concerns already more than ten years ago when we started with blood pressure checks at the pharmacies, but there is also a development. Now it happens that general practitioners refer their patients to the pharmacy in order to control their blood pressure. ("Onödig oro för självtest," September 19, 2012, Svensk Farmaci, web version)

Market Orientation or Professional Competence for the Common Good?

As we could see above, some physicians are critical of the role of the pharmacy and the pharmacists in the health care sector due to fundamental differences in their competence. This also seems to be related to financial dimensions of the launch of self-tests. The representative of the district physicians in Sweden says that, even though the tests will be part of the future, he is critical of the fact that the Apoteket AB appears to have an ambition to offer health coaches and health care in order to treat those who need help and advice after taking a test. He states that:

> The more interests, the poorer the soup … I am very hesitant to more actors in the health care. You should take care of the worries people feel, not make money of it. ("Självtest ingen succé," February 23, 2013, Tranås Tidning)

Or, as stated by another physician, the tests are more of a commercial stunt:

> It is a commercial stunt that enhances people's concerns and the work load on the health care sector. ("Läkare kritiserar växande flora av självtester," October 31, 2012, Dagens Medicin)

However, the brand manager of the Apoteket AB says that the pharmacies do not try to compete with health care; instead, they want to be a supplement. She claims that it is better that the customers buy their tests at the pharmacy, from knowledgeable staff, than on the Internet. As pharmacies are profit-driven organizations after deregulation, physicians can question the altruistic motives of providing self-tests at pharmacies. The physicians also state that the consequences of self-tests for the health care sector are not known. Therefore, the possibility to make a profit from such products can be questioned:

> We have no idea of how the self-tests effect health care or health one bit. It is a complicated question, I think. Those who provide tests make money but do not take the consequences. In addition to that, we also know that the tests show fault results. ("Testa dig själv om du är sjuk—hemma i soffan," September 26, 2012, Aftonbladet)

The physicians emphasize that the products and services have to be safe, but they may also have economic implications for the customers:

> In some cases it is a waste of money, since they have no use at all. The tests give no straight and fully reliable answers. When tests like these are taken in the health care they are part of a whole where you talk to and examine the patient. ("Läkare kritiserar test på Apoteket," November 10, 2012, TT and local newspapers)

However, the pharmacy has identified an interest for self-tests and also a group of customers willing to pay for tests such as tests for immunity to winter vomiting disease. According to the health strategist at Apoteket AB, it is good for society to care about health, and it is also valuable for the individual:

> It can be of value to know if you are resistant or need to be extraordinary careful [about winter vomiting disease]. ("Testa dig själv om du är sjuk—hemma i soffan," September 26, 2012, Aftonbladet)

Discussion and Concluding Remarks

The aim of this study was to investigate challenges and changes of professional boundaries, and hence, to expand our knowledge about how deregulations can be understood as changes in jurisdiction, or, professional boundaries. The results show that intrusion and social closure can be useful tools when analyzing how professions act and communicate in times of changed regulations. The notion of intrusion captures how changes in work conditions and tasks in one profession, becomes interference and threats for another. In this case, the intruding action was supported by technological changes in the knowledge field, which encouraged a redefinition of former ways of working in the field. This lead to an attempt of social closure, and hence to exclude the profession from performing certain work tasks.

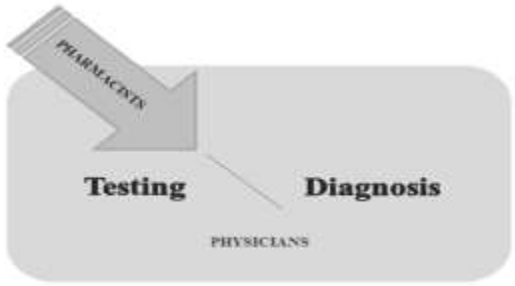
The launch of self-tests has been interpreted as an act of social closure through usurpation by pharmacists in Sweden, intruding on the jurisdiction of physicians (Parkin 1979). The physicians state that pharmacists neither have the correct or necessary knowledge to offer reliable, secure health care related to the tests. This is especially obvious regarding some diseases such as celiac intolerance. The intrusion thereby causes a reaction by the physicians, which can be interpreted as an attempt of social closure by exclusion (Parkin 1979). For a practitioner within medicine, tests and diagnoses are closely linked and cannot be separated either from each other or from the knowledge underlying the process. The statement of this in the dispute is the physicians' strategy to mark their unique knowledge and competence (Sullivan 2000). This is an example of jurisdiction and coincides with Abbott's (1988) definition of the concept—the link between the profession and its work.

According to Abbott (1988), a profession can develop or try to expand their territory when gaps occur. An introduction of new technology can be regarded as such an opening; it is possible for professions to use this technology to renegotiate jurisdiction. Self-testing as a new technology is not yet controlled, and the launch has therefore given rise to a controversy. The pharmacists, represented by the employees of Apotektet AB, claim that they do not challenge the physicians to be the ones who make the diagnosis; rather, the company sees a market opportunity. They claim that the self-tests should be seen as an attempt to meet a demand from customers, especially those customers who think that the rather expensive tests are worth the price. The physicians'

argument, that pharmacists are not knowledgeable enough to make diagnoses, is not seen as relevant by Apoteket AB. Apoteket AB only provides the tests and the proper knowledge about how to perform the tests at home, which is argued to be better than people consulting the Internet about symptoms and diagnoses. Since the tests also can be seen as part of a technological development in medicine, the tests are argued to represent packaged and accessible scientific knowledge that covers a demand on the market.

In sum, the launch of self-tests at pharmacies is seen as an act of intrusion. The uniqueness of the physicians are challenged by the pharmacists, as self-tests are seen as an attempt to divide two sequences of their working process: testing and making diagnoses. The pharmacists are making arguments for self-tests as a legitimate product of the pharmacy by using the dimensions of both patient concern and profit making. Also, self-tests as packaged, qualified knowledge seem to be an important argument and legitimize the act of intrusion. Intrusion and social closure are useful tools when analyzing negotiations in times of deregulations, since these concepts help us to understand inter-professional communication and barriers related to professional knowledge, and work. Traditions, former practice and technological change seem most important in these processes which the concepts of intrusion and social closure allow us to see.

Figure 1: Pharmacists' Intrusion by Redefining the Work Process of Physicians



Source: Adolfsson & Ulfsdotter Eriksson

Previous studies about pharmacists and their relationships with physicians indicate that the status of the pharmacists has historically been seen as lower, according to both pharmacists and physicians (Bryant et al. 2009; Claesson 1989). Thus, the jurisdiction of the physicians has been

difficult to challenge. However, changes in the health care system, not only in Sweden, create the need for questioning roles, norms, and responsibilities. Earlier studies on physicians and pharmacists indicate that there are barriers to an expansion of clinical or medical services at pharmacies and, therefore, an expansion of the pharmacists' role in the health care system (Bryant et al. 2009). This study confirms that deregulation and competitive markets can lead to new situations where not only interprofessional status, but also the balance between professional knowledge and for profit interests can be renegotiated (Dobson and Perepelkin 2011; Singleton and Nissen 2014). The in-between character of the pharmacy, belonging to both health care and a highly competitive business market, leave pharmacists in the position of being both advisors and salespersons. This study on self-tests shows that changes in the health care system, due to deregulation and high competition, can lead to acts that other (medical) professionals might perceive as intrusions. To conclude, the results of this study add to previous studies to demonstrate how conflicts and debates on knowledge, skills, and jurisdiction can be seen as acts of intrusion. The concepts of intrusion and social closure have been useful tools in order to reveal the complexity in times of changed regulations when professional boundaries are negotiated. In this case, developments in technology give room for changes in professional work and thereby encourage such negotiations. Therefore, our results suggest that intrusion and social closure can be useful as analytic tools, not only for studies in the field of health care, but also other fields that undergo re-regulations or significant changes in technology.

The results of the study lead to some interesting implications for practitioners. First, the health care professionals need to see themselves as part of systems in which the boundaries are sometimes blurred. One of many reasons is that technology development, in both software and medicine, allows different actors to receive information more easily and to act more independently from professionals. Professionals can end up in situations in which they are expected to answer questions or provide services about products that used to be in other professionals' jurisdiction (Motulsky et al. 2011). This calls for a discussion between different professional groups on how to organize work in order to provide secure patient care. The huge amount of medical- and health-related information on the web, as well as new forms of health and medical products and distribution forms, are a new arena that health care professionals have to manage. The risk for intrusions between professionals may increase if new collaborations and

health care solutions are invented. One such example could be increased collaboration between hospitals and other health care providers and the pharmacies. For instance, in Sweden, more pharmacists are employed in hospitals in order to provide better care for the elderly. Also, in pharmacies, other professionals representing various professions are employed (i.e., nurses, technicians, sales). Corporatization of pharmacies and the competition between pharmacies and supermarkets are also part of these market changes that professionals have to manage (Singleton and Nissen 2014; Bush et al. 2009).

The boundary blur can also have implications for education. The education system needs to be aware of the communicative and collaborative skills of professionals. Medical knowledge seems insufficient in regards to the health care market of today or tomorrow. For health care providers, recurrent training on new products and services, as well as how to act in order to handle blurring and renegotiated boundaries, could be vital for best economic output and the health of citizens.

In addition, the implication for customers in a market in which products and services are constantly changing is that the choice of making decisions on your own or consulting professionals is important (Hibbert et al. 2002). The amount of information on the web is vast, and available health care providers are sometimes a limited resource. The products in the customer market are becoming more advanced. Drugs sold over the counter (OTC) are available not only at pharmacies, but also at supermarkets, on the web, and elsewhere. However, this trend leaves the customer in a situation in which the competence needed for making such decisions is increasing. The question is: who will support the customers and the patients in their decision making? Is the health care system prepared to act in light of such innovative educational and consultative solutions? Are parents and the school system well-equipped for these challenges? The results of this study indicate that future research could enhance our knowledge on how professionals can prevent intrusion in a changing market through collaborative actions. Studies are needed about how customers and patients as decision makers, regarding their own health, would provide important knowledge for the health care system in order to be effective in reaching those who need assistance in health care matters. Also, studies on how various forms of packaged knowledge, such as databases or new medicine, change professional relationships and

collaborations might provide new insights into professional studies.

Acknowledgements

The authors would like to thank the anonymous reviewers for their constructive comments. Petra Adolfsson has been part of a research project on pharmacy funded by *Riksbankens Jubileumsfond* (The Swedish Foundation for Humanities and Social Sciences).

REFERENCES

Abbott, Andrew. 1988. *The System of Professions. An Essay on the Division of Expert Labor*. Chicago: The University of Chicago Press.
Adolfsson, Petra. 2014. "Pharmacies and Different Logics: Job advertisements in Sweden, 1903-2013." *Organizational Cultures: An International Journal* 13: 37-50.
Altheide, David. 1996. *Qualitative Media Analysis*. California: Sage Publications.
Anderson, Stuart. 2002. "The State of the World's Pharmacy: A Portrait of the Pharmacy Profession." *Journal of Interprofessional Care* 16: 391-404.
Apoteket AB. 2011. "Annual Report 2011." Last modified June 24, 2013. www.apoteket.se.
Apoteket AB. 2013. Testa själv! (Test on your own!) Accessed June 22, 2013. http://www.apoteket.se/privatpersoner/tema/halsotester/Sidor/startsida.aspx
Arman, Rebecka, Roy Liff and Ewa Wikström. 2014. "The hierarchization of competing logics in phychiatric care in Sweden." *Scandinavian Journal of Management* 30: 282-291.
Birenbaum, Arnold. 1982. "Reprofessionalization in Pharmacy." *Soc. Sci. Med.* 16: 871-878.
Boréus, Kristina, and Göran Bergström. 2005. "Argumentationsanalys." In *Textens mening och makt. Metodbok i samhällsvetenskaplig text- och diskursanalys,* edited by G. Bergström and K. Boréus. Lund: Studentlitteratur.
Brante, Tomas. 2011. "Professions as Science-Based Occupations." *Professions and Professionalism* North America (November 2011): 1.
Bryant, Linda J.M., Gregor Coster, Greg D. Gamble, and Ross N. McCormick. 2009. "General Practitioners' and Pharmacists' Perceptions of the Role of Community Pharmacists in Delivering Clinical Services." *Research in Social and Administrative Pharmacy* 5: 347-362.
Bush, Joseph, Christopher A. Langley, and Keith A. Wilson. 2009. "The Corporatization of Community Pharmacy: Implications for Service Provision, the Public Health Function, and Pharmacy's Claims to Professional Status in the United Kingdom." *Research in Social and Administrative Pharmacy* 5: 305-318.
Claesson, Cecilia. 1989. *Apotekaryrke i förändring. En sociafarmaceutisk studie av apotekarnas yrkesutveckling och professionella Status*. Uppsala: Uppsala University.
Djelic, Marie-Laure and Kerstin Sahlin-Andersson Eds. 2006. *Transnational Governance. Institutional Dynamics of Regulatio*n. Cambridge University Press, Cambridge.
Dobson, Roy T., Jeff G. Taylor, Carol J. Henry, Jean Lachaine, Gordon A Zello, David L. Keegan, and Dorothy A. Forbes. 2009. "Taking the Lead: Community Pharmacists' Perception of Their Role Potential within the Primary Care Team." *Research in Social and Administrative Pharmacy* 5: 327-336.
Dobson, Roy T., and Jason Perepelkin. 2011. "Pharmacy Ownership in Canada: Implications for the Authority and Autonomy of Community Pharmacy Managers." *Research in Social and Administrative Pharmacy* 7: 347-358.
Edmunds, June, and Michael W. Calnan. 2001. "The Reprofessionalization of Community Pharmacy? An Exploration of Attitudes to Extended Roles for Community Pharmacists amongst Pharmacists and General Practitioners in the United Kingdom." *Social Science and Medicine* 53: 943-955.

Elo, Satu, and Helvi Kyngäs. 2008. “The Qualitative Content Analysis Process.” *Journal of Advanced Nursing* 62: 107–115.
Farrell, B., K. Pottie, K. Woodend, V. Yao, L. Dolovich, N Kennie, and C. Sellors. 2010. “Shifts in Expectations: Evaluating Physicians’ Perceptions as Pharmacists Become Integrated into Family Practice.” *Journal of Interprofessional Care* 24: 80-89.
Hibbert, Derek, Paul Bissell, and Paul R. Ward. 2002. “Consumerism and Professional Work in the Community Pharmacy.” *Sociology of Health and Illness* 24: 46-65.
Hood, Christopher (1991) "A Public Management for all Seasons?", *Public Administration.* 69(1): 3-19.
Goodrick, Elizabeth, and Trish Reay. 2011. “Constellations of Institutional Logics: Changes in the Professional Work of Pharmacists.” *Work and Occupations* 28: 372-416.
Larson, Magali Sarfatti. 1977. *The Rise of Professionalism*. California: University of California Press.
Malmstig, Erik. 2001. “Arbetets Organisering i Vardagen en Sociologisk Studie av Elva öppenvårdsapotek.” *Score Rapportserie* 2001: 13. Stockholm.
McDonald, Ruth, Sudeh Cheraghi-Sohi, Caroline Sanders, and Darren Ashcroft. 2010. “Professional Status in Changing World: The Case of Medicines Use Reviews in English Community Pharmacy.” *Social Science and Medicine* 71: 451-458.
Motulsky, Aude, Claude Sicotte, Lise Lamothe, Nancy Winslade, and Robyn Tamblyn. 2011. “Electronic Prescriptions and Disruptions to the Jurisdiction of Community Pharmacists.” *Social Science and Medicine* 73: 121-128.
Parkin, Frank. 1979. *Marxism and Class Theory. A Bourgeois Critique*. London: Travistock Publications.
Reiss, Albert J. 1961. *Occupations and Social Status*. New York: The Free Press of Glencoe.
Rubensdotter Carlsson, Jenny, Tobias Renberg, and Sofia Kälvemark Sporrong. 2012. “Drug Experts of the Future, Today? Depiction of the Pharmacist Profession in Swedish Professional and Lay Print Media.” *Research in Social and Administrative Pharmacy* 8: 133-144.
Saks, Mike. 2012. “Defining a Profession: The Role of Knowledge and Expertise.” *Professions and Professionalism* North America (June): 2.
Singleton, Judith A., and Lisa M. Nissen. 2014. “Future-Proofing the Pharmacy Profession in a Hypercompetitive Market.” *Research in Social and Administrative Pharmacy* 10: 459-468.
Sullivan, William, M. 2000. “Medicine under Threat: Professionalism and Professional Identity.” *CMAJ* 162(March 7): 673-675.
Svensson, Lennart G. 2011. “Profession, Organisation, Kollegialitet och Ansvar.” *Socialvetenskaplig Tidskrift* 18: 301–319.
Swedish Medical Association. 2013. “Codes of Conduct.” Last modified June 23, 2013. http://www.slf.se/Forbundet/Etikochansvar/Etik/Lakarforbundets-etiska-regler/.
Treiman, Donald J. 1977. *Occupational Prestige in Comparative Perspective*. New York: Wiley.
Tonna, A. P., D. Stewart, B. West and D. McCaig. 2007. “Pharmacist Prescribing in the UK—a Literature Review of Current Practice and Research.” *Journal of Clinical Pharmacy and Therapeutics* 32: 545-556.
Ulfsdotter Eriksson, Ylva. 2006. Yrke, status och genus. En sociologisk avhandling om yrken på en segregerad arbetsmarknad. Göteborgs universitet: Sociologiska institutionen.
Yuksel, Nese, Greg Eberhart, and Tammy J. Bungard. 2008. “Prescribing by Pharmacists in Alberta”. *Am J Health-Syst Pharm* 65: 2126-32.
Vitell, Scott J., Mohammed Y. A. Rawwas, and Troy A. Festervand. 1991. “The Business Ethics of Pharmacists: Conflicts Practices and Beliefs.” *Journal of Business Ethics* 10: 295-301.
Weber, Max. 1983. *Ekonomi och Samhälle. Förståelsesociologins grunder 1. Sociologiska begrepp och definitioner. Ekonomi. Samhällsordning och grupper*.Lund: Argos.
Weiss, Marjorie C., and Jane Sutton. 2009. “The Changing Nature of Prescribing: Pharmacists as Prescribers and Challenges to Medical Dominance.” *Sociology of Health and Illness* 31: 406-421.