

APOM-project: an investigation of pharmacy organization and management

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SOM theme A: Intra-firm coordination and change

Abstract

Recently, in a joint cooperation of Stichting VNA, SAL Apotheken, the Faculty of Management and Organization, and the University Centre for Pharmacy, University of Groningen in the Netherlands, a Ph.D-study started regarding Apot(he)ek, Organization and Management (APOM). The APOM-project deals with the structuring and steering of pharmacy organization. The manageability of the internal pharmacy organization, and the manageability of the direct environment of pharmacy organization is the subject matter. The theoretical background of the APOM-project is described. A literature study was made to find mixes of objectives. Three mixes of objectives in pharmacy organization are postulated; the product mix, the process mix, and the customer mix. The typology will be used as a basic starting point for the empirical study in the next phase of the APOM-project.

Keywords

Community pharmacy
Management
Organization structure
Organization change
Pharmacy organization
Strategy
Working organization

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Introduction

Organization studies have become increasingly important for the management of pharmacy organization. The studies cover a diversity of issues, for example, financial management, personnel management, organization structure, types of pharmacy managers et cetera. The pharmacist is becoming 'pharmacy manager'. The pharmacy manager is working on pharmaceutical tasks as well as managerial tasks. Structuring and steering of organizational processes are important to have a clear vision of the pharmacy as an organization. In November 1994, in a joint cooperation of Stichting Verenigde Nederlandse Apotheken (VNA), Stichting Apothekers in Loondienst (SAL) Apotheken, the Faculty of Management and Organization and the University Centre for Pharmacy (University of Groningen) in the Netherlands, a Ph.D-study started regarding Apot(he)ek, Organization and Management (APOM). The APOM-project deals with the structuring and steering of pharmacy organization and will take four years. The study should lead to improved manageability of pharmacy organization.

In the APOM-project, firstly, it is assumed that pharmacy managers aim for good quality in the provision and use of medicine, and, in addition, that the way in which pharmacy managers interpret good quality varies. However, it is assumed that there is no 'one best way' to organize quality, since different opinions exist about the interpretation of good quality. A pharmacy manager will steer pharmacy organization by stressing a certain package of organizational tools, for example, good quality of the medicine in order to meet specific standards, minimizing risk, and minimizing error occurrence. In addition, pharmacy manager can stress, for example, customer satisfaction or profitability and efficiency. Firstly, the study analyzes whether pharmacy managers steer internally consistent. It is analyzed whether pharmacy managers act as they say they do. By analogy with the contingency approach,

consistent steering or organizational 'fit' is expected to lead to effective structuring. It is assumed that correspondence of thinking and acting will lead to improved manageability. For example, it is analyzed whether a pharmacy manager who assumes that he/she is in the customer mix actually does stress customer-related activities, and not only product and check.

In the APOM-project, secondly, it is assumed that over the last years the customer is becoming increasingly important within pharmacy organization. Within this developing context, a customer-based pharmacy organization, the actual change of pharmacy organization to the customer mix and the managerial problems in the organizational change will be described. The expected result of the APOM-project is improved manageability of pharmacy organization.

Within this paper the theoretical background of the APOM-project is described. Pharmacy manager selects objectives related to the economic sustainability of the pharmacy organization. The selection of the set of objectives will lead to a certain steering mix; the sum total of steering measures which structures the organization. A literature study was made to find mixes of steering measures, or objectives. Based on the material a typology is presented. The study describes three pharmacy mixes, the *product mix*, with an emphasis on product and check; the *process mix*, with an emphasis on money, and the *customer mix*, with an emphasis on customer satisfaction. The typology is used as a basic starting point for the empirical study in the next phase of the APOM-project.

Background of the Study

Pharmacies, as well as other organizations, mostly have consensus of their primary role in society, the *purpose*. For example, the purpose of a pharmacy can be described as the supply of medicine to the population. In most of the legislation passed within the last two decades this basic task comprises at least the control, storage and supply of medicines, as well as their preparation and their development and manufacture on a larger scale. In addition, to the basic task there has increasingly been a recognition or imposition of other tasks, in particular the provision of

information and counselling with regard to medicines, counselling in preventive health care, the notification of suspected adverse reactions, medication surveillance, and, on the research front, a role in the quest for new medical substances and forms of administration [1]. The *mission* of pharmacies is the unique reason for its existence; that which sets pharmacies apart from all other organizations. Although the terms "purpose" and "mission" are often used interchangeably, to distinguish between them may help in the understanding of organizational goals [2]. In many countries, good quality of the provision and use of medicine, would be such a mission. Within the broad limits of its purpose, each organization chooses a mission that can be described in terms of products and markets, services and customers [2]. Over the last fifty years the pharmacy, for example, has redefined its mission, shifting the emphasis of its operations away from the production of medicine to the support of pharmacotherapy and the provision of information [3], in order to improve drug use. The purpose of an organization is its primary role in society; the mission of an organization is the unique reason for its existence. In addition, in Organization Theory, it is well known that missions can be translated into various *objectives* that an organization must reach in order to achieve its goals [2]. For example, individual pharmacists can assert their own interpretation on the mission by stressing one or more objectives. The objectives may be described by the productivity of the pharmacy, the quality of the services given to the customer, or a variety of other ways.

Despite consensus of purpose, pharmacy managers interpret good quality in different ways. Several studies showed different opinions about the interpretation of good quality [4, 5, 6, 7, 8, 9], for example, an emphasis on good quality of medicines, good quality of revenue or good quality of information. In addition, differences in the interpretation of good quality can vary over time. Organization objectives should not be regarded as an unchangeable set of goals. The objectives should be viewed as open to amendment and will change as strategies develop [10]. Pharmacists approached quality from their own point of view in the past; the back door of the pharmacy. With a little exaggeration: good quality was perceived in relation to the purchase of medicine and the production of preparations. Currently, pharmacists

approach quality from the point of view of the patient; the front door of the pharmacy. Good quality is related to the perception of the patient [11]. Quality, in this view, can only be good if pharmacy organization is tuned precisely to the wishes of the patient.

Pharmacy managers are able to compose a certain set of objectives. A pharmacy is obviously a small organization. Many small organizations have an entrepreneurial mode of strategy making [12]. This means that the strategy-making process tends to be highly intuitive and non analytical. It is not, therefore, surprising that the resulting strategy, seldom made explicit, reflects the chief executive's implicit vision of the position of the organization in its environment. In fact, that strategy is more often than not a direct extrapolation of his personal beliefs, an extension of his own personality [13]. The pharmacy manager can design pharmacy organization by selecting a specific set of internally consistent objectives. This selection will lead to a certain steering mix; the sum total of steering measures which structure the organization [14]

Pharmacy managers deal with the manageability of the internal pharmacy organization, and the manageability of the direct environment of pharmacy organization. Pharmaceutical care is not provided in isolation from other health-care services, but in collaboration with patients, physicians and other health-care providers [15, 16, 17]. The pharmacist will have to characterize the pharmacy as a link in the total health-care system. For example, the pharmacist could concentrate on the consultation with general practitioners, with specialists, and with patient associations. In addition, the pharmacist could concentrate on the cooperation within the pharmaceutical business chain, and on the relations with home nursing services [16]. In addition, some aspects of pharmaceutical care can be defined. Firstly, the pharmaceutical care for the community; pharmacists individually and as a profession have important roles to play in positively influencing drug policy, drug use and outcomes as well as other aspects of health care. In many instances, firstly, pharmaceutical care should take place through collaboration with other health professionals at community level. Secondly, pharmaceutical care should be for

individual patients, the so-called comprehensive pharmaceutical care, the delivery of which requires an ongoing, covenantal relationship between pharmacist and patient [15]. In addition, pharmaceutical care can be defined as the intensive care by the pharmacist in order to achieve an optimal pharmacotherapy in which the patient and the patient's complaint(s) are at the centre in order to realize an optimal quality of life [18, 19, 20].

The pharmacy manager can design pharmacy organization in a variety of ways. Pharmacy organization can be designed by, for example, care and money. Firstly, pharmacy organization provides care as a part within the pharmaceutical business chain. The pharmacy manager selects objectives related to the care for the patient. Secondly, pharmacy organization, as well as any other organization, needs turnover in order to sustain its activity. Pharmacy manager selects objectives related to the economic sustainability of the pharmacy organization. The selection of the set of objectives will lead to a certain steering mix; the sum total of steering measures which structure the organization. In the APOM-project three pharmacy mixes are defined related to the care orientation and to the economic orientation.

Three pharmacy mixes

Three pharmacy mixes of objectives are described (figure 1); *the product mix*, *the process mix*, and *the customer mix*. Although several studies have resulted in the description of different types of pharmacy or different types of pharmacist [21, 22, 23, 24, 25] it is assumed here that there is no 'one best way' to organize quality. The pharmacy manager should seek to find internally consistent positions within one of the three pharmacy mixes, in order to be able to steer and structure pharmacy organization. Why is consistency such an important issue here?

Mainly, the importance of consistency is related to effectiveness. It is assumed that

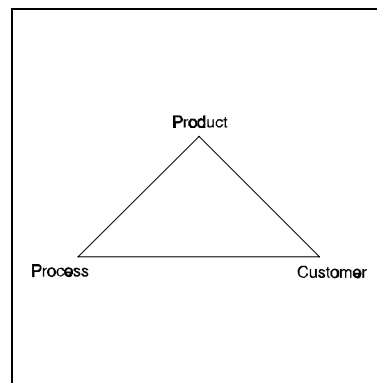


Figure 1 Three mixes of objectives in pharmacy organization; product mix, process mix and customer mix.

improved leads to more effective organizations. In addition, with respect to internal consistency, one of the prime purposes of strategic analysis is to provide a clear picture of the organization and the environment in which it is operating. A useful summary of this situation might include a listing of the major opportunities and threats which face the organization, its particular strengths and weaknesses and any objectives which are a particularly important influence on policy [10]. In the APOM-project, internal consistency relates to the fit of the organization strategy with its objectives selected by the pharmacy manager. For example, if pharmacy manager intends to attain maximum customer satisfaction, would the set of selected objectives be likely to achieve maximum customer satisfaction? At this stage, the pharmacy mixes are described in a pure form; it is assumed for the moment that they are internally consistent.

The product mix

The *product mix* deals with, the specific standards the medicine should meet, the minimilization of risks, and the minimilization of error occurrence. The pharmacy manager designs pharmacy organization with an emphasis on *product and check*. With respect to the product, it should be common to have a formulary of some kind compiled within the pharmacy system of a country, in order to standardize extemporaneous preparations; e.g. in close cooperation with experts working at faculties of pharmacy [1]. With respect to the check, it seems sensible to know where the responsibility lies for ensuring the correctness of a prescription. In Dutch law, for example, a pharmacist was legally allowed in refusing to dispatch a medicine without prescription, if, in the view of the pharmacist, the patient ought to consult a general practitioner first [26]. The pharmacist can be held responsible if it is showed that the medicine is dispatched too lightly. In addition in English law, for example, a related issue was decided by a court of law in the so-called "Migril case" [1983] where, although a prescription had been correctly dispensed according to the doctor's instructions, it was held judicially that the pharmacist should have questioned the dosage specified which was, in fact, a cumulative overdose. The patient developed gangrene in both feet and substantial damages were awarded against both the doctor and the pharmacist. Such examples form the clearest

recognition by society that the pharmacist's legal responsibility extends beyond the accuracy with which a prescription is dispensed and involves the nature of the prescription itself and the manner in which it is made available to the patient [1]. In addition, a pharmacy can be defined as a constellation of working stations with defined tasks. Within the product mix a certain working station and related tasks will be expected to be stressed. The pharmacy organization has roughly five working stations. At working-station 1 (*receiving*) counter, the prescription is received. At working-station 2 *computer*, the data concerning the patient and the prescription are put into the computer. At working-station 3 *filling*, the prescribed medicine is collected/produced. At working-station 4 *check*, the filled/produced prescription is checked. At working-station 5 (*delivery*) counter, the medicine is handed over to the customer. Several measures can be taken to assure the safety of the dispensed medicine at various working stations and by using various organizational systems in pharmacy organization. The dispensing of the medicine can be organized in various ways by dividing the (set of) task(s) of the working stations over several persons; resulting in various working systems [27]. For example, the pharmacist can decide to stress the activities of one or more working stations; in the product mix for example, the working station *check* would be likely to be stressed. In several countries the check is organized in different ways. For example, the Dutch quality system with respect to extemporaneous preparations comprises laboratories (Laboratorium Nederlandse Apothekers), standardized therapeutic relevant regulations (Formularium der Nederlandse Apothekers; FNA), production records (chargebereidingsvoorschriften), Regional Pharmacy Laboratories (RAL) coordinated by Central Consultative Body Regional Pharmacy Laboratories (CORAL), and a post-academic course of quality guarantee [28]. In addition, the standards for Dutch pharmacists (AWEK) describe the organization of dispensing medicine. Each pharmacy is free to take its own decision about the use and interpretation of the AWEK standards; AWEK is not legally obliged. In addition, the pharmacy manager can design the working organization in various ways, and still work according to AWEK. The filling of the prescription should be done by various persons to guarantee a good check, according to AWEK standards. One pharmacy assistant receives the prescription and dispenses the medicine. A second pharmacy assistant works at the

computer. A third pharmacy assistant collects the prescribed medicine. The third pharmacy assistant checks the printed label and sticks the label on the medicine packs; this assistant is responsible for the correctness of the medicine and the label [29]. In the short term, the AWEK standards will be substantially revised, and will be renamed Nederlandse Apotheeknorm (NAN standards). In the Netherlands, the dispensing of the medicine of pharmacists is checked in the same way as the dispensing of the pharmacy assistants; all personnel is allowed to check each other. In addition, in Sweden the check is organized differently than in the Netherlands. At Swedish pharmacies, for example, three types of staff dispense medicine. Pharmacists (4 years university study), prescriptionists (2 years university study) and technicians (intermediate vocational education) have different responsibilities. Firstly, pharmacists can dispense medicine on their own. Secondly, prescriptionists can dispense medicine on their own. Thirdly, technicians can dispense medicine, but have to be checked by a pharmacist/prescriptionist; this system results in two varieties of making checks. The first variety is that the pharmacy staff perform it the way the law prescribes. This means that a pharmacist/prescriptionist fills a prescription on his/her own. A technician is checked by a pharmacist/prescriptionist (standard industry packs of medicine). If the prescribed medicine is, for instance, an extemporaneous medicine, the technician leaves the working station *filling* to the pharmacist/prescriptionist. The second variety is when the pharmacy takes the decision to have a "double check". This means that everybody needs a check: prescriptionists/pharmacists as well as technicians. This also means that two persons are responsible for the filling of each prescription. In this situation, the technician is allowed to make the "double check". Each pharmacy is free to take its own decision about the "double check" [30].

Pharmacy organization is structured in order to attain *highest product quality and product safety*. In Dutch community pharmacies the computer is used today in an ambitious system of prescription handling, in which product quality and product safety are closely guarded. The four most important files relate to the patient, the preparation, the medication history, and the financial record. The system renders possible valuable checks of possible interactions, special dosage requirements, contra

indications and even compliance [31] et cetera. In addition, the system can be used to produce tables and other means in order to support the steering of pharmacy organization.

The main objective of pharmacy organization in the product mix is to maximize safety and quality with the least risk. Although risks can become infinitesimally close to zero, the concept of "absolute safety" (zero risk) implies perfect foresight and is therefore an ideal which is not attainable. Risk management is the making of decisions concerning risks and their subsequent implementation, and flows from risk estimation and risk evaluation [32]. The determination of "safety" does not involve a measurement, but a judgement based on the acceptability of risk, usually taking into consideration not only the measured risk, or risks, but also the benefits and alternative risks at the very least [33].

The process mix

The *process mix* deals with the way in which the dispensing of the prescription is organized, and to what extent it is organized profitably and efficiently. The pharmacy manager designs pharmacy organization with an emphasis on *money*. With respect to this issue, pharmacies pay attention to financial management. Financial management focuses on making wise decisions about obtaining and using financial resources. Pharmacy managers face many financial decisions, for example, how much inventory to carry, whether to participate in third-party prescription plans, whether to buy a new computer, and so on. The principal goal of financial management is to increase the value of the organization. This goal is achieved by making the most efficient use of financial resources. Pharmacies, for example, carry inventories of prescription and non-prescription drugs. They must invest money in order to buy inventories. Pharmacies make most efficient use of inventories when they carry the smallest amount of stock necessary to meet consumer demand. Carrying larger stock is a waste of resources because it takes money away from other, more productive uses [34].

Pharmacy organization is structured in order to attain *highest productivity*. Productivity is the relation of a quantity measure of outcome (measured in pieces, kilograms et cetera) to a quantity measure of effort of production factors (measured in working hours, units of means of production, units of means of raw materials) [35].

The main objective of pharmacy organization in the process mix is to maximize productivity at lowest cost. With respect to working organization of pharmacies, maximizing productivity could be attained by, for instance, a re-design of a more efficient organization which can then achieve more prescriptions per pharmacy assistant in the same time. With respect to working organization of pharmacies, cost reduction could be attained by, for instance, a re-design of a more efficient organization in order to do the same amount of work with less (qualified) personnel, or to achieve more work with the same quantity of (qualified) personnel, both in the same time. In relation to productivity and cost, two types of economic evaluation can be defined.

The first method is effectiveness evaluation; a method in which the consequences of the alternatives are examined. The second method is cost analysis; a method in which only costs are examined [36]. To accomplish a full economic evaluation both the costs (inputs) and consequences (outcomes) of the competing alternatives must be examined [37]. Refined methods are used by groups of pharmacies, for instance by Boots in the United Kingdom or the Royal Dutch Association for the Advancement of Pharmacy in the Netherlands, and, in addition, ideas of these methods are roughly used by individual pharmacy managers. A method or combination of methods can be used to attain maximize outcome or minimize cost.

The customer mix

The *customer mix* deals with the way in which the wishes of the customers are met. The pharmacy manager designs pharmacy organization with an emphasis on *customer*. Systematic time and motion studies in Czechoslovakian pharmacies have led to quite clear concepts as to what a pharmacy should provide in terms of facilities

if it is to meet the patient's needs. These studies culminate in the concrete definition of a specific dispensing unit known as "dispensing module". The module is mostly of a circular shape in which the worker is assumed to be the cylinder axis and on this assumption he can reach the same distance in all directions. This module was in fact put into operation as early as 1963. Similar installations have also appeared in the USA and later the (former) Soviet Union in 1971 [38]. In Sweden, the idea of a circular shape was used in the development of the carousel by Apoteksbolaget AB and Sintek; a round compact storage system for medicine with horizontally revolving shelves. The carousel can be used for different purposes at the same time; two staff can serve customers directly from stock, while a third person replenishes it. In the Netherlands the carousel is used in the counter model which was designed by Farmac under the authority of SAL Apotheke; inspired by Swedish examples. The counter model integrates tasks in dispensing medicine: from working stations on several locations with several persons, to working stations on one location with fewer persons. One person fills the prescription at the counter which is then checked by another person [27].

Pharmacy organization is structured in order to attain *highest service quality*. Service quality should be more than just dispensing medicine. The pharmacist is responsible for more than the delivery of a product to the ultimate consumer. It is certain that he should be responsible for reinforcing the physician's instructions about drug therapies. He should be responsible for keeping patient-drug-utilization records. The pharmacist should not only dispense drugs, but he should both dispense and elicit information concerning drug usage and concerning the patient [39].

The main objective of pharmacy organization in the customer mix is to maximize customer satisfaction. Several methods of measuring the level of patient satisfaction are used in pharmacies in different countries. The most direct way is simply to ask them for their views on the subject. Another less direct way involves inferring attitudes from behaviour that is elicited essentially for other purposes, for example, by studying the pronouncements and writings of individuals and groups [40]. In Sweden, Apoteksbolaget AB was the first to monitor customer satisfaction on a

national level with the National Customer Satisfaction Barometer (CSB) at pharmacies; the direct way of measuring patient satisfaction. In 1992 in the Netherlands, this technique has been supported by KNMP and VNA and has been used by Stichting Health Base ever since. Customer Satisfaction Projects have been made, for example, in the province Zeeland and the city of Deventer by the end of 1993. These studies comprise a survey for patients and a survey for the personnel [41, 42]. The customer satisfaction index can be described as the counterpart to productivity measures. Whereas productivity refers to *quantity* of output, CSB measures *quality* of output (as experienced by the customer) [43].

Changing to the customer mix

In most Western countries pharmacy managers seek to structure their organization in accordance with the customer mix. Some years ago in the British health-care system, changing market conditions exposed the dilemma between the pharmacist as an entrepreneur and the pharmacist as a care worker. The Nuffield commission stressed the urge of a professional pharmacist in his/her role as a care worker [44]. The Nuffield report showed an emphasis on processing the dispensation of prescriptions at minimal cost in some health-centre pharmacies. As a result, the service provided in these health-centre pharmacies was worse than elsewhere. The report showed that independency and credibility were endangered if pharmacies gave high priority to financial profit. On the contrary, the pharmacist as a care worker can give independent advice, and is credible for general practitioners, as well as for patients, despite all threats from the commercial environment. To guarantee the professional occupation of pharmacists; two measures were recommended. Firstly, the commission recommended the payment of consultation with practitioners, the payment of the provision of information to the patient, the payment of medication surveillance and so on. This measure was recommended, since advice brings no financial return; the sale of medicine does. In this situation the pharmacist concentrates on maximizing the sale of medicines. This was regarded as an important barrier to change pharmacies in accordance with other active participants in the health-care system, in order to attain high-quality service. Secondly, the commission recommended that the profession of pharmacists should be led rather by professional

responsibility than by laws, regulations, and so on. In Great Britain, many pharmacies are owned by non-pharmacists; these pharmacists especially should have an independent professional responsibility [45]. The pharmaceutical information task was regarded as the most important part of the work. In Germany, medicine advice is mostly regarded as a bonus free of charge: advice is normally given as an additive. The pharmacy manager as a medicine expert tends to solve all problems of patients with medicine; whether he wants to or not. Concerning this part he has good reason to feel competent. In this view the pharmacy would be a place for the sale of medicine and equally a place for the sale of advice [46]. In today's market, it is not sufficient to ensure high levels of productivity, the quality of what is produced is becoming increasingly important [43]. Distributing drugs in a productively way, no longer suffices today to convince broad segments of society of the legitimacy and value of private corporate dealings. A growing part of our society wants to know not only how much a corporation earns, but also how these earnings are achieved [47]. Current changes in health policy towards the community and self-care make it necessary that the pharmacist functions fully in the community and not only within the walls of his pharmacy [1]. In the Netherlands in a study, it was found that pharmacists think that the additional value of the pharmacy is service (good and quick) and supply of information [26]. In this context, patient-friendly activities consist of information and the delivery of medicine at home. In an earlier study [3], it was showed that important target groups of pharmacy organization did not know what the additional value of the pharmacy was. It was concluded that the pharmacy should be actively marketing these values. Not in the sense of "maximizing the sale of medicine", but marketing in the sense of anticipating the needs and wishes of the environment; environment-oriented thinking.

Conclusion

Within the APOM-project, it is assumed that there is no 'one best way' to organize quality, since different opinions exist about the interpretation of good quality. Pharmacy organization, for example, provides care as a part within the pharmaceutical business chain. The pharmacy manager selects objectives related to the care for the patient. In addition, pharmacy organization, as well as any other organization,

needs turnover in order to sustain its activity. Pharmacy manager selects objectives related to the economic sustainability of the pharmacy organization. The selection of the set of objectives will lead to a certain steering mix; the sum total of steering measures which structures the organization. In the APOM-project three pharmacy mixes of steering measures or objectives were defined, and, related to the care orientation and to the economic orientation: the product mix, the process mix, and the customer mix. The product mix relates to the pharmaceutical product and relates to the check of this product. The process mix relates to the financial profit in selling the pharmaceutical product. The customer mix relates to the customer's satisfaction of the patients visiting the pharmacy.

In the next phase of the APOM-project it will be studied if 'thinking and acting' of pharmacy managers correspond within the three pharmacy mixes. It will be studied if the pharmacy manager who thinks that he is acting in, for example, the customer mix, actually stresses the package of subjects related to the customer mix. The pharmacy manager in the example, should stress customer satisfaction, and not, for example, only maximum profit. It is expected that some of the studied pharmacies will be internally *inconsistent*; for example, the pharmacy manager in the customer mix will act like he/she is in another mix. Argyris [48] showed that people do not act in correspondence with their espoused theory. The actual behaviour is in correspondence with another theory: the theory in use. The theory in use must be traced back from behaviour. The theory in use does not correspond with the espoused theory. People are not aware of this behaviour. It is assumed that internal consistency of pharmacy organization will be related to improved manageability of pharmacy organization. In other words, it is assumed that improved correspondence of 'thinking and acting' will lead to an effective structure of the organization. By analogy with the contingency approach, consistent steering or organizational 'fit' is expected to lead to effective structuring. Therefore, it is assumed that correspondence of thinking and acting will lead to improved manageability.

Finally, within the health-care system, services did become increasingly patient oriented over the last years. The patient is treated as a customer, rather than as a patient. Starting from this very position in general, and at pharmacies in particular, it will be studied what happens if a pharmacy organization will 'travel' to the customer mix. If pharmacy organization is internally consistent in its position, pharmacy organization will be changed in accordance with the customer mix. For example, the pharmacy manager in the process mix acts like he/she is in the process mix, will change pharmacy organization to the customer mix. Assuming correspondence of 'thinking and acting', it will be analyzed what type of organizational problems the pharmacy manager has to manage, in order to 'travel' from the process mix or the product mix to the customer mix.

The APOM-project will provide an insight in the managerial processes of pharmacy organization, and, in addition, will provide an insight in the structuring and steering of these managerial processes of pharmacy organization. Ultimately, if the expectations of the APOM-project will be fulfilled, the pharmacy manager should be able to improve the manageability of the pharmacy organization.

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