

International Series: Integration of community pharmacy in primary health care

Community pharmacy and primary health care in Sweden - at a crossroads

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Published online: 2-May-2020

Abstract

The overall goal of Swedish health care is good health and equitable care for the whole population. The responsibility for health is shared by the central government, the regions, and the municipalities. Primary care accounts for approximately 20 percent of all expenditures on health care. About 16% of all physicians work in primary health. The regions have also employed a large number of clinical pharmacists, usually hospital-based, but many perform a variety of different primary care services, the most common of which is patient medication reviews. Swedish primary health care is at a crossroads facing extensive challenges, due to changes in demography and demanding financial conditions. These changes necessitate large transformations in health services and delivery. Current Government inquiries have primarily focused on two ways to meet the challenges; a shift towards more local care requiring a transfer of resources from hospital care, and a further development of structured digi-physical care, that is both digital (“online doctors”) and physical accessibility of care. While primary care at present is undergoing processes of change, community pharmacy has done so during the past decade since the re-regulation of the Swedish pharmacy market. A monopoly was replaced by a competitive system, where five pharmacy chains now share most of the market, a competition that has made community pharmacy very commercialized. A number of different, promising primary care services are being offered, but they are usually delivered on a small scale due to a lack of remuneration and philosophy of providers. Priority is given to sales and fast dispensing of prescriptions, often with a minimum of counseling. Reflecting primary health care, community pharmacy in Sweden is at a crossroads but currently has a golden opportunity to choose a route of collaboration with primary health care in its current transformation into more local and digi-physical care. A major challenge is that primary health care inquires, strategic plans, and national policy documents usually do not include community pharmacy as a partner. Hence, community pharmacy have to be proactive and seize this chance of changes in primary health policy and organization in order to become an important link in the chain of health care delivery, or there is a significant risk that it will predominantly remain a retail business.

Keywords

Pharmacies; Primary Health Care; Delivery of Health Care, Integrated; Ambulatory Care; Community Health Services; Pharmacists; Community Pharmacy Services; Professional Practice; Sweden

THE SWEDISH HEALTH CARE SYSTEM

Sweden has a population of 10.3 million people and spends 11% of its gross domestic product (GDP) on health and medical services, which is on par with most other European countries.¹ In 2018, 313.6 billion SEK was allocated to health care in Sweden, out of which 55.9 billion was assigned to primary care.² General government financed 85 percent of the total costs, while households paid 14 percent of the total costs via patient fees and other fees.³ Private health care, accounting for 12% of total healthcare costs, mainly offers primary care, such as health care centers or homes for the elderly.¹

According to the Swedish Health and Medical Services Act, the overall goal of Swedish health care is good health and care on equal terms for the whole population. The care shall be based on the following three basic principles:

- Human dignity: All human beings have an equal entitlement to dignity and have the same rights regardless of their status in the community.
- Need and solidarity: Those in greatest need take precedence in being treated.

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Cost-effectiveness: When a choice has to be made, there should be a reasonable balance between costs and benefits, with cost measured in relation to improvement in health and quality of life.^{4,5}

Sweden is divided into 21 regions and 290 municipalities. The responsibility for health and medical care in Sweden is shared by the central government, the regions, and the municipalities. All of Sweden's municipalities and regions are members of the Swedish Association of Local Authorities and Regions (SALAR) [Sveriges Kommuner och Regioner (SKR)], which is an employers' organization that represents and advocates local government in Sweden. The regions have the primary responsibility for planning and providing health and medical services and decide on the allocation of resources. The regions own and operate the hospitals, health care centers, and other institutions. The municipalities are responsible for the disabled, home health care of the elderly, and nursing homes. They are also responsible for providing care for people with mental disorders, support and services for people released from hospital care, and school health care. Outpatient care is organized into primary care districts, each with 5,000 to 50,000 inhabitants. There are 100 hospitals in Sweden, of which about 85 are run by regional governments; the remainders are private. Seven of these 85 are regional university hospitals and they offer highly specialized care and host teaching and research. There are about 46,000 registered physicians and 106,000 registered nurses in Sweden, most of who are employed in the health care

sector. The number of registered pharmacists in the work market is 9,800, approximately half of whom are pharmacy practitioners.⁶

Quality and efficiency of health care in Sweden is measured through a number of indicators by a system named Open Comparisons, operated and financed by the National Board of Health and Welfare [Socialstyrelsen]. The results are used to follow-up, analyze and develop health care on different levels. The target groups for this data are officials, decision makers, municipalities, regions and politicians. The indicator results are presented by municipality, region and county. The national development data over time is often presented. Certain indicators are even measured per hospital or clinic. Stakeholders may, with the help of the indicator results, study the quality of the health care system as a whole, or examine specific aspects, such as medical outcomes, patient satisfaction, accessibility, and costs, to support follow-up, development and improvements.^{7,8}

PRIMARY HEALTH CARE

An overview

Primary health care accounts for about 20 percent of all expenditures on health, and about 16 percent of all physicians work in this setting.² There are about 1,200 primary care practices, of which 40 percent are privately owned. Team-based primary care, comprising general practitioners (GPs), nurses, midwives, childcare practitioners, pediatricians, physiotherapists, psychologists, and gynecologists, is the main form of practice. In some practices, pharmacists are included. There are, on average, four GPs in a primary care practice. GPs or district nurses are usually the first point of contact for patients, unless for minor ailments where community pharmacy practitioners often enjoy the public's trust. District nurses employed by municipalities also participate in home care and regularly make home visits, especially to the elderly; they have limited prescribing authority. People may register with any public or private provider accredited by the local regional council with most individuals registering with a practice instead of with a physician, but in some practices, it is possible to register with a specific GP. Providers (public and private) are paid a combination of fixed capitation for their registered individuals (80-95% of total payment), fee-for-service (5-18%), and often performance-related payment (0-3%) for achieving quality targets in such areas as patient satisfaction, care coordination, continuity, enrollment in national registers, and compliance with evidence-based guidelines.⁵

The National Medicine Strategy

SALAR and the Government have since 2011 jointly developed the National Medicine Strategy (NMS) together with the following stakeholders: the Medical Products Agency, the National Board of Health and Welfare, Swedish Agency for Health Technology Assessment and Assessment of Social Services, the Swedish eHealth Agency, the Health and Social Care Inspectorate, the Dental and Pharmaceutical Benefits Agency, the Public Health Agency of Sweden, the Swedish Pharmacy Association, the Swedish Pharmacists Association, the Swedish Pharmaceutical

Society, the Swedish Medical Association, the Swedish Association of Health Professionals, and the research-based pharmaceutical industry. The NMS's long-term vision is "A correct medicine use to the benefit of patient and society". It aims at improving medicine use and patient safety, as well as to foster an equitable health care in Sweden. An action plan is issued annually, containing a number of assignments to the participating stakeholders, to contribute to the overall goal of an effective, safe, accessible and equitable drug use that also is both socially and environmentally sustainable. Examples of topics of previous NMS assignments related to community pharmacy are self-care with a focus on nonprescription drug use, improved patient safety in generic substitution, and development of patient-oriented quality indicators for community pharmacy practice.⁹

Changes, challenges and opportunities

Swedish primary health care faces big challenges including changes in demography, caused by a fast population growth (by 16% in the last 20 years), mostly due to a large immigration, primarily of refugees, and by an increased proportion of older people.¹⁰ Other challenges are competence provision, the increased need to support welfare by electronic processes and communication, and given the financial conditions a need to develop and streamline health care. A further shift towards local care is a nationally agreed clear path.

Primary care is the part of health care that is best placed to address individuals' overall health care needs, including preventive measures. The Government and SALAR have reached an agreement to develop local health care. The goal of the transition is to create a good, local and coordinated health care, fostering health and health equity. Primary health care is one of four sectors, with an allocation of 2,935 million SEK to the regions, aimed at among other things improving primary care accessibility and medical continuity for patients and to contribute to a more patient-centered health care. A further goal is to enable patients and their families to become involved in care and treatment, given their conditions and needs.¹¹

A current Government inquiry interim report, Good quality, local health care – a joint roadmap and vision, focuses on primary health care and how to strengthen it. It contains both legislative proposals and examples of success factors in practice to strengthen primary health care, which are intended to inspire the responsible authorities, i.e. regions and municipalities. The proposals suggested by the Inquiry form the basis for a reform of primary health care. The inquiry is to take particular account of the transfer of resources from hospital care to primary care, and the cooperation between the two and municipal health care has increased. The increased emphasis on primary health care means that this level of care needs to function effectively. GPs will take care of most of the patients' symptoms, resulting in a decreased need of specialist, emergency and hospital carer. Furthermore, there will a more in-depth inclusion of municipal services and patient participation is emphasized. Access is a challenge in primary health care today, and in the inquiry's proposals it is made clear that it has to be responsible for urgent health care. Primary care has to be organized to provide high

accessibility to the services and to meet objectives covered by its mission. Of central importance for both the quality of care and the patient's experience, as well as for the work environment of staff and the effectiveness of health care, is the continuity in the relationship between the patient and health care staff and between different professions and different health care contacts. The Inquiry proposes that the patient may be able to have access to and choose a GP, to ensure continuity and benefit of treatments. In summary, improved access, quality and continuity in primary health care are emphasized. Another proposal makes clear that research has to be conducted in primary health care.^{12,13}

Another Inquiry, Digi-physical care choice, accessible primary health care based on need and continuity, is to review the patient choice systems in primary care, including an analysis of how a long-term sustainable system for 'Online Doctors' – so called digital health service providers - can be created. These systems have emerged during the past few years. According to the Inquiry the digital revolution needs to have a broad impact on health care and become a more integrated part of all health care. Digitalization creates the opportunity to remedy one of the main problems of primary care – accessibility – e.g. by being independent of geography. The Inquiry puts forward a number of proposals and makes recommendations to the regional councils through a reform package known as an integrated digi-physical choice reform. It is recommended that the regional councils require that all primary care providers ensure digi-physical care, both digital and physical accessibility. The Inquiry's proposals are aimed at creating an integrated digi-physical patient choice, where the patient can turn to the same primary care provider regardless of whether they do so digitally or via an appointment.¹⁴

Neither the recent inquiries on local care and digi-physical care, nor primary care plans, include the community pharmacist as a partner. There is however an awareness of pharmaceutical competence, and the regions have employed a large number of clinical pharmacists. The local care approach is in fact based on the belief that the aggregated competence of the whole health care team results in the best outcome.¹² A digi-physical care collaboration between primary care and community pharmacy would be especially beneficial in rural areas, enabling the patient to get certain health related data measured in the pharmacy and digitally sent to the patient's health care center.

REGIONAL CLINICAL PHARMACISTS

The previously mentioned regions have employed clinical pharmacists to deliver pharmaceutical health care services, mostly since the re-regulation of the Swedish pharmacy market in 2009. The majority of the 725 clinical pharmacists employed are hospital-based, but many also perform services in primary health care. Some work in primary care only. A survey was conducted through digital SurveyMonkey specifically for this article, to examine to what extent pharmacists employed by the regions deliver services in primary health care, as well as which services they provide. According to the survey, 174 clinical

pharmacists nationwide are engaged in primary health care to an extent corresponding to 70 full time equivalents. The number of pharmacists varies among the regions between 1 and 35 with a median of 6. Several different primary health care services are delivered, the most common of which are patient medication reviews, conducted by pharmacists in health care centers, retirement/nursing homes and in municipal home health care in more than half of the regions. Home medication reviews have also been performed but so far to a limited extent. According to regulations by the National Board of Health and Welfare [Socialstyrelsen], all aged 75 or older with ≥ 5 prescribed medications are entitled to a medication review annually.¹⁵ An MD is formally responsible, but the reviews are often undertaken by pharmacists. According to two studies, pharmacists' implementation of medication reviews has been appreciated by GPs, nurses and patients.^{16,17}

Both participation of pharmacists in Pharmacy & Therapeutics Committees, or in some form of collaboration groups including primary care representatives, and follow-up, analysis and presentation of prescription statistics to GPs, exist in close to 9 out of 10 regions. In the majority of regions pharmacists are also assisting in practical medication handling and in logistics and presenting producer-neutral information and education to GPs and district nurses on new drugs or pharmacotherapeutics. To some extent this is also done with municipal home health care staff. Pharmacist participation in public procurement of drugs and financial follow-up is quite common. A joint network of clinical pharmacists in primary health care in seven regions has been established.

COMMUNITY PHARMACY

An overview

There are a total of 1,422 community pharmacies in Sweden, a 53% increase since the re-regulation of the Swedish pharmacy market in 2009, resulting in 14 pharmacies per 100,000 inhabitants an increase from the 10:100,000. Ownership of pharmacies is re-regulated, but there always has to be a pharmacist-in charge. About 97% of the country's pharmacies are operated by five community pharmacy chains, one of which is the Government-owned apoteket, the former monopolist chain of Apoteket AB (1970-2009). In one of the chains, a minor part of the pharmacies is operated as a franchise. Additionally, there are 45 independently run pharmacies, and three unmitigated e-commerce pharmacy companies, that are taking medicine orders online only. Pharmacy e-commerce accounts for 10% of the turnover and 16% of the volume of the community pharmacy market. There are also 620 so called "pharmacy representatives", usually located in general food stores, as an extension of the closest pharmacy, forwarding dispensed prescriptions. Since the re-regulation, nonprescription drugs are sold in other outlets, such as food stores and gas stations.¹⁸

There are 10,000 community pharmacy employees; 53% pharmacists, 23% pharmacy technicians and 24% other staff. There are two categories of pharmacists, a 3-year-long training for a BS(Pharm) degree, also named "prescriptionists" in English, and a 5-year-long MS(Pharm) education. Both categories have the same rights and

obligations in community pharmacy practice, with the “prescriptionists” being the major group.

The reimbursement system is based on a Pharmacy Margin, with a combination of fixed fee and percentage. There is a reimbursement for generic substitution with an increased margin added to all generic drugs. Discounts are allowed for non-generic drugs and in reality, only used for parallel traded drugs. There is no reimbursement for primary care services.

A clinical decision support system

The use of electronic prescriptions has long been fully implemented in Sweden. A governmentally owned clinical decision support system, named Electronic Expert Support (EES), has been established, which analyses patients’ electronically stored prescriptions in the Swedish national prescription repository. It was developed following protocols for Drug Utilization Review (DUR) by Medco Health Solutions, used in various forms at community pharmacies in the US. The system has been adapted to Swedish clinical practice. The Swedish e-Health Authority’s expert group is responsible for quality assurance of EES content. Its information is designed as evidence-based rules, and is constantly updated based on science and information from government agencies.

The pharmacist can use the EES while dispensing prescriptions to identify potential drug-related problems (DRPs). With EES, the electronic prescription is analyzed both individually and together with all the patient’s other current prescriptions and alerts of potential DRPs and EES suggestions for resolutions of the DRPs. EES can detect DRPs including drug interactions, therapy duplications, high doses, potential contraindications, “drug gender warnings” (that is, when a drug only or usually used in women has been prescribed for a man or vice versa), and inappropriate drugs and doses for geriatric or paediatric patients. In 2018, close to 5.2 million EES-warnings were analysed.^{19,20}

Primary health care services, challenges and opportunities

There are a number of primary health care services delivered by community pharmacists in Sweden, such as:

- pre-booked basic medication reviews and other patient counseling sessions in privacy, such as a 20-minute-long review of the patient’s drugs, supported by the EES system
- blood pressure measurements
- blood analyses of blood sugar, HbA1c, lipids and CRP
- skin care analyses, including analyses of skin problems caused by adverse drug reactions, and counseling by a pharmacy
- birth mark control using sciascopy, to scan the birthmark; the pictures are sent to a dermatologist for clinical assessment and for notifying the patient
- inhalation check and counseling of asthma and COPD patients
- allergy consultations
- smoking cessation programs

- vaccinations, administered by nurses in cooperation with vaccination or health care centers

- dose dispensing services for nursing home patients and for patients living in their own homes

- improved adherence to prescribed drugs in patients with COPD and asthma together with Frisq – digital care plan, including the Frisq app and follow-up meeting with pharmacists.²¹

However, the number of patients receiving the services varies with both the type of service and among the different pharmacy chains but is considered to be generally low. One reason is the strong competition among the pharmacy chains after the re-regulation, resulting in a primary focus on sales of health-related products, as well as items of less related to health, such as cosmetics. Another is an emphasis on lean staff and rapid dispensing of prescriptions with minor counseling. Hence, there is usually not much time prioritization for these services, also because of a lack of remuneration and a lack of patients’ willingness to pay, an argument often put forward by the pharmacy chains.

The 45 independently operated pharmacies are however usually less commercialized, putting a larger emphasis on counseling and patient-oriented services, enjoying a majority of patients being regular, as well as a closer collaboration with local primary health care. These pharmacies are often hubs in their neighborhoods, building long term trust in their clientele, resulting in more informal relations with both patients and local GPs and a greater knowledge about individual patients’ needs. Some pharmacies apply a pharmacist-only concept that is more nonprescription drugs are put behind the counter than usually is the case in Swedish pharmacies, to ensure appropriate counseling. Local agreements are reached between the pharmacists and the GPs, both relieving health care and making patient encounters smoother. Even medications home deliveries with pharmacist counseling at the kitchen table happens.

According to a survey in 2014, 70 % of a nationally representative consumer panel of respondents 15 years of age and older (n=1000) felt that primary health care services should be performed in close proximity to or in pharmacies.²²

“Check My Medicines” [Koll på läkemedel] operated since 2008, is a successful co-operation between the pharmacy chain of apoteket and the three main retiree organizations in Sweden. Its aim is to empower the elderly to take charge of their own medication, and to improve their use of drugs. By disseminating knowledge, creating a national dialogue and debate, Check My Medicines wants to contribute to the necessary changes which will benefit the elderly’s use of drugs and their health. The project focuses on reducing the number of inappropriate medications, strengthening the monitoring systems, and developing guiding material and electronic expert systems that support both doctors and pharmacists. Furthermore, the project focuses on engaging key stakeholders, and empowering patients and their families to become actively engaged in the medical treatment in the elderly. More than 900,000 senior citizens have been educated/informed in study circles about

“medicines and elderly”, and through campaigns, brochures, presentations and dialogues with their pharmacists about what they should expect from their medical treatment. They have also been empowered to ask their doctors “tough” questions. Check My Medicines has received additional funding from the Swedish Government, due to its success in empowering the elderly, and due to the good results in reducing the amount of inappropriate medications in the elderly.

A government commission by The Dental and Pharmaceutical Benefits Agency [Tandvårds- och läkemedelsförmånsverket (TLV)] has investigated a possible introduction of publicly financed patient-oriented community pharmacy services/primary health care services and is expected to conduct a pilot study, aimed at increasing adherence to prescribed drug treatment through further developed community pharmacist counseling.²³ TLV is a central government agency whose remit is to determine whether a pharmaceutical product, medical device or dental care procedure shall be subsidized by the state. It also determines retail margins for all pharmacies in Sweden, regulates the substitution of drugs at the pharmacies and supervises certain areas of the pharmaceutical market.²⁴

A system of quality indicators in community pharmacy practice was developed by two Government Commissions through the Medical Products Agency [Läkemedelsverket] and tested nationwide. Examples of indicators were “Does the pharmacy have written instructions on counseling on the use of over-the-counter drugs (OTCs) in humans and animals?”, “Does the pharmacy offer pre-booked counseling on medicines and their use?”, and “Does the pharmacy have written work procedures for the pharmacy staff’s deviation management and learning from negative events?”.^{25,26} A third Government Commission on quality indicators in community pharmacy practice was assigned TLV and focused among others on OTC counseling, reporting of adverse drug reactions, and continuing professional development, and may eventually be introduced in community pharmacy practice.²⁷

PHARMACY ORGANIZATIONS

Views and strategies, challenges and opportunities

The Swedish Pharmacy Association [Sveriges Apoteksförening]

The Swedish Pharmacy Association [Sveriges Apoteksförening] was formed after the re-regulation of the Swedish pharmacy market in 2009. It represents nearly all pharmacies in Sweden with all pharmacy chains operating in Sweden being members. The association does not have a public strategic plan, but is a voice of its members in publicity campaigns and collaboration with health authorities and other stakeholders to achieve their goals. Among its current priorities in community pharmacy are; an increased use of the EES along with an additional effect on drug use, an expansion of pharmacists’ role to impact medical treatment with pharmacist repeat prescribing, an introduction of a pharmacist-only category of drugs, and collaboration with health authorities to develop

requirements and a support system for pharmacy self-care counseling.¹⁸

The Swedish Pharmacists Association [Sveriges Farmaceuter]

The Swedish Pharmacists Association [Sveriges Farmaceuter] is a trade union for university graduates in pharmacy, founded in 1903 with around 7,100 members. The association aims to ensure that their members have secure employment and able to develop in their professional life. As a professional association, they are experts on the competence, skills and labor market for pharmacists.²⁸ According to the Swedish Pharmacists Association, there are several business and professional challenges, such as pharmacists’ qualifications could be better used in community pharmacy and that pharmacies could have a more prominent role in health care. Community pharmacy is perceived both by many pharmacists and the public as focusing too much on retail business. There is an apparent conflict between the retailing and professional aspects of community pharmacy. Recent pharmacy graduates are employed only for a limited time with the large pharmacy chains as they don’t experience stimulating positions. Working conditions, such as salaries, hours and holidays, in community pharmacy practice are also perceived as inferior to those in other pharmaceutical related positions.

The development of patient-oriented services/primary health care services in community pharmacy in Sweden is slow, probably due to lack of collaboration among the different pharmacy chains since the re-regulation of the pharmacy market in 2009. Nor has the issue of public reimbursement been addressed until recently, by the previously mentioned TLV Government Commission. Another challenge is the rapid growth of pharmacy e-commerce in Sweden, resulting in a need for community pharmacy and its pharmacists to develop new roles. The use and handling of drug in the municipal home health care program appears to be flawed. This could be avoided by an improved role of the pharmacist linking to home health care staff.

The Swedish Pharmacists Association adopted a vision and a strategic plan in 2019 to 2025, where goals in professional issues were set. An ambition is to combine trade union and professional issues in a synergistic way. The plan contains a number of key elements, such as good working conditions enabling pharmacists to develop and use their knowledge and skills and to receive reasonable compensation. Furthermore, that the pharmacists will be recognized as playing a role for better health in society, supported by a maintenance of life-long learning. The association is envisaging the implementation of its strategic plan by advocacy work with the authorities. The association feels that there are two critical elements; (1) the maintenance of a high quality of pharmaceutical university education and continuing professional development, enabling a further demand for pharmaceutical competence; (2) a successful combination of trade union and professional issues i.e. the use of pharmaceutical knowledge and skills creating demand for pharmaceutical services demand, thereby making room for trade union successes.²⁹

The Swedish Pharmaceutical Society [Apotekarsocieteten]

The Swedish Pharmaceutical Society [Apotekarsocieteten] is a non-profit organization for professionals engaged in the field of pharmaceuticals. The aim of the organization is to support research and innovation in drugs and healthcare, and to promote high professional standards through supporting education and professional development. With more than 5,300 individual members, the society is divided into 14 scientific sections, 11 regional divisions and 3 interdisciplinary interest groups. The Society accepts any member interested in drugs and is hence not a professional organization specifically for pharmacists, although pharmacists constitute a majority of its members. In its policy program, the following positions can be noted:

- Pharmacies shall be a statutory part of the health care system to enable a basis for an integrated cooperation between health care providers to the benefit of patients. The community pharmacists' competence shall be seized to achieve best patient, drug and society benefits.
- The disciplines of health economics, drug use, clinical pharmacy and communication should be invigorated in the pharmaceutical, undergraduate education
- Practical research on drug use, pharmacy practice, pharmaceutical competence use, social pharmacy and effects of drug-related interventions and health care processes should be fostered.³⁰

The NEPI Foundation [Nätverket för läkemedelsepidemiologi]

The NEPI Foundation [Nätverket för läkemedelsepidemiologi] was established by the Swedish Parliament in 1993 in order to support drug information, to promote health economy, and to develop pharmacoepidemiology in Sweden. The board is appointed by the Swedish Pharmaceutical Society and the Swedish Society of Medicine. NEPI's main focus is on supporting the use of new methods to describe the use of pharmaceuticals and the effects of these pharmaceuticals on individual and public health.³¹

In a Delphi study conducted by NEPI, aimed at identifying barriers to a successful adherence and at discussing health care providers' roles, physicians, nurses, pharmacists, patients and health authority representatives (n=57) were asked to respond anonymously to a number of questions and to give free text comments. In total, 947 barriers were identified and more than 800 comments reported. One of the most common barriers listed was problems due to generic substitution, a barrier where pharmacists were considered to have a key position in alleviating the problems through appropriate counseling. An important conclusion of the study was the lack of a unified consensus on responsibilities and roles in the chain of health care, a lack that results in unnecessary excess work and difficulties to develop work models. Strikingly many respondents did not have any clear view of the role of the community pharmacist, as opposed to the perception of the role of the hospital-based regional, clinical pharmacist, a finding which indicates a profound need to elevate the position of the community pharmacist in health care.^{31,32}

CONCLUDING REMARKS

There are currently extensive organizational changes occurring and proposed for in Swedish health care, focusing on a shift towards an expansion of primary health care. Prerequisites for the profound transition include a transfer of resources to primary care and an increased efficiency through both local and digi-physical care. Community pharmacy has undergone major changes after the re-regulation of the pharmacy market a decade ago and has in the view of many become too commercialized and has developed into a retail business, even if there are exceptions in the market. If the pharmacy chains would rather compete through an expansion of different, often promising, primary care services, they would both better serve the public and become more financially sustainable by attracting and keeping patients. The chances for public remuneration and/or patients' willingness to pay for the services would also increase, if the pharmacy chains were able to provide evidence of clinical, humanistic and socioeconomic gains by their services.

A big challenge is however that primary care inquires, strategic plans, and national policy documents usually do not include community pharmacy as a partner. Community pharmacy therefore has to be proactive. Community pharmacy currently faces a golden opportunity to establish a significant role in the present evolution of local and digi-physical primary care. It is crucial that community pharmacy seizes the chance of a closer collaboration with primary care and thereby contributes to a win-win situation, to the benefit of patients. Another major reason for joint efforts between primary health care and community pharmacy is the aging population of Sweden. An increase of poly-medicated patients and thereby an increased risk of drug-related problems in the population, creates a further need for pharmaceutical competence and patient counseling in community pharmacy practice. In conclusion, Swedish community pharmacy is at a decisive crossroads to choose between a continued focus on retail business or become an important link in the chain of health care.

ACKNOWLEDGEMENTS

We thank Susanna Eklund (SALAR), Fredrik Boström (Swedish Pharmacy Association), Anna Montgomery (Swedish Pharmacists Association), Paulo Mukooza (Swedish Pharmaceutical Society), Andreas Furängen (NEPI), and pharmacy representatives Martin Belin, Catharina Claesson, Samira Mirzaii, Johan Olofsson, Birgitta Lange Sjöblom and Lars-Åke Söderlund, as well as the respondents of the survey on regional clinical pharmacists, for providing important information.

CONFLICT OF INTEREST

None declared.

FUNDING

None.

References

1. Health Resource Guide: Sweden. export.gov, 2019. Available at: https://2016.export.gov/industry/health/healthcareresourceguide/eg_main_116247.asp (accessed Feb 29, 2020).
2. Sveriges Kommuner och Regioner. [Financial report, October 2019]. Available at: <https://rapporter.skr.se/ekonomirapporten-oktober-2019.html?action=search&query=prim%C3%A4rv%C3%A5rden> (accessed Feb 29, 2020).
3. Statistics Sweden (SCB). System of Health Accounts 2018. Available at: <https://www.scb.se/en/finding-statistics/statistics-by-subject-area/national-accounts/national-accounts/system-of-health-accounts-sha/pong/statistical-news/system-of-health-accounts-2018/> (accessed Apr 14, 2020).
4. Sveriges Riksdag. [Swedish Health and Medical Services Act (1982:763)]. Available at: https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/halso--och-sjukvardslag-1982763_sfs-1982-763 (accessed Mar 1, 2020).
5. The Commonwealth Fund. International Health Care System Profiles. The Swedish Health Care System, 2016. Available at: <https://international.commonwealthfund.org/countries/sweden/> (accessed Mar 1, 2020).
6. Socialstyrelsen. [Assessment of supply and demand of licensed health care and dental practitioners. The National planning support 2019]. Available at: <https://www.socialstyrelsen.se/globalassets/sharepoint-dokument/artikelkatalog/ovrigt/2019-2-14.pdf> (accessed Apr 24, 2020).
7. Socialstyrelsen. [About open comparisons of health care, 2019]. Available at: <https://www.socialstyrelsen.se/statistik-och-data/oppna-jamforelser/halso-och-sjukvard/om-oppna-jamforelser-halso--och-sjukvard/> (accessed Mar 28, 2020).
8. Swedish Association of Local Authorities and Regions. The National Board of Health and Welfare. Quality and Efficiency in Swedish Health Care. Regional comparisons 2012. Available at: <https://www.socialstyrelsen.se/globalassets/sharepoint-dokument/artikelkatalog/statistik/2013-5-7.pdf> (accessed Apr 2, 2020).
9. Regeringskansliet, Socialdepartementet. [The National medicine strategy 2016-18]. Available at: <https://www.regeringen.se/contentassets/5522c1b4dd164170b0d77344ed6990d8/nationella-lakemedelsstrategin-2016-2018.pdf> (accessed Apr 26, 2020).
10. Statistics Sweden (SCB). [The population of Sweden. 2020]. Available at: <https://www.scb.se/hitta-statistik/sverige-i-siffror/manniskorna-i-sverige/sveriges-befolkning/> (accessed Apr 26, 2020).
11. Sveriges Kommuner och Regioner. [Agreement on Good and local care 2020]. Available at: <https://skr.se/halsasjukvard/kunskapsstodvardochbehandling/primarvardnaravard/overenskommelseomengodochnaravard.28402.html> (accessed Mar 18, 2020).
12. Government Offices of Sweden, 2018. [Good quality, local health care – A primary care reform]. (SOU 2018:39). Available at: http://www.sou.gov.se/wp-content/uploads/2018/06/Summary-SOU-2018.39_Final2.pdf (accessed Mar 18, 2020).
13. Regeringskansliet. [Good and local care. A reform for a sustainable health care system]. (SOU 2020:19), 2020. Available at: http://www.sou.gov.se/wp-content/uploads/2017/08/SOU_2020_19_webb.pdf (accessed Apr 2, 2020).
14. Regeringskansliet. [Digi-physical care choice. Accessible primary health care based on need and continuity]. (SOU 2019:42), p.35-50. The patient choice scheme needs to become digi-physical. Available at: <https://data.riksdagen.se/fil/747A19F6-5B75-4598-8AB6-E3573327056B> (accessed Mar 26, 2020).
15. Socialstyrelsen. [Patient medication reviews in the elderly, prescribed five or more medicines – a guidance for health care. 2013]. Available at: <https://www.socialstyrelsen.se/globalassets/sharepoint-dokument/artikelkatalog/vagledning/2013-3-18.pdf> (accessed Mar 20, 2020).
16. Österberg M. [Clinical pharmacists in local care. Report on pharmacists in home health care]. Region Sörmland, 2019.
17. Gröndal H. [Positive effects, challenges and development possibilities. Patient medication reviews with pharmacist support in primary health care in Västmanland Region]. Rapport, 2019.
18. Sveriges Apoteksforening. [Branch report 2019]. Available at: http://www.sverigesapoteksforening.se/wp-content/uploads/2019/04/Arsrapport_Apoteksforeningen_2019_webb-kopia.pdf (accessed Mar 9, 2020).
19. eHälsomyndigheten. [Electronic expert support (EES)]. Available at: <https://www.ehalsomyndigheten.se/tjanster/ees/> (accessed Mar 31, 2020).
20. Hammar T, Lidström B, Petersson G, Gustafson Y, Eiermann B. Potential drug-related problems detected by electronic expert support system: physicians' views on clinical relevance. *Int J Clin Pharm*. 2015;37(5):941-948. <https://doi.org/10.1007/s11096-015-0146-8>
21. Apoteksgruppen. [Advice and support for you living with COPD]. Available at: <https://www.apoteksgruppen.se/recept/frisq/> (accessed Apr 20, 2020).
22. TNS Sifo och SA Service AB, 2014.
23. Tandvårds- och Läkemedelsförmånsverket (TLV). [Pharmaceutical service in community pharmacy]. 2019. Available at: <https://www.tlv.se/om-oss/om-tlv/rapporter/arkiv/2019-12-20-farmaceutisk-tjanst-pa-oppnervardsapotek.html> (accessed Mar 25, 2020).
24. The Dental and Pharmaceutical Benefits Agency (TLV). Welcome to the TLV. Available at: <https://www.tlv.se/in-english.html> (accessed Mar 25, 2020).
25. Läkemedelsverket. [Pharmacy indicators, a continued development work. Report from the Medical Products Agency March 31, 2015]. Available at: <http://web02.lv.episerverhosting.com/upload/om-lakemedelsverket/rapporter/Apoteksindikatorer-fortsatt-utvecklingsarbete-Rapport-final.pdf> (accessed Apr 14, 2020).
26. Westerlund T, Bardage C, Barzi S, Berggren A-L, Ring L, Bernsten C. Developing patient-oriented quality indicators for Swedish community pharmacy practice – a government commission. Presentation at the FIP Congress, Bangkok, Thailand, 2014. Abstract available at: <https://www.fip.org/abstracts?page=abstracts&action=item&item=10389> (accessed Mar 1, 2020).

27. Tandvårds- och Läkemedelsförmånsverket (TLV). [Indicators aimed at measuring community pharmacy practice. 2019]. Available at: https://www.tlv.se/download/18.6ddff38416f1a7ef2ed167bd/1576836930048/rapport_dec_2019_forstudie_indikatorer_mata_oppenvardsapotekens_verksamhet.pdf (accessed Apr 27, 2020).
28. Sveriges Farmaceuter. [About The Swedish Pharmacists Association]. Available at: <https://www.sverigesfarmaceuter.se/OmSverigesFarmaceuter/> (accessed Mar 25, 2020).
29. Sveriges Farmaceuter. [Vision and strategic plan until 2025. 2019]. Available at: <https://www.sverigesfarmaceuter.se/OmSverigesFarmaceuter/vad-tycker-sveriges-farmaceuter/vision-och-strategisk-plan-2025/> (accessed Mar 25, 2020).
30. Apotekarsocieteten. [The Swedish Pharmacy Society's policy program in the field of pharmaceuticals]. Stockholm, 2019. Available at: <https://www.apotekarsocieteten.se/wp-content/uploads/2018/06/Apotekarsocietetens-policyprogram-för-läkemedelsområdet-antaget-av-fullmäktige-20180526.pdf> (accessed Mar 21, 2020).
31. NEPI. Nätverk för läkemedelsepidemiologi. [About NEPI]. Available at: <http://nepi.net/OmNEPI1.htm> (accessed Mar 31, 2020).
32. Furängen A, Hoffmann M. [NEPI's collaboration project]. Stockholm, 2017. Available at: <http://nepi.net/res/dokument/NEPIs-samverkansprojekt-slutrapport-exkl-bilagor-2-7.pdf> (accessed Mar 31, 2020).