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Private Entries, Competition, and Patient Experiences in Swedish Primary Care: Local patterns between 2015- 2024

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Abstract: Over the past decade, Swedish primary care has seen a substantial increase in the establishment of private actors. As the sector changes in composition, it becomes relevant to examine the influence on the functioning of the system, as well as on patients' experience and right to healthcare. This thesis examines the relationship between the entry of new private clinics and quality of the nearest public clinics, where quality is defined by patients' overall impressions of their primary care provider. The research aims to examine how competition theory works in a price-regulated sector, with the purpose of highlighting potentially beneficial or disadvantageous outcomes of patient experience at existing public care clinics in relation to increased private competition. The approach is a quantitative panel design examining quality development of primary care clinics based on patient survey data from 2015-2024, extracted from Nationell Patientenkät (NPE). Tools of analysis include comparison of means and difference-in-differences. The analysis finds no clear relationship, suggesting that patients have been little affected by the entry of more private providers, and that competitive mechanisms may not operate as expected in the primary care market. Further research is encouraged to identify factors of greater impact on patient impressions which could enable increases in patient-perceived care quality forward.

Key words: Primary care, care quality, Sweden's healthcare system, private primary care clinics, public primary care clinics, competition, patient-perceived care quality, price-regulated markets

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AI Declaration

This thesis has made limited use of artificial intelligence (AI) tools as supportive instruments during the research and writing process. AI has primarily been used for language-related assistance, including improving grammar, synonyms to words, as well as for translating selected passages or words from Swedish to English. In addition, AI tools have been used to provide technical support in the handling of secondary data, for example implementing and understanding functions in Excel.

No AI tools have been used to generate empirical results, perform statistical analysis, or draw conclusions. All data processing, analysis, interpretation, and content of the thesis are the independent work of the authors, who take full responsibility for any errors or omissions.

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List of Abbreviations and Definitions

PCS	Primary Care System
PCC	Primary Care Clinic
NPE	Nationell Patientenkät ("National patient survey", the main source of data for this thesis)
1177	The Swedish national healthcare information platform
Entry	The year that a PCC opened according to regional records
Competition group	The focus group: Each public PCC closest located to where a private PCC has entered
Non-competition group	The comparison group: All other PCCs, public and private, who have not received additional competition from being located closest to a private entrant

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1 Introduction

Healthcare is a core component of the Swedish welfare state, both as a public service and as one of the country's most resource-intensive sectors. In 2024, 11,2% of the Swedish GDP was allocated to healthcare, placing Sweden among the highest spenders globally in share of GDP spent on healthcare (SCB, 2026; Svenskt Näringsliv, 2025). In numbers, Swedish taxpayers contribute approximately 328 billion SEK to the healthcare sector annually (Svenskt Näringsliv, 2025). Nevertheless, this substantial amount of resources invested aligns with public opinion and politics. In Novus' (2026) national-sample survey from February 2026, healthcare is the issue that most voters consider one of their most important political questions, by a considerable margin: 65% of participants ranked healthcare as one of the most important issues, compared to 56% for school and education, the next issue in order. Hence, both economic and social perspectives underline the central role of healthcare in Sweden.

When significant structural changes occur in such an important sector, it is highly relevant to consider behaviors and trends arising from it. Over the past decade, the Swedish primary care system (PCS) has undergone significant changes in its composition, as the presence of private providers has increased. Private providers now represent almost half of all primary care clinics (Vårdföretagarna, 2026). Given the importance of the healthcare sector and the ongoing debate on the role of private actors, questions arise about how increased privatization and competition affect the functioning of the PCS. In this context, a key issue is whether additional competition from private entries not only affects their own performance, but if it could also improve patient experiences at existing public clinics.

1.1 Research Problem

The Swedish PCS underwent a reform in 2010 which enabled patients to choose their primary care clinic (PCC), while substantially increasing entries of private actors. As patient-fees in Sweden are fixed, theory suggests that increased supply of services, and thus increased competition, may instead result in quality improvements. Previous studies assessing quality as a competition mechanism in healthcare report mixed results, and studies specifically focusing on Swedish primary care often use limited timespans and broad spatial divisions. However, any competitive effects are likely to appear gradually over time, and the geographical reach of competition might differ across the country.

Furthermore, the increase of private actors in primary care raises concerns about care equality. The Sustainable Development Goals (SDGs) emphasize qualitative healthcare for all people, and privatization is sometimes argued to undermine equal access and affordability of care. Moreover, lost credibility of care institutions may cause patients to refrain from seeking care, leading to more severe health issues over time. To uphold the SDG and maintain the Swedish reputation of delivering high-quality healthcare, it is essential to consider how the introduction of private actors has been reflected in patients' experiences.

1.1.1 Research Question

How has competition from the entry of private primary care clinics in Sweden been associated with patient-perceived care quality changes of the closest located public care clinics over the past decade (2015-2024)?

1.2 Aim and Scope

This thesis investigates the potential relationship between the entry of private primary care providers and the quality of existing public primary care providers, as defined by patient overall impressions. Using a quantitative panel design based on the Nationell Patientenkät (NPE, “National patient survey”) patient survey data from 2015 to 2024, the study examines the quality development of the closest located public care clinics after the entry of a private competitor. Compared to previous research, this study takes a more local approach over a longer period with the intention of providing a more precise understanding of the relationship between competition from increased privatization and quality of public care providers. By doing so, the research aims to evaluate if and how competition theory works within the price-regulated primary care context.

The broader purpose is to investigate whether the entry of private actors in primary care contributes to or impairs the preconditions for a well-functioning primary care system and peoples’ equal right to accessible and affordable healthcare. By doing so, the research seeks to contribute to the fields of health economics and public administration by providing insights into how resources are best allocated to benefit patients. Associations identified could assist Swedish policymakers by suggesting long-term patterns of patient-perceived care quality at public clinics close to where private competitors entered.

1.3 Delimitations and Definitions

Delimitations of this research primarily relate to its temporal and geographical scope. Using annual NPE data from 2015 to 2024 allows for a longitudinal analysis of patient-perceived care quality of the same public PCCs. This longer, more recent period has received limited attention in previous research and thereby enables new insights. Furthermore, the public PCCs in focus are compared to all other PCCs in Sweden, making it possible to control for universal sectoral developments, such as policy changes, and thereby distinguishing changes attributable to local competition increases specifically. Since Swedish healthcare is managed at the regional level, the analysis also performs a cross-regional comparison. By investigating potential differences across regions, the analysis separates between care quality changes originating from structural or policy differences and changes that might have occurred due to added local competition.

In addition, a relative distance measure is applied, accounting for regional variations in clinic density across Sweden, and, consequently, variations in the geographical reach of competition. The term ‘closest located public PCC’ refers to the one geographically closest located public PCC to a new private PCC. This definition facilitates consistency in the selection of the study’s focus group, with one public clinic included for each private entry. Moreover, patients’ willingness to travel to a PCC likely varies across Sweden. Competition from a new PCC might extend across a larger area in less dense markets, while its’ geographical reach is smaller in a market with more participants. A relative definition of distance may help account for such regional differences.

‘Quality’ in this thesis refers to patient-perceived quality measured through the “overall impression” scores in the NPE survey data. This definition is expected to capture the trends related to PCC competition for patients, rather than competition in terms of clinical quality. Previous research suggests that patients might base their quality assessment on factors other than clinical quality, which appears difficult for patients to assess (Angelis et al. 2021; Swedish Competition Authority, 2014). Thereby, using patient-perceived quality directs the analysis toward how increased competition is reflected in patient experiences and whether patients find the Swedish PCS satisfactory. This definition also receives support from current literature. Reviewing the state of primary care in Västra Götaland, Sköld (2025) emphasizes patient experience as a key dimension of the quality of PCCs, confirming the choice of NPE and patient-perceived quality as relevant. Furthermore, several previous studies on primary care quality also use patient survey data (Angelis et al. 2021; Dietrichson et al. 2020; Glenngård, 2023; Lundvall et al. 2011; Swedish Competition Authority, 2014), strengthening the research’s link and contribution to existing knowledge.

Nevertheless, the chosen approach and definitions of relevant concepts also introduce certain limitations, particularly related to the exclusion of other factors that may impact competition in primary care. Factors such as local conditions, resources, and structural or organizational characteristics may impact where private PCCs choose to establish. There might also be underlying differences between public and private care providers that shape competitive behavior and make them less comparable. While these factors are acknowledged, they cannot be controlled for within the scope of the analysis. Thereby, the analysis investigates associations rather than causal relationships.

Furthermore, although the definition of quality as patient impressions is well-motivated and considered the most relevant definition for the study’s purpose, it remains important not to confuse it with actual clinical care quality, which is not included in the scope of this thesis. Finally, there are additional methodological limitations related to the use and processing of secondary data, which are further discussed in the methodology section.

1.4 Outline of the Thesis

The remainder of this thesis is structured as follows. Section 2 presents the theoretical framework, including further context and motivation for the study, a review of previous empirical research, and a discussion of competition theory both generally and within the specific context of healthcare. Section 3 describes the data sources used for the study. This thesis is based on secondary data from NPE, the Swedish national healthcare information platform (1177), and regional records, and all data sources are critically evaluated on their suitability for the analysis. Section 4 outlines the research design, methodology, the process of secondary data preparation, and potential limitations of the selected approach. This section is followed by the presentation and discussion of results in section 5. Section 6 then concludes by summarizing findings and reflecting on their implications.

2 Theory

The Swedish healthcare system is generally considered high-performing, making it desirable to ensure its maintained functioning forward. Kaabi et al. (2022) compare studies of countries with public and private healthcare systems to determine which structure offers the highest-quality, most cost-effective healthcare. They list Sweden as one of the best healthcare systems in the world. The authors explain that public systems, as Sweden's, tend to focus on equal access and affordability of care and consider healthcare a social rather than economic good. This approach also aligns with fulfilment of the Sustainable Development Goal of basic standard healthcare for all people. However, previous research on private hospitals finds that they prioritize profitable patients of higher financial status (Goodair & Reeves, 2024), which might instead contribute to increasing health inequalities and distancing from this SDG.

Hence, it is essential that, while combining public and private providers of primary care, the public system foundation of Swedish healthcare continues to offer accessible, affordable, and high-standard healthcare to all people. This issue is especially relevant currently, as the Swedish PCS has undergone major changes of increased privatization over the past decade. The past decade is an interesting period for analyzing long-term trends related to increasing privatization as the number of private PCCs has increased extensively during this period.

A liberalizing reform of the Swedish PCS in 2010 provided the preconditions for increased entry of private PCCs and thereby increased competition. The Swedish Competition Authority (2012) explains that the system of choice reform allowed patients to choose their primary care provider, while also facilitating establishment of new PCCs. The reform was predicted to increase competition, and since patient fees are fixed, competition would instead center around quality (Lundvall et al. 2011; Swedish Competition Authority, 2012). A follow-up report on the development from the reform up until 2014 found an 80% increase in private PCCs during this period (Swedish Competition Authority, 2014). Hence, this reform enabled entries of private PCCs, and the system of choice emphasized quality as important to stay competitive.

2.1 Previous Research

According to competition theory, increased competition in a market may improve quality as providers must continuously enhance their performance to remain competitive. Empirical evidence from regulated healthcare markets partly supports this prediction. Barros et al. (2016) conclude that competition can improve quality when prices are regulated and when patients are able to observe and respond to differences between providers. In such settings, where price competition is limited, providers are instead incentivized to compete through quality improvements to attract and retain patients.

However, the extent to which competition leads to improved quality depends on several conditions. Ezrachi and Stucke (2015) argue that competition is more likely to improve quality when consumers can identify meaningful differences between providers and make informed choices. At the same time, they address important challenges in healthcare markets, particularly related to information asymmetry. They highlight how patients often lack access to clear and comparable information about clinical quality and may instead base their decisions on more visible factors such as accessibility, waiting times, or reputation. This may weaken the intended effects of competition and limit its impact on actual quality improvements.

Overall, the empirical literature suggests that while competition has the potential to improve quality, its effects are context-dependent and influenced by many other factors such as information availability, market design, and patient behavior. To better understand how such factors influence competitive mechanisms, the following sections review previous research in both Swedish and international contexts.

2.1.1 Swedish Healthcare

While early evaluations provide some support for competition-induced quality improvements, empirical evidence from Swedish primary care remains mixed and limited in scope. Lundvall et al. (2011) identify a weak positive relationship between new private entries and patient-perceived quality in the first year following the 2010 reform. However, they find no significant differences between private and public providers. As further discussed in Section 2.2.3, underlying differences between private and public providers are expected to impact their competitive behavior and performance. Nevertheless, Lundvall et al.'s (2011) results could instead suggest that competition raises overall quality rather than favoring a specific ownership type. Similarly, Dietrichson et al. (2020) find modest improvements in patient-perceived quality, while objective clinical indicators remain largely unaffected. This indicates that competition may primarily influence subjective dimensions of quality, including patient satisfaction, rather than measurable health outcomes.

The findings of Lundvall et al. (2011) and Dietrichson et al. (2020) highlight patient experiences as the indicator of quality most affected by increased competition, providing motivation for this study to consider patient-perceived quality specifically. Meanwhile, the limited time scope of these studies, 2009-2010 (Lundvall et al. 2011) and 2005-2013

(Dietrichson et al. 2020), makes it difficult to draw conclusions about long-term patterns up until present. Hence, the outdated time horizon of previous research motivates the long-term approach in this thesis.

Besides the accuracy of the time scope, a key consideration regarding the findings of improved patient-perceived care quality is where they originate from. A limitation listed in Dietrichson et al. (2020) is their inability to distinguish whether the observed quality improvements are driven by existing providers adapting to increased competition, or by the entry of higher-performing new providers. This distinction is important, as existing literature on price-regulated healthcare markets suggests that competition primarily operates through quality adjustments among providers (Gaynor & Town, 2011). Gaynor and Town (2011) highlight how, since prices are fixed, providers compete through dimensions they can influence, such as quality, to attract and retain patients. Consequently, without separating competitive responses of existing providers from entrant characteristics, the underlying mechanism remains unclear. If improvements instead reflect selection effects, where new entrants already have higher quality, the underlying mechanism differs.

Qualitative research further nuances the understanding of competitive behavior in Swedish primary care. Vengberg et al. (2019) show that managers often associate competition with accessibility and service provision rather than clinical quality. In addition, providers receive limited information about why patients switch between clinics, which may weaken the theoretical mechanism linking competition to quality improvements. This suggests that providers may respond to competition by improving more visible aspects of care, for example availability or service, rather than underlying medical quality. Consequently, competition may not necessarily lead to improvements in all dimensions of quality but instead shift focus towards aspects that are easier for patients to observe. This reinforces the motivation for focusing on patient-perceived care quality.

Moreover, the degree of competition varies substantially across Swedish regions. Vengberg et al. (2024) demonstrate that many local primary care markets remain highly concentrated, particularly outside urban areas, where market structures may resemble local monopolies. This implies that the intensity of competitive pressure differs across locations, and that the effects of competition are likely to be context dependent. It also highlights the importance of carefully defining local markets when analyzing competition, since geographical boundaries significantly influence measured competition levels.

Further insights are provided by studies examining differences between public and private providers. Between 2010 and 2019, Glenngård (2023) finds that quality differences between public and private PCCs, with private PCCs initially scoring higher on patient surveys, decreased over time. Moreover, while there were initially differences in patient mix and socioeconomic conditions, with public PCCs serving more socioeconomically deprived populations in 2010, most of the differences did not persist by 2019. Overall, the study identifies a convergence between public and private providers in patient characteristics as well as performance. Similarly, Angelis et al. (2021) show that private providers tend to have better management practices, which are associated with improved accessibility, for example shorter waiting times. However, they do not find a significant relationship between management

quality and broader measures of patient-perceived quality. Together, these findings indicate that while private providers may perform better in certain dimensions, ownership alone is not a clear determinant of quality.

Finally, Swedish research highlights the importance of broader structural and organizational factors in shaping quality outcomes. Sköld (2025) finds that despite improvements in accessibility over time, considerable geographical differences persist across regions. The study identifies resource allocation and staffing as key challenges affecting both quality and continuity of care and emphasizes that patient experience is difficult to maintain in high-demand settings. Furthermore, the identified differences between PCCs suggest that organizational factors and local conditions play a significant role in performance. These findings highlight that variations in quality are closely linked to structural and contextual factors. Related to this, an important question is whether competition could indirectly influence such conditions, for example through providers' incentives to attract patients, which may affect staffing decisions or allocation of resources. However, in a price-regulated system with capacity constraints, such competitive effects might be limited. Overall, the Swedish literature indicates that while competition may play a role in shaping patient-perceived quality, its effects are complex, context-dependent, and closely intertwined with structural characteristics of the healthcare system.

2.1.2 International Healthcare

Previous international research provides mixed evidence on whether increased competition and privatization improve healthcare quality. A large-scale literature review by Goodair and Reeves (2024), including longitudinal studies from several high-income countries, finds that increased privatization is often associated with worse health outcomes. Similarly, broader European evidence suggests that the effects of competition are not consistent across contexts. Siciliani et al. (2022) conclude that the impact of competition depends on institutional settings, market structures, and patient behavior, and that there is no clear consensus on its overall effects. Together, these findings challenge the prediction from competition theory that increased competition automatically leads to improved performance.

At the same time, several studies highlight important methodological challenges when comparing private and public providers. Goodair and Reeves (2024) argue that patients who seek private care often have better initial health conditions and more resources, which creates a selection bias. Hence, differences in outcomes may reflect underlying patient characteristics rather than true differences in provider performance. Similar concerns are raised in European evidence, where patient choice is often influenced by geographical proximity rather than quality differences (Siciliani et al. 2022). These limitations suggest that quality measures based on health outcomes alone may be misleading, which strengthens the relevance of using patient-perceived quality as an alternative measure.

Importantly, a limitation of much of the existing literature is its strong focus on hospital care. Most of the studies included in Goodair and Reeves (2024) analyze hospitals, which differ from primary care in both organizational structure and patient interaction. Interestingly, the

only study included in Goodair and Reeves (2024) that does consider primary care, namely Hebrang et al. (2003) which is discussed below, deviates from the other studies' results and highlights positive outcomes of increased privatization on patient-perceived care quality. Angelis et al. (2021) similarly emphasize that primary care operates under different conditions, where management practices, patient relationships, and accessibility play a more central role. Conclusions drawn from hospital-based studies may thereby not be directly transferable to primary care settings, and the effects of competition may differ depending on the healthcare sector.

Evidence specifically focusing on primary care provides a more nuanced view of competition. Hebrang et al. (2003), studying the Croatian primary care reform, find that privatized providers improved accessibility more than non-privatized providers in the years following reform. In addition, patients were more likely to switch away from lower-performing clinics, indicating that patient choice increased competitive pressure. These findings suggest that when patients can observe differences between providers and act upon them, competition may lead to improvements in observable dimensions of care. Similar patterns are found in other regulated healthcare systems where competition is associated with higher quality when patients actively respond to provider differences (Brunt et al. 2020).

At the same time, research on primary care also highlights that performance differences are not driven by competition alone. Angelis et al. (2021) show that private PCCs tend to have higher management quality than public ones, and that better management is associated with improved accessibility, reflected in shorter waiting times. However, they find no significant relationship between management quality and broader patient-perceived quality. This indicates that improvements in certain dimensions of care may originate from organizational characteristics rather than competitive pressure, further suggesting that competition theory alone cannot fully explain variations in quality.

Overall, international evidence suggests that competition under regulated prices can improve certain aspects of care quality, particularly when patients are able to observe and respond to differences between providers. Nevertheless, the effects are modest, context-dependent and differ across healthcare sectors. The strong focus on hospital care in much of the existing literature, combined with limited evidence from primary care, highlights an important gap. This motivates further research that specifically examines how competition operates in primary care settings and how existing providers respond to increased competitive pressure over time.

2.2 Theoretical Approach

2.2.1 Competition Theory

To better understand competition and its role in economics, as well as its impact on society, many scholars have sought to define the concept. Stigler (1987) defines competition as rivalry

among individuals or groups, arising when multiple actors compete for a resource or outcome that can be obtained by all involved. In the context of this thesis, patients, representing customers, would be the factor that actors compete for by making quality improvements observable for patients. Also in classical economic theory, competition plays a central role in ensuring efficient outcomes. Adam Smith's (1776) "invisible hand" illustrates how self-interested behavior in competitive markets can lead to socially desirable outcomes, as firms are incentivized to improve their performance to attract consumers. Competition can take different forms depending on market structures, for example price competition (Bertrand, 1883) or quantity competition (Cournot, 1838), highlighting that both the mechanisms and outcomes of competition depend on how firms interact within the market.

In this thesis, the relationship between competition and quality is of particular interest, and the expectation that increased competition improves quality is grounded in this theoretical framework. Gaynor and Town (2011) argue that in markets where prices are fixed or regulated, firms are unable to compete through price and must instead compete through non-price dimensions, primarily quality. In such settings, quality becomes the central strategic variable, as providers seek to attract and retain patients at a given price level. Providers that fail to meet patients' expectations risk losing market share, while higher perceived quality may attract additional demand. Consequently, competition under price regulation is expected to lead to higher equilibrium quality.

However, while competition theory provides a strong foundation for understanding these mechanisms, its assumptions do not always fully reflect real-world market conditions. This highlights the importance of also considering its limitations. The theoretical assumptions that must be met for competition to have positive effects are discussed in the following section, and are included in Table 2.1, presented in the summary section (Section 2.3).

2.2.2 Limitations of the Competition Theory

There are several limitations to competition theory, and other research highlights additional mechanisms that may influence quality. For competition to effectively improve quality, a range of underlying conditions must be fulfilled. Markets are more complex than theoretical models suggest, and multiple factors may shape the character of competition. Competition is often linked to innovation and improvements in performance over time. For instance, Joseph Schumpeter (1942) introduces the concept of "creative destruction", where competition drives innovation and replaces less efficient firms, thereby improving overall market outcomes. However, the effects of competition are not always straightforward and depend on market conditions where barriers to entry, including high costs or regulatory constraints, may limit competition and allow existing firms to maintain market power (Bain, 1956).

In the context of Swedish primary care, these barriers may also interact with how providers choose where to establish, as private and public actors may face different local preconditions. For example, in their study of early post-reform effects, Lundvall et al. (2011) found that in regions of higher personnel requirements, private PCCs entered to a lower extent. This may

have influence on entry patterns and the local availability of providers. Moreover, since prices are regulated, competition is driven by non-price dimensions such as accessibility and professional conduct. These observable aspects can vary, and because patients often have imperfect information, they may not be aware of all available choices or differences in quality. The extent to which competition could lead to improved outcomes is likely context-dependent and may vary across settings due to differences in local conditions and institutional constraints.

Additional empirical evidence on Swedish primary care further highlights these limitations. Sköld (2025) argues that differences in quality between PCCs are strongly influenced by other factors than competition such as resource allocation, staffing levels, and local conditions. They also mention how even though accessibility has improved in some areas, significant geographical differences remain visible. These findings indicate that even in the presence of competition, structural constraints may limit providers' ability to improve quality.

The above limitations underline how in addition to competition, other factors may shape how providers respond to competitive pressure, and competition alone may not be sufficient to explain variations in patient-perceived care quality. As indicated throughout this section, differences in the preconditions of public and private providers are likely to play an important role in this context. These preconditions and differences are therefore explored further in the following section.

2.2.3 Competition in Healthcare: Differences between private and public providers

The primary care sector operates under regulated conditions, where prices are fixed and entry is subject to regional decisions, while both public and private providers deliver services within the same system. This institutional setting likely shapes how competition functions, as providers primarily compete on non-price dimensions such as accessibility and perceived quality. Moreover, public and private providers may differ in terms of incentives, resource constraints, and patient composition, which can influence their ability and willingness to respond to competitive pressure. Since the focus group of this study consists only of public PCCs, it is important to acknowledge that such differences may affect how competition operates in practice and complicate the comparability between ownership forms.

For competition to generate positive effects on quality, several theoretical conditions must be fulfilled (see Table 2.1). Patients need access to reliable and comparable information to identify quality differences and make informed choices. In addition, a sufficient number of providers is required to ensure meaningful competitive pressure, and providers must have the resources and organizational capacity to respond to patient demand. Furthermore, patient choice should primarily reflect quality rather than socioeconomic constraints, and entry conditions should allow new providers to establish in different regions. If these conditions are only partially met, competition may not be as related to improved quality and could instead result in limited or uneven effects across providers and regions.

Previous research comparing private and public primary care providers over time initially identified a private provider advantage. Glenngård (2023) examines differences between public and private care providers in the Swedish region Skåne using NPE's patient-perceived quality measures. The results show that private PCCs initially scored higher on several dimensions of patient-reported experiences in 2010, while overall differences in quality were relatively small. Such initial differences could have strengthened competition by making quality differences more visible to patients, thereby increasing incentives for providers to improve. At the same time, public PCCs served populations with higher levels of socioeconomic deprivation in 2010, suggesting that patient choice and observed outcomes may partly reflect differences in patient characteristics rather than provider performance.

Nevertheless, differences between public and private providers do not seem to have persisted over time. Comparing 2010 to 2019, Glenngård (2023) finds that initial differences in both patient mix and patient-reported experiences diminished over time, and no statistically significant differences remained by 2019. Hence, the scope for competition based on perceived quality may also have weakened. Overall, the convergence in both characteristics and performance between public and private providers suggests that competitive pressures may lead to similar outcomes, but also that limited observable differences reduce patients' ability to distinguish between providers, potentially weakening the effectiveness of competition.

However, the conclusion on converging public-private performance is countered by research on private and public hospitals. Goodair and Reeves' (2024) study on hospital care quality, using health outcomes of patients rather than patients' impression of the care provider, finds privatization mainly related to worse health outcomes of patients. They explain that, while it might seem as if private hospitals perform better, it may be the result of which patients they target rather than better quality of their services.

Public and private care providers seem to attract patients of different characteristics. Regardless of in PCCs or hospitals, Glenngård (2023) and Goodair and Reeves (2024) both highlight the socioeconomic differences between those receiving care at a private or public facility. Goodair and Reeves (2024) acknowledge the difficulty comparing the performance of public and private actors since people who receive private care tend to have better initial health status. Thereby, it may seem as if private providers perform better, reflected by better patient health outcomes, while it is rather a result of better initial health of people of higher socioeconomic status. This difficulty could motivate a patient-perception approach to examine care quality. Presumably, patients' assessments of their PCCs are less related to their initial health status and more to their subjective impression.

Differences might also exist in the incentives for public and private PCCs. Previous literature highlights the importance of incentives, showing that profit and non-profit providers may not respond to the same signals (Gaynor & Town, 2011; Siciliani et al. 2022). It is reasonable to expect that private PCCs consider factors affecting profitability when deciding where to establish. For instance, Lundvall et al. (2011) find that following the 2010 reform in Sweden, private PCCs were less likely to enter regions with high staffing requirements. High staffing

requirements could for example be in areas with older populations or greater care needs, where more physicians, nurses, and continuous patient follow-up are required. Such conditions increase operating costs and may reduce the attractiveness for private providers.

Private and public actors may also face different preconditions across regions. In the early post-reform period, Lundvall et al. (2011) discuss concerns related to competition neutrality, where private PCCs refrained from entering regions in which local authorities were perceived as less supportive of private providers. This selective entry implies that private providers may concentrate in more attractive areas, while public PCCs remain more prevalent in less profitable regions. As a result, the number of providers and the intensity of competition may vary across regions, potentially weakening competitive pressure where it is most needed and limiting the extent to which competition can improve quality.

Yet another aspect of the discussion on public versus private care providers concerns organizational factors. Angelis et al. (2021) investigate the management of public and private PCCs, attempting to identify connections to ownership form and care quality based on patient surveys (NPE). They find that private PCCs have better managerial quality, which they can relate to higher patient scores on accessibility and waiting times. These findings suggest that since better management and better patient-perceived quality are related, public PCCs become inferior in their starting point. In addition, the differences in management might also impact how private and public PCCs compete, making the ownership forms less comparable.

Nevertheless, ownership form might not automatically translate into a beneficial organizational structure. Sköld (2025) highlights differences between PCCs in organizational factors such as staffing and resources, but better performance is not consistently related to one ownership form. Hence, perhaps the differences in quality between public and private providers have less to do with the ownership form and more with individual PCC characteristics and local conditions. As described by Lundvall et al. (2011), concerns related to staffing and other resource requirements may act as barriers for private PCCs in certain areas, indicating that their establishment and operation are shaped by contextual constraints rather than solely by ownership. This suggests that several of the theoretical conditions required for effective competition may only be partially fulfilled in practice.

2.3 Summary

Overall, both theory and previous research suggest that competition under regulated prices can improve care quality, particularly when measured by patient-perceived outcomes. However, these effects are generally modest and highly context dependent. The literature shows that competition is more likely to influence observable aspects of care, such as accessibility and patient experience, rather than clinical quality, especially in the presence of information asymmetries. This motivates the focus of this study on patient-perceived quality as the main outcome variable.

At the same time, competition does not operate in isolation. This study attempts to account for universal sectoral changes, for instance related to policy changes, by comparing the focus group to all of Sweden's other PCCs. Additionally, by focusing on the one nearest public PCC to each private entry instead of an absolute distance limit, it accounts for regional differences in clinic density and patients' acceptable distance to a PCC. The analysis also compares the metropolitan regions to identify potential variations arising from the regional governance structure of Swedish primary care. However, from the literature review, structural and organizational factors including resource allocation, staffing, management practices, and local conditions, are shown to play an important role in shaping quality outcomes. Furthermore, differences between public and private providers, such as patient composition and incentives, introduce potential selection effects that may complicate direct comparisons. While these factors are important, it will not be possible to incorporate all of them in this study and they are instead acknowledged as underlying conditions that may influence the results. On this basis, the study investigates associations rather than causal relationships.

To further clarify how various underlying conditions may influence the results, Table 2.1 summarizes key factors identified throughout the literature review and their expected impact on observed differences in patient-perceived quality. The table links these factors to standard economic theory on competition, where quality improvements are expected to arise when providers face incentives to attract patients and are able to respond. More specifically, the table builds on models of regulated competition in healthcare, where non-price competition becomes central and providers compete on observable quality dimensions rather than prices. In this context, the table not only outlines how factors may strengthen or weaken the effects of competition, but also highlights the theoretical assumptions that likely need to be (at least partly) fulfilled for such effects to occur. For instance, risk adjustment through the Care Need Index (CNI) compensates for differences in patient socioeconomic characteristics and has been shown to contribute to a more even distribution of providers and patient mix across areas, thereby supporting more comparable conditions for competition (Glenngård, 2023).

Table 2.1: Factors influencing observed differences in patient-perceived quality and competitive behavior

Factor	Expected to increase differences	Expected to decrease differences	Mechanism	Theoretical assumption for positive effects of competition
Information availability	X		Patients can identify quality differences → stronger competition	Patients have access to reliable and comparable quality information
Information asymmetry		X	Patients choose based on non-quality factors	Patients are able to observe and interpret quality differences
Market concentration		X	Less competition → weaker incentives	Sufficient number of providers to ensure meaningful competition
High competition (many PCCs)	X		Stronger pressure to improve	Providers face credible risk of losing patients
Staffing constraints		X	Limits ability to respond to competition	Providers can adjust staffing levels in response to demand
Resource availability	X		Enables quality improvements	Providers have sufficient resources to invest in quality improvements
Patient socioeconomic mix	X		Differences driven by patient characteristics	Patient choices reflect quality rather than socioeconomic constraints
Risk-adjustment (CNI)		X	Reduces differences in patient mix	Reimbursement systems adequately compensate for patient complexity
Management quality	X		Better ability to improve accessibility	Providers have the organizational capacity to respond to competitive pressure
Geographic conditions	X		More choices in urban areas	Patients can realistically choose between multiple providers
Entry barriers		X	Fewer providers → less competition	New providers can enter the market relatively easily

Source: Literature from section 2 (Theory) on potential impactors on patient-perceived care quality, and competition theory in price-regulated markets

In line with theory and prior empirical findings, competition is expected to have a stronger impact in settings where patients can observe and act on quality differences, and where providers have sufficient flexibility in terms of resources, staffing, and organization. Conversely, in contexts characterized by information asymmetries, limited competition, or capacity constraints, observed differences in quality may be smaller or driven by factors

unrelated to competitive pressure. The table thus serves as a conceptual framework for interpreting the empirical results, emphasizing that any observed effects of competition should be understood in relation to these underlying conditions and the extent to which the theoretical assumptions are met.

Finally, the existing literature reveals an empirical gap. Swedish studies largely focus on the early post-reform period or use aggregated geographical units, limiting the ability to capture local competitive dynamics over time. Given that competition in primary care is inherently local, this study adopts a geographically precise and longitudinal approach, focusing on how the entry of new private clinics affects nearby public providers. A more local and longer-term approach is expected to reveal competitive patterns more clearly, thereby providing the foundation for the following hypothesis.

2.4 Hypothesis

The entry of a new private primary care clinic is associated with an increase in patient-perceived care quality at the geographically closest public primary care clinic.

3 Data

3.1 Source Material

3.1.1 Nationell Patientenkät (NPE)

The study uses secondary data from the NPE yearly patient surveys that all regions participate in since 2009 (Patientenkät.se, 2026a). The answers are converted to numerical scores by NPE, making quality measurable. To propose a relationship extending beyond the specific survey samples, representativeness of the sample is essential. The NPE surveys use stratified random sampling, covering all Swedish regions in one survey year, and a selection of regions in the following year; a pattern that alternates every other year. The surveys are issued to a random sample of patients who have received primary care during the specific period (Patientenkät.se, 2026a), and sampling is conducted on individual PCC level. Thereby, the data is expected to be highly typical of patient perceptions of different PCCs. The relevance and validity of NPE for the research question relates to the comprehensive, random sample data, which offers patient assessments of separate PCCs and over time, enabling evaluation of the hypothesized relationship. The source is considered reliable because of its standardized data collection procedures, consistency across regions, and because it is administered by Sveriges Kommuner och Regioner, a well-established actor in Swedish healthcare.

Related to the reliability of the surveys and cross-PCC comparability, the period assessed is limited to 2015-2024 even though data is available from 2009. The NPE survey was remade in 2015 (Patientenkät.se, 2026b), and by only using later surveys containing the same

questions, PCC performance remains comparable. This period is still considered sufficient to consider longer-term patterns from the 2010 reform and it enables a unique contribution as previous studies focus only on the early post-reform period (Dietrichson et al. 2020; Lundvall et al. 2011).

3.1.2 Regional records

The study also uses regional administrative records obtained directly from Swedish regions. The data was collected by contacting regional authorities via email and requesting information on the establishment (entry) of PCCs over time. This includes data on when new PCCs entered the market, which is essential for identifying changes in competition at the local level.

The reliability of this source is strengthened by the fact that the data originates from official regional authorities, who are responsible for the organization and oversight of primary care. Due to this, the information is expected to be accurate and based on internal administrative records. This makes the data highly relevant for capturing actual entry patterns, which are central to the research question.

However, there are some limitations to consider. Since the data was collected separately for each region, there may be inconsistencies in how information is recorded, defined, and thereby shared. For instance, regions may differ in how they define “entry” (for example new establishment vs. ownership change or relocation), which could affect comparability across regions. In addition, the level of detail provided varies, and some regions may have incomplete historical records, leading to measurement issues.

Despite these limitations, the regional data is considered a valuable source, as it offers unique information on provider entry over time that would otherwise be challenging to construct through manual searches. This allows for a more precise analysis of changes in competition, complementing both the NPE data and the information obtained from 1177.se.

3.1.3 1177

Another source of data that is used in the thesis is data from 1177.se, Sweden’s national healthcare information platform, managed by the regions (1177.se, 2026). The platform provides publicly available information on PCCs, including location, ownership type (public or private), and in some cases information on services and accessibility. This makes it a relevant source for identifying provider characteristics and mapping the structure of local healthcare markets.

Regarding the source’s reliability, it is strengthened by the fact that 1177 is an official platform within the Swedish healthcare system, ensuring a high level of credibility and consistent information across regions. Since the information is continuously updated by

regional authorities, it is expected to reflect current conditions of PCCs. This makes the data suitable for constructing variables related to provider presence.

The platform also has some limitations to be considered. 1177 is primarily designed for patients rather than research purposes, and the level of detail and standardization may vary. Some information, such as service scope or accessibility, may be incomplete or inconsistently reported. In addition, historical data is limited, as 1177 mainly reflects current provider structures rather than longitudinal changes over time. This implies that potential relocations of PCCs cannot be fully observed, which may affect the accuracy of measuring geographical proximity between providers. As a result, some PCCs may be incorrectly classified as newly established or continuously located, which could introduce errors in the selection of competition group PCCs. Nevertheless, 1177 is considered a relevant and complementary data source, providing essential structural information on PCCs that cannot be obtained from the NPE data alone.

4 Methods

This thesis is a quantitative panel study, performing quality assessments of the same public PCCs over time, and comparing them to other PCCs. The longitudinal element displays quality changes from more competition over time, which is the focus of the research question. The comparative element enables contrasting between the public PCCs in focus and other PCCs to distinguish between whether a quality change might relate to increased local competition, or if it occurred universally in the sector, for instance due to general policy changes. The quantitative approach is motivated by enabling hypothesis testing and comparisons, and because the study requires measurable data and a representative sample to examine relationships. The relationship investigated is that between the entry of a private PCC, the independent variable, and patient-perceived care quality of the closest located public PCC, the dependent variable.

4.1 The Approach

The focus group of the study included each public PCC located closest to where a private PCC has entered. This group is referred to as the ‘competition group’ (Appendix A). All other clinics formed the ‘non-competition group’, which was used for comparisons and to contrast between changes in the competition group and universal sectoral developments. To account for regional differences in clinic density, the locational scope was defined by the nearest public PCC relative to each new private entry. Since the geographical reach of competition and patients’ willingness to travel to their PCC may vary across the country depending on initial clinic density, this relative approach identified the one clinic presumably most affected by the entry. While the NPE survey questions are divided into several sub-categories of patient perceptions, this study used the weighted average score for “overall impression” for each PCC, which should summarize patients’ complete perception of their PCC well.

The selection of the competition group was limited to 2015-2020 for two reasons. Firstly, since the NPE surveys were remade between 2014 and 2015 (Nationell Patientenkät, 2026b), only using the surveys from 2015 forward which ask the same questions facilitates cross-year comparisons. Secondly, examination of quality change requires data from subsequent years after a private entry. Since this study focuses on longer-term effects, and the difference-in-differences benefit from comparable time periods, the period from the year of a private entry to the comparison year was set to five years. Five years is considered sufficient to reveal longer-term effects of added competition. Furthermore, it is the longest possible period to assess if intending to use data for equal time periods for all competition group PCCs regardless of which year between 2015-2020 that they received additional competition (considering that the NPE dataset reaches until 2024).

Entries of private PCCs between 2015-2020 were identified based on regional records requested by the authors. For two regions, Norrbotten and Östergötland, these records were missing due to non-response. Instead, a media search was performed, revealing the year of private PCC entries (Appendix B). The private clinics were then entered into 1177's map function to locate the nearest public PCC. The closest located public PCC to each private entry was selected for the competition group. These PCCs' quality change was calculated from the year of the private entry to four years later, to capture the quality development over a five-year period following increased competition. All remaining clinics were assigned to the non-competition group, where the average quality development was calculated for five-year periods starting in each year between 2015-2020.

Using the five-year time spans, the analysis compared the average quality development between the competition and non-competition group, a so-called difference-in-differences model, to distinguish the differences possibly attributable to a local competition increase. Standard errors were used to assess the precision of estimates. During data selection, several public PCCs in the competition group were identified as the closest clinic to more than one private entrant (Appendix C). These were examined separately, in a similar manner as the full competition group, by comparing this sub-focus group to the rest of the competition group. This sub-group analysis enabled exploring of whether participation in both the competition group and the sub-group amplified the relationship between private entries and patient-perceived care quality at public PCCs, compared to participation only in the full competition group.

Besides the difference-in-differences approach, the quality scores in 2023 were used to further assess a potential long-term relationship between competition group participation, or sub-group participation (more than one private entry), and overall impression scores in 2023. 2023 is the most recent year with data available for all PCCs in Sweden and thereby offers the best insight into whether an impact of increased competition is still visible in competition group PCCs (close to) today. A positive difference would suggest that PCCs exposed to competition between 2015 and 2020 had higher patient-perceived quality scores in 2023, while a negative one would imply the opposite. Additionally, focusing on a single year for this part of the analysis allowed for a comparison of the distribution of PCC's overall impression scores between the groups.

Furthermore, the year 2023 was also used to contrast the four metropolitan regions comprising most of the competition group (Appendix D), to consider potential differences arising from variations in regional governance rather than local competition increases. For this analysis, the sample size did not allow for separating PCCs into time periods based on the year of private entry, and therefore PCCs were only separated by region.

The year 2023 was selected for the cross-region comparison, the comparison of means, and the distribution analyses described above because it is the most recent year with complete NPE data on all PCCs in Sweden. Since the competition group selection was limited to 2015-2020, at least three years have passed between the competition increase for competition group PCCs and the NPE survey of 2023. Any quality changes are thus expected to be fully visible by 2023. For this part of the analysis, the time passed between private entry and comparison year became shorter for PCCs receiving competition in 2020 than those receiving competition in 2015. However, to achieve a comparison of all PCCs in the same year, 2023 is considered the best available option. The year 2023 accommodates the long-term approach of the thesis better than any other year, since the 2024 surveys only include a selection of regions.

4.2 Data Preparation and Processing

Using secondary data involves selecting and structuring it for the intended analysis. Since the NPE data was not collected specifically for this study, certain adjustments were necessary. Every other year, the NPE surveys were performed only in a number of regions instead of all 21. While data was available each year for most of the competition group (PCCs in the regions of Skåne, Stockholm and Västra Götaland), several relevant PCCs did not participate in the NPE surveys annually, requiring certain adjustments to obtain sufficient data on their quality scores over the five-year period after entry of a private competitor. In cases where data was missing for the year of entry or for the comparison year (four years later), data from the closest available year was used (details in Appendix A). These observations were categorized under the year that the actual data observation was retrieved from, instead of under the year of the actual private entry.

Further considerations emerged related to the geographical reach of competition following a private clinic entry. Certain situations required case-by-case assessments of the likelihood of a competitive relationship between a public PCC and a private entrant. Some areas had a relatively high density of private PCCs compared to the number of public PCCs, making it unlikely that a public PCC further away would experience increased competitive pressure from a private entry. Therefore, in municipalities without any public PCCs but with several private providers, it was assumed that no public PCC is affected by a private entry, and thereby no public PCC was selected for the competition group. In addition, in areas where more than five private PCCs were located closer to a new private entrant than the nearest public PCC, specifically for a few cases in the city of Stockholm, no public PCC was selected for the competition group. Furthermore, when two public PCCs were located at approximately the same distance to a new private PCC, the one that appeared more closely connected to the

private entry, based on transport connections or exposure by being the sole provider in a sizeable area, was selected for the competition group.

A few private PCCs that entered between 2015-2020 only operated for about a year before closing again. Such a short period of increased competition was considered unlikely to have had long-term effects on care quality. Therefore, the closest located public PCCs to these clinics were not selected for the competition group. However, there were also situations where a private PCC opened between 2015 and 2020 but ultimately shut down after a longer time, resulting in a period that was considered sufficient to impact competitive behavior in the area. The closest located public PCCs to these private clinics were included in the competition group. For these cases, the minimum period of private PCC operation considered sufficient to impact longer-term competitive behavior, leading to inclusion in the competition group, was four years.

4.3 Methodological Limitations

Using secondary data means using data not collected for this study's purposes. As highlighted in the previous section, several challenges arose such as missing observations and cases where it was not obvious which public PCC, if any, was closest to and thereby most likely to have a competitive relationship with a private entrant. Despite careful consideration and attempts to resolve such difficulties, results might have been impacted by the methodological choices and trade-offs made by the authors. Also relating to the content of NPE, it is crucial to be aware that this study essentially considers how patient impressions of care quality have changed after new private competitors are introduced in an area, not how clinical quality changed. The motivation for and implications of using the patient-perceived quality definition have been presented (Section 1.3; Section 2.3) and it remains important not to consider it synonym to clinical quality.

Furthermore, as highlighted in the comparison of private and public care providers (Section 2.2.3) it is important to be aware of how their potential differences may impact the analysis. This study considers the main difference between the competition and non-competition group whether they have received a close-by private competitor or not. However, this should not be assumed to be the only difference. The study does attempt to account for general developments in the healthcare sector, differences due to regional governance, as well as regional differences in clinic density and associated variations in patients' acceptable distance to a PCC. The analysis also includes a sub-focus group of PCCs exposed to more intense competition through more than one private entry, and it focuses on patient-perceptions rather than health outcomes to make PCCs more comparable in performance. Yet, because of the difficulty accounting for all influential factors, the results should be interpreted as associations rather than causal relationships. Nevertheless, the longitudinal element should help indicate the direction of the relationship by revealing the chronological order in which the entry of a private PCC and a change in care quality of the public PCC occurs.

Another consideration is that entry might not be entirely random. Private PCCs might strategically enter where existing PCCs perform relatively poorly and thus where demand for new providers is higher. In their early post-reform investigation of this issue, Lundvall et al. (2011) did not find any such relationship, which downplays the issue of non-random entry causing selection bias of the competition group. Nevertheless, if such a strategy was applied by private entrants, it should impose even more pressure on existing public PCCs to raise their quality to stay competitive. This possibility motivates a closer examination of initial trends in patient-perceived care quality of public and private PCCs, which is performed in the first part of the results section.

5 Empirical Analysis

5.1 Results

5.1.1 Descriptive statistics

Before describing the characteristics of the competition group, the abovementioned consideration of potential non-random entry (Section 4.3) motivates a comparison of initial care quality of existing public PCCs and private entrants. If private PCCs enter with higher care quality, this would provide further reason for established public PCCs to improve their quality to maintain their market position as they receive additional competition from higher-performing private PCCs. To address this, Figure 5.1 displays the average patient-perceived quality score of the competition group PCCs in the year before their private competitor entered against the Swedish average scores, pre-calculated in the NPE data, as well as the first available survey scores for the new private competitors.

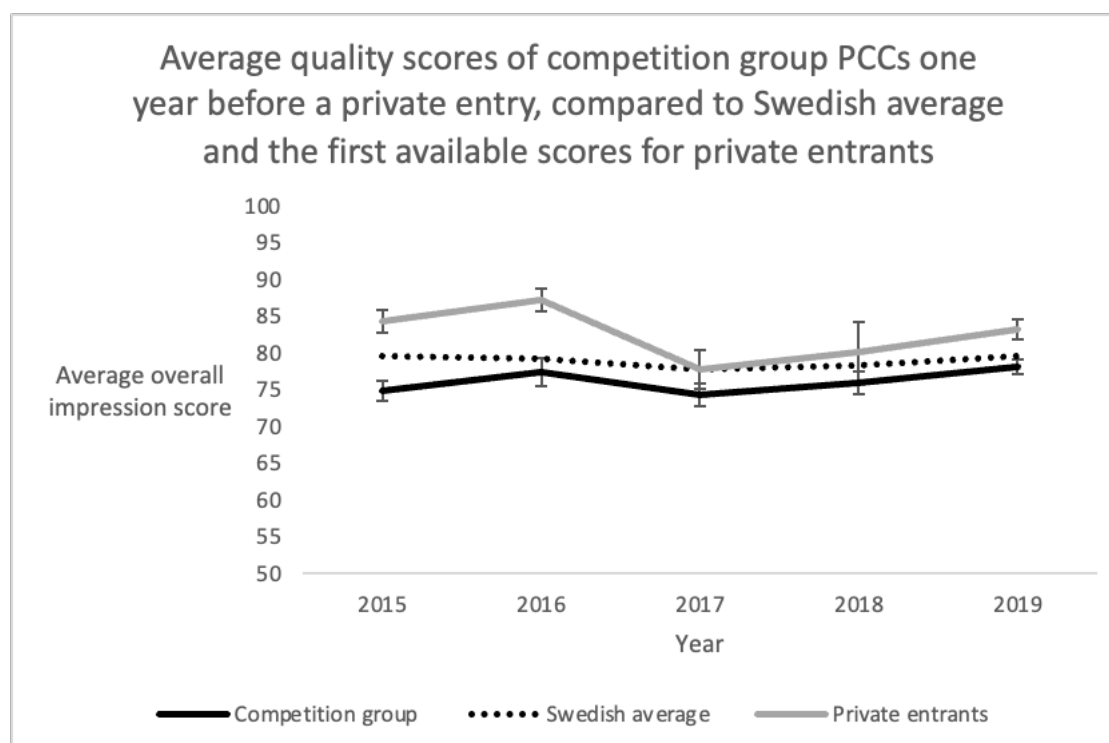


Figure 5.1: Average quality (overall impression scores) of competition group PCCs one year before private entry, compared to Swedish average and private entrants

Source: Nationell Patientenkät and authors' calculations

Notes: The competition group PCCs included in each year are those that received a private entrant the following year, i.e. the PCCs under 2015 received private competition in 2016. PCCs receiving a private competitor in 2015 are not included in this graph since the equivalent data is unavailable for 2014 (see explanation in Section 3.1.1). For PCCs with missing data for the year before private entry, data from two years before entry was used and these PCCs are therefore placed under that year instead. The private entrant scores are the first available scores for each private entry (maximum 2 years post entry). Error bars represent standard error of the mean.

In Figure 5.1, the Swedish average is the most stable between years, which is expected as the Swedish average is based on far more observations than the sub-groups of the competition group and private entrants (details in Appendix E). Thereby, each competition group PCC and private entrant affects these average scores more. In general, the competition group lies slightly below Swedish average, and private entrants slightly above. However, the differences are small except in 2015 and 2016, and in 2015, there were few private entrants with NPE records available, while in 2016, there were few observations for competition group PCCs. Therefore, and because the trend appears inconsistent across years, the quality score differences may be driven by a few outlier PCCs. In sum, Figure 5.1 suggests, though with rather great uncertainty, that private entrants on average had higher patient-perceived care quality as they entered, which could have triggered their corresponding competition group PCCs to improve as well to stay competitive against the higher-performing private entrants.

To overview the focus group of this study, the competition group, Table 5.2 presents descriptive statistics of the public PCCs included in this group, as well as the distribution of private entries over time (details in Appendix A). The first part of the table shows the number of public PCCs exposed to private competition between 2015-2020 across regions. The table displays an uneven distribution, with a large share of PCCs located in more populated

regions such as Västra Götaland, Stockholm, Skåne, and Uppsala, while several other regions only include one or a few observations. This reflects geographical differences in market size and the establishment of new private providers. To further visualize the geographical distribution, Figure 5.2 shows competition intensity on a Swedish map. The map highlights variation in the number of PCCs in the competition group across regions, using a color scale ranging from light red (fewer than 5 PCCs) to dark red (15 PCCs and more). Regions not included in the competition group are marked in white, indicating no exposure to new private entries. The figure demonstrates that competition is concentrated in densely populated areas, while large parts of Sweden experience limited or no competition exposure from private entries between 2015 and 2020.

The second part of Table 5.2 displays the number of private entries by year, between 2015 and 2020. The number of entries remain relatively stable over time, fluctuating between 10 and 21 per year, and peaking in 2019 with 21 new entries. Overall, the table illustrates that both the geographical distribution and timing of private entries vary, which is important to consider when analyzing patterns of competition and patient-perceived care quality.

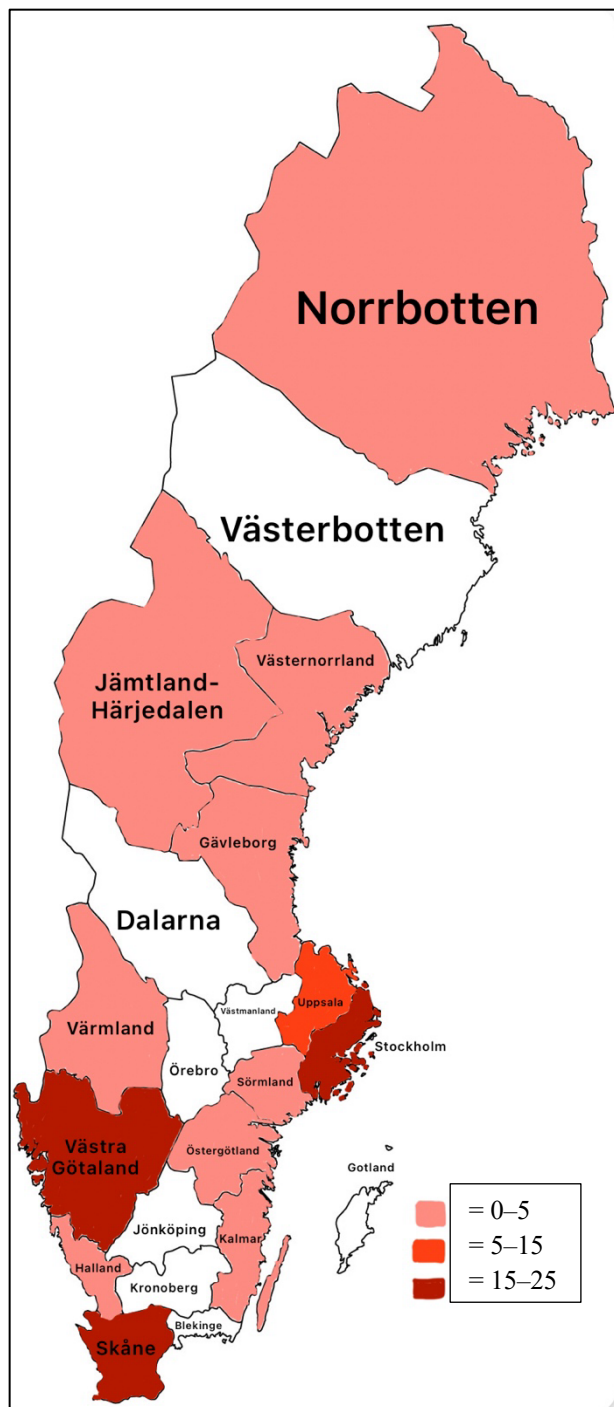


Figure 5.2: Regional dispersion of competition group

Sources: Regional records of private entries requested by the authors, 1177's map function, and authors' calculations and drawings

Table 5.2: Descriptive statistics of competition group

Region	No. of public PCCs in competition group
Blekinge	0
Dalarna	0
Gotland	0
Gävleborg	1
Halland	3
Jämtland-Härjedalen	1
Jönköping	0
Kalmar	2
Kronoberg	0
Norrbotten	1
Skåne	16
Stockholm	16
Sörmland	3
Uppsala	9
Värmland	1
Västerbotten	0
Västernorrland	1
Västmanland	0
Västra Götaland	20
Örebro	0
Östergötland	1
Total	75
Year of entry	No. of private entries
2015	10
2016	16
2017	17
2018	16
2019	21
2020	19
Total	99

Sources: Regional records of private entries requested by the authors, 1177's map function, and authors' calculations

Note: The total number of public PCCs in competition group is lower than the total number of private entries since 17 of the competition group PCCs are the same for several entries (two or more): they are located closest to more than one of the private entries (details in Appendix C).

5.1.2 Full competition group analysis

This section considers the full competition group in comparison to the non-competition group. Table 5.3 shows averages of five-year change in care quality, reflected by patient overall

impressions scores, starting from each year between 2015-2020. Each PCC in the competition group is assigned to the period beginning in the year when they received a new private competitor. This setup captures the care quality development of the public PCCs between the year of the competition increase and four years later. These average changes are compared to the average five-year change for the non-competition group, hence the PCCs not located near a private entrant.

Table 5.3: Average quality change (overall impression scores) over five-year periods, competition vs non-competition group

Period	2015– 2019	2016– 2020	2017– 2021	2018– 2022	2019– 2023	2020– 2024
Competition group change	-1,57	6,15	2,59	0,99	-2,39	-1,5
N observations competition group first year (last year)	9 (9)	13 (14)	20 (20)	11 (12)	31 (29)	15 (15)
Non-competition group change	-0,50	1,95	1,79	0,29	-0,28	-1,90
N observations non-competition group first year (last year)	1077 (1076)	733 (645)	1050 (1083)	723 (796)	1076 (1130)	645 (793)
Difference-in-differences (competition - non-competition)	-1,07	4,20	0,80	0,70	-2,11	0,35
Standard error DiD	3,06	2,13	1,61	2,42	1,21	1,33

Source: Nationell Patientenkät and authors' calculations

Note: The competition group observations are divided across time periods based on the year of their private entry, corresponding to the first year of each time period. Where data for the entry year or comparison year (four years later) is missing, data for the closest year available was used (observations are placed in the correct period based on the year the data was retrieved from). Therefore, the number of observations for the first and last year of the period are not always the same. Quality change for each group and period was calculated as the difference between the average score in the last and first year of the period. The standard errors of the difference-in-differences were calculated as the square root of the sum of sample variances.

As Table 5.3 indicates, differences between the competition group and non-competition group are generally small and inconsistent across periods. PCCs facing a private competitor in 2016, 2017, 2018 or 2020 perform slightly better than the non-competition group, whereas those with new competitors in 2015 or 2019 perform worse. The only periods where differences are fairly pronounced are between 2016-2020 and 2019-2023. However, no consistent pattern emerges from these differences: in the first period, the competition group PCCs outperform PCCs in the non-competition group, whereas the opposite holds in the second period.

Furthermore, there are potential distortions to consider. Between 2016 and 2020, the competition group's average increase of 6,15 points is largely due to a single outlier: one PCC

in Västra Götaland received two private competitors in 2016 and increased their overall impression scores by 18 points during the same period. Excluding this outlier, the competition group change from 2016-2020 would instead result in a four-point increase, and the difference-in-differences would be reduced to 2,05. Thus, the extreme values of this one clinic exaggerate the group average, and difference-in-differences, for 2016-2020. Notably, the difference-in-differences without the overperforming outlier (2,05) is of proportional size to the reversed difference observed between 2019-2023 (-2,11). Hence, when combined, the larger but contradictory differences in 2016-2020 and 2019-2023 do not suggest any consistent pattern.

To further examine long-term patterns of patient-perceived care quality, Table 5.4 presents the average quality scores of competition group and non-competition group PCCs in 2023. 2023 is the most recent year with data available for all PCCs in Sweden and thereby offers the best insight into a potential long-term relationship. From Table 5.4, a negative difference between competition groups scores and non-competition group scores is visible. Hence, the non-competition group slightly outperforms the competition group in average overall impression in 2023.

Table 5.4: Average quality (overall impression scores) in 2023, competition vs non-competition group

	Average quality score in 2023
Competition group	76,88
Non-competition group	79,03
Difference (competition - non-competition)	-2,15

Source: Nationell Patientenkät and authors' calculations

To further compare the character of the competition and non-competition group PCCs, Figure 5.3 reveals the relative frequency of overall impression scores in 2023, including all PCCs in both groups. For this figure, the quality scores of all PCCs were grouped into five-point bins and plotted using upper limits of each bin. The shares of PCCs in each bin, rather than real numbers, were used to make the distributions comparable despite the large differences in group size.

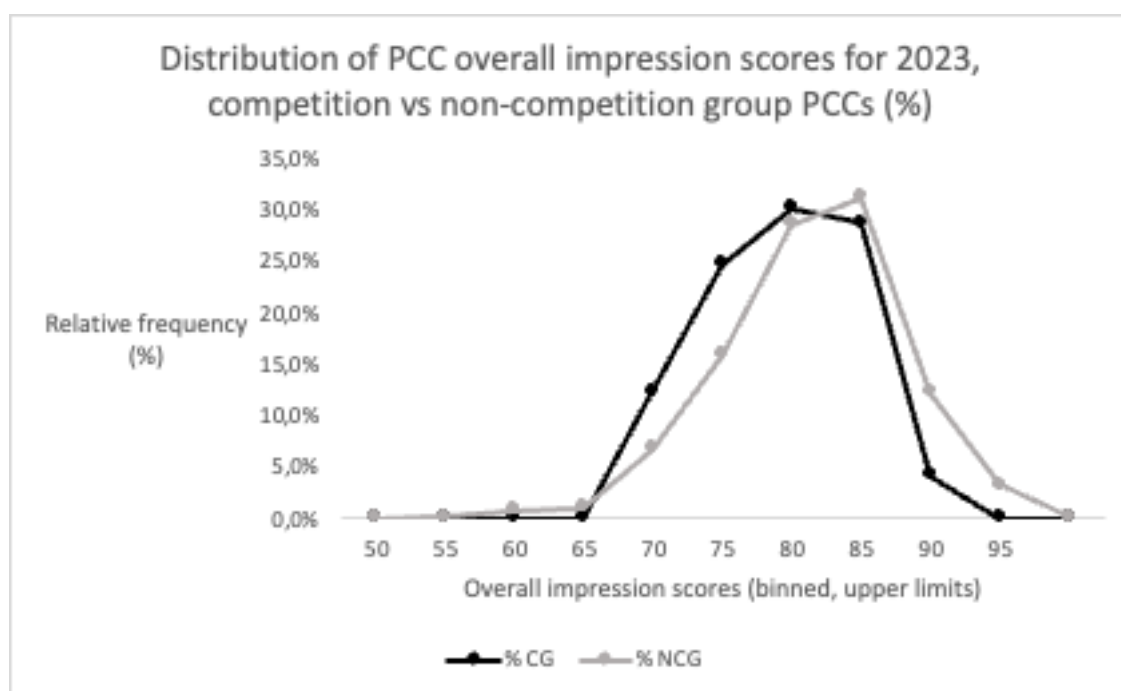


Figure 5.3: Distribution of overall impression scores in 2023, competition vs non-competition group PCCs (%)

Source: Nationell Patientenkät and authors' calculations

Note: CG = competition group. NCG = non-competition group. The overall impression scores are binned, with each number on the x-axis representing the upper bin limit (i.e. 70 = 65-70, 75 = 70-75, and so on.)

The distribution curves in Figure 5.3 are quite similar. Hence, a similar share of the PCCs in the competition and non-competition group place within the same overall impression score intervals. This indicates that, while the non-competition group curve is skewed slightly more to the right, the groups behave quite similarly overall. In sum, when comparing competition and non-competition group PCCs in 2023, a weak or barely existing negative relationship appears between increased competition from private entrants in 2015-2020 and patient-perceived care quality at the closest located public PCCs in 2023.

5.1.3 Sub-group analysis: PCCs with more than one private competitor

The vague results of the full sample analysis (Section 5.1.2) motivate a more in-depth approach. This section investigates the relationship between entry of more than one private competitor in an area and patient-perceived quality of the closest public PCC. The analysis thus distinguishes between PCCs having received more than one new private competitor in 2015-2020, resulting in a sub-sample of 17 PCCs (listed in Appendix C), and the remaining PCCs in the competition group. Hence, the non-competition group is no longer used for comparisons, but instead the rest of the competition group is.

Figure 5.4 compares the public PCCs in the competition group that received more than one private entrant between 2015-2020 to the rest of the competition group. Again assessing five-year average changes, the groups exhibit a similar development for three time periods: 2016-

2020, 2017-2021, and 2019-2023. Between 2015-2019, the sub-group exhibits a positive development, in contrast to the rest of the competition group with a negative development. However, the sub-group consists of only three PCCs for 2015, reducing the likelihood of these scores pointing towards a general trend. Moreover, in 2018-2022 the sub-group again outperforms the rest of the competition group by approximately three overall impression points. In contrast, between 2020-2024, the pattern is reversed, where the sub-group on average scores three points lower than the rest of the competition group. In sum, the data fails to indicate any clear pattern.

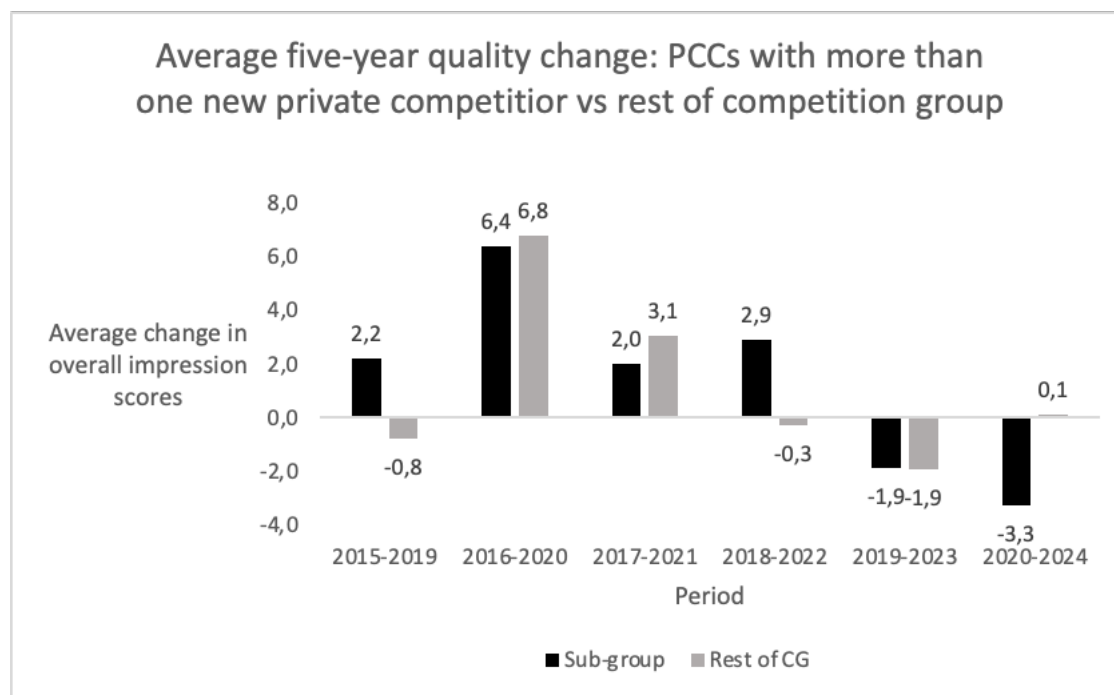


Figure 5.4: Average five-year quality change (overall impression scores) of PCCs with more than one new private competitor, vs the rest of the competition group

Source: Nationell Patientenkät and authors' calculations

Note: CG = competition group. Observations are divided across time periods based on the year of their private entry, corresponding to the first year of each time period. Where data for the entry year or comparison year (four years later) is missing, data for the closest year available has been used (observations are placed in the correct time period based on the year the data was retrieved from). Quality change for each group and period was calculated as the difference between the average score in the last and first year of the period. Standard errors (SE) for the difference-in-differences (DiD) were calculated by taking the square root of the sum of sample variances.

DiD estimate 2015-2019 = 3,0 (SE = 5,4)

DiD estimate 2016-2020 = -0,4 (SE = 4,9)

DiD estimate 2017-2021 = -1,0 (SE = 3,2)

DiD estimate 2018-2022 = 3,2 (SE = 5,1)

DiD estimate 2019-2023 = 0,0 (SE = 2,5)

DiD estimate 2020-2024 = -3,4 (SE = 2,6)

Again comparing the average quality scores from 2023, Table 5.5 contrasts the sub-group against the rest of the competition group. The difference visible in Table 5.5 indicates a small but positive difference. While the difference in average quality scores in 2023 between the full

competition group and the non-competition group was negative (Table 5.4), having received more than one private competitor between 2015-2020 might instead be weakly related to receiving a higher overall impression score by patients in 2023.

Table 5.5: Average quality (overall impression scores) in 2023, sub-group vs rest of competition group

	Average quality score in 2023
Sub-group	77,75
Rest of CG	76,61
Difference (sub-group - rest of CG)	1,13

Source: Nationell patientenkät and authors' calculations

Note: CG = competition group.

The distribution curves of PCCs in the sub-group and the rest of the competition group are presented in Figure 5.5. As for the full competition group (Figure 5.3), the curves appear quite similar in their incline, decline and peaks. The only major difference is that a lower share of the sub-group PCCs had overall impression scores of 75-80 in 2023. Nevertheless, a peak is instead observed between 80-85, again resembling the rest of the competition group's distribution. In general, no obvious differences in the characteristics of the sub-group PCCs compared to the rest of the competition group are apparent.

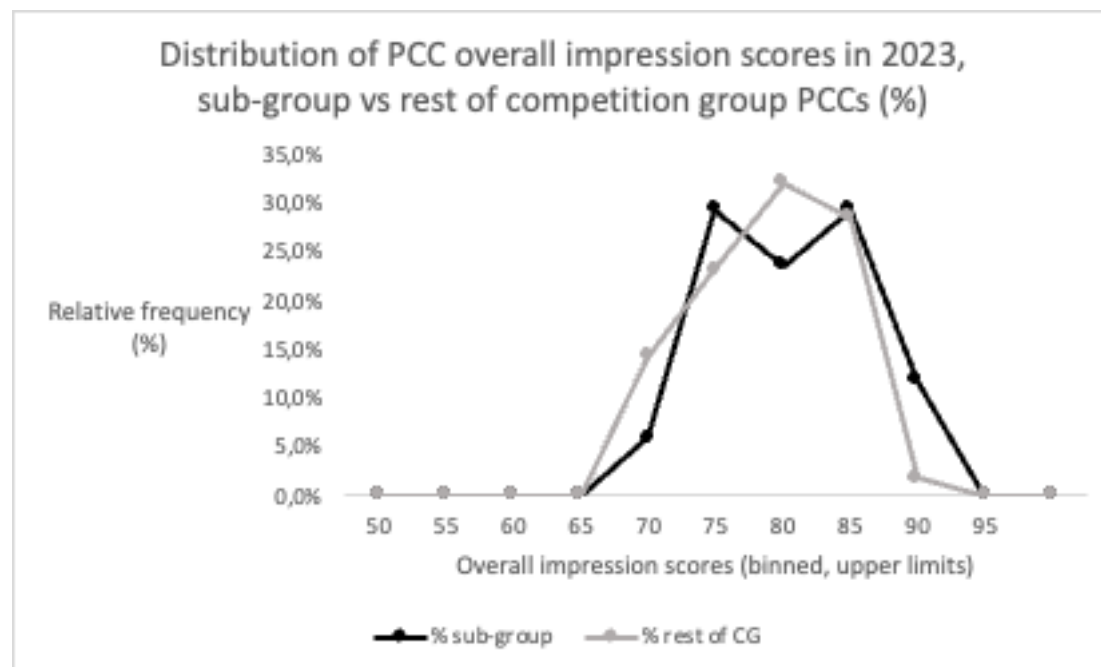


Figure 5.5: Distribution of overall impression scores in 2023, sub-group vs rest of competition group PCCs (%)

Source: Nationell patientenkät and authors' calculations

Note: CG = competition group. The overall impression scores are binned, with each number on the x-axis representing the upper bin limit (i.e. 70 = 65-70, 75 = 70-75, and so on.)

5.1.4 Cross-region analysis: The metropolitan regions

Since Swedish healthcare is governed at the regional level, it is relevant to consider potential inter-regional differences that may themselves influence patient-perceived quality. Such differences might not be attributable to local competition increases, but rather to differing regional policy, incentives, and structures. Figure 5.6 displays the average overall impression scores in 2023 for PCCs located in the four metropolitan regions, comprising most of the competition group (Appendix D): 15 PCCs from Skåne, 15 from Stockholm, 9 from Uppsala, and 18 from Västra Götaland. These averages are also contrasted against the average of the non-competition group PCCs in these regions in 2023, to investigate if regional policies might have affected public PCCs differently in terms of their ability to respond to additional competition.

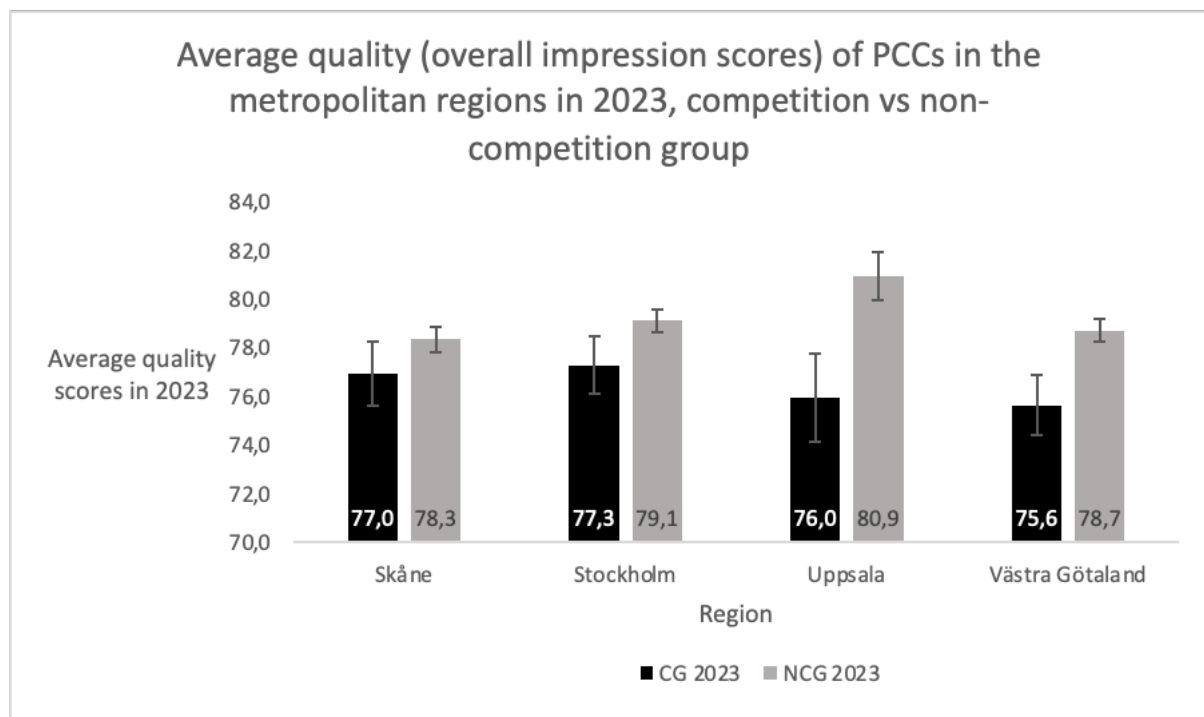


Figure 5.6: Average quality (overall impression scores) across the metropolitan regions in 2023, competition vs non-competition group

Source: Nationell Patientenkät and authors' calculations

Note: CG = competition group. NCG = non-competition group. Error bars represent standard error of the mean.

Because of the relatively small sample for the competition group, the PCCs in Figure 5.6 have not been divided into further groups to assess five-year changes based on the timing of private entry (as is done in Sections 5.1.2 and 5.1.3). Instead, PCCs are only grouped by region, and the year 2023 is used for the comparison, as it is the most recent year with data available for each of the regions.

Although minor differences in the competition group across regions are visible, the precision of the averages is too poor to confirm such conclusions. Moreover, the comparison of competition and non-competition group PCCs frames the non-competition group as superior in patient-perceived care quality. However, these differences are uncertain and small, in particular for Skåne, Stockholm and Västra Götaland. The difference between competition and non-competition group PCCs is slightly larger in Uppsala, where the competition group average is 76 and the non-competition group average is 80,9. This difference could indicate a regional structure that has inhibited public PCCs from properly responding to increased competition. Nevertheless, out of these four regions, Uppsala has the lowest number of competition group PCCs, making it more difficult to generalize based on the results for this region. In general, Figure 5.6 suggests that inter-regional differences, as well as differences between the competition and non-competition group, are relatively small. Variations in regional governance have likely not reinforced public-private PCC differences or caused substantial differences in patients' impression of their care.

5.2 Discussion

The results presented in the empirical analysis provide a basis for evaluating how increased competition from private entries has been associated with patient-perceived care quality in Swedish primary care. While economic theory suggest that competition should incentivize providers to improve quality, the findings of this study indicate a weak and inconsistent relationship. This raises important questions regarding the extent to which competitive mechanisms function as expected in a price-regulated healthcare system. At the same time, the absence of clear negative trends suggests that the structural changes following the expansion of private providers have not extensively impacted patient-perceived quality. Against this background, the following sections discuss the findings in relation to theory and previous research, and considers how methodological limitations and institutional characteristics may help explain the observed patterns.

5.2.1 Why increased competition does not appear to translate into improved patient-perceived care quality

This study aimed to examine how the entry of private PCCs is associated with changes in patient-perceived care quality at the geographically closest public PCCs in Sweden between 2015 and 2024. Overall, the findings indicate that the relationship between increased local competition and patient-perceived quality is weak, inconsistent, and in most cases, estimates are rather imprecise. Across both descriptive and comparative analyses, no clear or systematic pattern emerges suggesting that private entry leads to improved quality at public PCCs. While the sub-group analysis indicates a slightly more positive relationship under more intense competition, these patterns remain weak and uncertain.

Taken together, the results reject the hypothesis of a positive relationship between competition and patient-perceived care quality. Instead, they suggest that competition, at least in this context, does not appear to be an effective mechanism for driving improvements in patient experiences. This is particularly noteworthy in relation to the original policy expectations behind the Swedish system of choice reform. As highlighted by the Swedish Competition Authority (2014), increased competition was expected to incentivize providers to improve quality. However, the absence of clear improvements in this study suggests that such competitive mechanisms may not function as intended in a price-regulated PCS.

Although no clear improvements in quality are observed, the results also do not indicate any systematic deterioration in patient-perceived care quality. This implies that the expansion of private providers and increased competition have not negatively affected patients' experiences at public PCCs. In line with the broader aims of this thesis, ensuring high-quality and accessible care, this finding suggests that the structural changes in the PCS over the past decade have not undermined patients' perceived quality of care.

To summarize, the results indicate that increasing the number of providers alone may be insufficient to generate meaningful quality improvements. Instead, they point toward the importance of other factors, such as information availability, patient choice behavior, provider incentives, and resource constraints. This contributes to a more cautious interpretation of competition as a policy tool in healthcare, suggesting that its effectiveness is highly dependent on the institutional context in which it operates.

5.2.2 How data limitations and institutional context may impact the weak relationship

Several limitations should be considered when interpreting the results and their generalizability to a broader context. First, the analysis is subject to potential non-random entry of private providers. As suggested in the descriptive statistics, private entrants may have slightly higher initial quality levels, although this pattern is uncertain. If private providers tend to establish in areas with specific characteristics, for example higher demand, better preconditions, or already improving public PCCs, this could bias the observed relationship between competition and quality.

Secondly, the imbalance in group sizes between the competition and non-competition groups, as well as the small size of the sub-group exposed to multiple entries, limits statistical precision. This might have made it more difficult to detect clear patterns and increases sensitivity to outliers, as illustrated in the five-year change analysis. In addition, the reliance on patient-perceived quality measures introduces further uncertainty, as such measures may be influenced by expectations, communication, and patient composition rather than actual clinical performance.

Thirdly, the study measures competition based on geographical proximity, which might not fully reflect actual patient choice. If patients do not actively switch providers in response to

new private entrants, the competitive pressure on public PCCs might be weaker than assumed. This points to a key explanation of the results: competition in this setting could be restricted by imperfect information and limited patient responsiveness. Even if quality differences exist, patients are not always fully aware of them or may face barriers to switching care provider, reducing the effectiveness of competitive mechanisms.

Lastly, structural and institutional characteristics of the Swedish PCS likely play an important role. The system is highly regulated, with fixed prices and relatively standardized services, limiting providers' ability to compete along dimensions that significantly affect patient-perceived quality. Simultaneously, factors including staffing, resource availability, and regional governance may have a stronger influence on care quality than local competition alone. The above limitations imply that the results should be interpreted with caution, and as associations rather than causal effects. However, they provide a plausible explanation for why the expected positive effects of competition are not clearly observed. Overall, the findings suggest that competition alone is likely to be an insufficient driver of quality improvements in Swedish primary care, and that other mechanisms or policy tools might be more effective in enhancing patient-perceived care quality.

5.2.3 Examination of the results in relation to existing research

The findings of this thesis align with previous Swedish research showing modest and mixed effects of competition on patient-perceived quality (Dietrichson et al. 2020; Glenngård, 2023; Lundvall et al. 2011). Similar to earlier studies, the results suggest that competition does not lead to substantial or consistent improvements in quality. The weak and context-dependent relationship identified also aligns with broader literature emphasizing that competition in regulated healthcare markets primarily affects observable aspects of care and depends on patients' ability to respond to quality differences (Ezrachi & Stucke, 2015; Vengberg et al. 2024). Furthermore, the lack of strong effects is consistent with research highlighting the importance of structural factors, such as resource constraints and local conditions, in shaping care quality (Sköld, 2025).

6 Conclusion

6.1 Research Aims

This thesis has investigated the potential relationship between the entry of private primary care providers and the quality of existing public primary care providers, as defined by patient overall impressions. Attempting to fill the current literature gap on local, long-term patterns following the Swedish primary care reform in 2010, the intention was to provide a more precise understanding of this competition-based relationship. By doing so, the research aimed to evaluate if and how competition theory works within the price-regulated primary care

context, and what the implications of increased privatization have been on patients' impression of their care provider. Any changes over time would thereby reflect changes in the experienced quality of care delivered to patients in Sweden.

6.2 Research Objectives

The research question of this thesis was "How has competition from the entry of private primary care clinics in Sweden been associated with patient-perceived care quality changes of the closest located public care clinics over the past decade (2015-2024)?" To answer this question, the study used panel data from Nationell Patientenkät and examined the quality development for public PCCs having received a private competitor during the period 2015-2020. These PCCs' development after their competitor entered was compared to all other Swedish PCCs, and PCCs having received more than one private entrant were also analyzed separately. Most of the analysis centered around various forms of comparisons of means.

In sum, the findings suggest a non-existing or possibly very weak relationship, of which the direction may be debated, between increased competition from the entry of private PCCs and patient-perceived care quality of the closest located public PCCs. Consequently, the hypothesis predicting a positive relationship is rejected. The research instead suggests that there is no relationship, at least not to the extent that it would be of great importance for the functioning of the PCS or for patients' right to qualitative care.

6.3 Practical Implications

There are no clear signs that the increase in private entries in Swedish primary care has improved patient impressions of their close-by public care providers. Nevertheless, there are no clear signs of the opposite either. These findings align with the mixed and vague relationships identified in previous research, and also suggest that patients' impressions and credibility in their PCCs have not changed much alongside increased PCC competition. Hence, for the overall purpose of this study, investigating whether Swedish primary care still delivers on the SDG and maintains the delivery of high standard healthcare to all citizens, the findings are not necessarily vague. Rather, they indicate that the changes in the composition of the PCS in the past decade have not altered patients' experience of their care.

The main contribution of this research is within health economics, and to the Swedish welfare model. Despite drastic changes in the PCS since 2010, there are no obvious indications that patients neither suffered, nor benefitted, from it long-term. This conclusion is highly relevant for Swedish policymakers and the ongoing debate regarding the impact of private healthcare actors. The evidence is not sufficient to determine whether more entries in primary care are beneficial in general, but more entries does not seem strongly related to higher-standard, equal access healthcare. Consequently, there might be other more efficient ways of raising care quality, as observed by patients, than simply encouraging more entries.

There are some clear limitations relating to the study scope, and it is important to apply caution if using the findings as a basis for real-world decisions. Factors such as local conditions, resources, and structural or organizational characteristics may impact where private PCCs choose to establish. Public and private care providers might also differ in their ways of operating or incentive structures, which could impact competitive behavior and make them less comparable. While these factors have been acknowledged, it has not been possible to control for them. Thereby, the analysis is limited to suggesting associations rather than causal relationships, and further research would be needed to reach more definitive conclusions. Furthermore, as has been repeatably noted throughout the thesis, it remains important, particularly when bringing the findings of this study into practice, not to confuse patient-perceived care quality with actual clinical care quality. Clinical quality is not within the scope of this thesis.

6.4 Future Research

The scope and findings of this study themselves point towards relevant areas for future research. Firstly, to investigate causality between private entries and care quality of public PCCs, it would be necessary to isolate the effects of additional factors of potential influence on the results: how public and private PCCs operate, incentives, local preconditions, and so on. This would imply a resource-demanding analysis and a more comprehensive approach than was possible for this thesis.

Secondly, relating to the discussion on defining care quality, it would be interesting to also examine trends in clinical quality following increased privatization, for instance by using some measure of health outcomes. Previous research that ruled out such a relationship were mainly based on hospitals, which have been found to operate differently from primary care institutions. Moreover, those who have investigated clinical quality in the Swedish PCS after the 2010 reform have only done so for the first three years after the reform (Dietrichson et al. 2020). A more long-term view of clinical quality changes alongside patient-perceived changes would contribute to a more complete view.

Lastly, since the results suggest that the 2010 reform facilitating more PCC entries did not have clear positive effects on patient-perceived care quality, it appears relevant to investigate what other interventions that might. Perhaps there are other policies or incentives more directly targeting PCC performance that would be more effective in boosting care quality. If so, this should be of great value for policymakers in Swedish healthcare, to make beneficial decisions or interventions to enable more notable improvements in patient-experienced care quality.

6.5 Chapter Summary

This thesis examined the relationship between increased competition from private entries in primary care and patient-perceived care quality of the nearest public PCCs, aiming to evaluate

competition theory in the context of Swedish primary care. In particular, the intention was to investigate how patients' care experiences have evolved following increased privatization.

The main findings of the analysis, performed through comparisons of means and difference-in-differences, is that there is no clear or strong relationship between the variables. Despite a substantial increase of private care providers since the system of choice reform in 2010, no obvious corresponding change in patient-perceived care quality is observed, suggesting that competitive mechanisms may not work as expected in the primary care market.

The study is subject to certain limitations, particularly in terms of suggesting a causal relationship, and further research is required to determine the nature of the suggested relationship with more certainty. Nevertheless, the vague competitive effects identified here motivates continued exploration into other factors that may be of greater influence on patient-perceived care quality. Such insights would help Sweden further raise its standards and maintain the position as a global front-runner in healthcare.

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Appendix A

This appendix includes details on the selection of the competition group, which was based on regional records of year of private entry (n) and the name of the private PCCs entering. The closest located public PCCs, the competition group, are in the column marked in orange. Mostly, five-year change scores were based on the difference between the year of entry, n, and four years later, n+4 (i.e. 2015 to 2019). Where this was not possible due to missing data, the PCCs were placed in the closest time group where data was available. These cases are noted in the right column of the table.

Year of entry (n)	Private PCC	Region	Municipality	Closest public PCC -> competition group	Note
2015	Strandängshälsan	Halland	Laholm	Vårdcentralen centrum Laholm	
2015	Norrskensets vårdcentral	Norrbottnen	Kiruna	Kiruna hälsocentral	2017 was used as first year due to missing data 2015-2016
2015	Blomman vårdcentral	Skåne	Malmö	Vårdcentralen Granen	
2015	Helsingborgs vårdcentral	Skåne	Helsingborg	Vårdcentralen Närlunda	
2015	Furuhöjden Husläkarmottagning Roslags Näsbö	Stockholm	Täby	Täby vårdcentral	
2015	Meliva vårdcentral Ekeby	Uppsala	Uppsala	Eriksbergs vårdcentral	
2015	Vårdcentralen Kasernhöjden	Värmland	Karlstad	Vårdcentralen Västerstrand	
2015	St Olof vårdcentral	Västernorrland	Sundsvall	Hälsocentralen Granlo	
2015	Vårdcentralen Östra Göteborg	Västra Götaland	Göteborg	Närhälsan Hjällbo vårdcentral	
2015	Medpro clinic Noltorp Vårdcentral	Västra Götaland	Alingsås	Närhälsan Sörhaga vårdcentral	
2016	Möllevångens vårdcentral	Skåne	Malmö	Vårdcentralen Sönderåsen	
2016	Arenastadens vårdcentral Solna	Stockholm	Solna	Hagalund vårdcentral	
2016	Solna husläkarmottagning i Frösunda	Stockholm	Solna	Hagalund vårdcentral	
2016	Kry Vårdcentral Vallentuna	Stockholm	Vallentuna	Husläkarmottagningen Korallen	
2016	Familjeläkarna Tungelsta Vårdcentral	Stockholm	Haninge	Jordbro vårdcentral	
2016	Airport Sky Vårdcentral	Stockholm	Sigtuna	Valsta vårdcentral	
2016	Vårdcentralen Min Doktor vårdcentral Nyköping	Sörmland	Nyköping	Vårdcentralen Ekenberg Nyköping	2017 was used as first year and 2021 as last year due to missing data for 2016 and 2020
2016	Familjeläkarna Bålsta	Uppsala	Häbo	Knivsta vårdcentral	2017 was used as first year and 2021 as last year due to missing data for 2016 and 2020
2016	Meliva vårdcentral Aros	Uppsala	Uppsala	Kungsgårdens vårdcentral	2017 was used as first year and 2021 as last year due to missing data for 2016 and 2020
2016	Bräcke diakoni Vårdcentralen Malmen	Västra Götaland	Skara	Närhälsan Götene vårdcentral	
2016	Omtanken vårdcentral Majorna	Västra Götaland	Göteborg	Närhälsan Majorna	
2016	Sättila Vårdcentral	Västra Götaland	Mark	Närhälsan Skene vårdcentral	
2016	Alovia vårdcentral	Västra Götaland	Trollhättan	Närhälsan Sylte vårdcentral	
2016	Viskaforsskliniken	Västra Götaland	Borås	Närhälsan Trandared vårdcentral	
2016	Capio Vårdcentral Lödöse	Västra Götaland	Lilla Edet	Närhälsan Älvängen vårdcentral	
2016	Medpro clinic Lödöse Vårdcentral	Västra Götaland	Lilla Edet	Närhälsan Älvängen vårdcentral	
2017	Husläkarna Falkenberg	Halland	Falkenberg	Vårdcentralen Falkenberg	
2017	Hälsocentralen Ripan	Jämtland-Härjedalen	Östersund	Zätagränds hälsocentral	
2017	Achima Care Emmaboda Nybro	Kalmar	Emmaboda	Emmaboda hälsocentral	
2017	Lönngårdens vårdcentral	Skåne	Malmö	Vårdcentralen Lunden	
2017	Familjeläkarna Barkarby Vårdcentral	Stockholm	Järfälla	Barkarby vårdcentral	
2017	Meliva Vårdcentral Liljeholmen	Stockholm	Stockholm	Liljeholmens vårdcentral	
2017	Meliva vårdcentral Skärholmenhälsan	Stockholm	Stockholm	Skärholmens vårdcentral	
2017	Vasastans vårdcentral praktikertjänst AB	Stockholm	Stockholm	Surbrunns vårdcentral	
2017	Capio vårdcentral Enköping	Uppsala	Enköping	Enköpings husläkarcentrum	
2017	Enköpingshälsan	Uppsala	Enköping	Enköpings husläkarcentrum	
2017	Capio vårdcentral Sävja	Uppsala	Uppsala	Gottsunda vårdcentral	
2017	Capio vårdcentral Liljeforsborg	Uppsala	Uppsala	Gränbystadens vårdcentral	
2017	Praktikertjänst Knivsta läkargrupp	Uppsala	Knivsta	Knivsta vårdcentral	
2017	Uppsala barncentrum och vårdcentral	Uppsala	Uppsala	Samariterhemets vårdcentral	
2017	Wästerlänkarna Redegatan	Västra Götaland	Göteborg	Närhälsan Kungssten vårdcentral	
2017	Praktikertjänst Lerums vårdcentral	Västra Götaland	Lerum	Närhälsan Lerum vårdcentral	
2017	Tranehälsan	Västra Götaland	Tranemo	Närhälsan Tranemo vårdcentral	

Continued

2018	Kry vårdcentral Oskarshamn	Kalmar	Oskarshamn	Gripens hälsocentral	2019 was used as first year due to missing data for 2018
2018	Doktor.se Garnisonsgatans Vårdcentral	Skåne	Helsingborg	Vårdcentralen Drottninghög	
2018	Kry vårdcentral Tuna	Skåne	Lund	Vårdcentralen Getingen	
2018	God hälsa vårdcentral Kirseberg	Skåne	Malmö	Vårdcentralen Granen	
2018	Nydale vårdcentral	Skåne	Malmö	Vårdcentralen Gullviksborg	
2018	Blomman vårdcentral i Sofielund	Skåne	Malmö	Vårdcentralen Lunden	
2018	Tryggakliniken Kristianstad	Skåne	Kristianstad	Vårdcentralen Östermalm	
2018	Meliva Vårdcentral Jakobsberg	Stockholm	Järfälla	Jakobsbergs vårdcentral	
2018	Vårdcentralen Kry nyköping	Sörmland	Nyköping	Vårdcentralen Bagaregatan Nyköping	2019 was used as first year and 2023 as last year due to missing data for 2018 and 2022
2018	Praktikertjänst Ultuna vårdcentral	Uppsala	Uppsala	Gottsunda vårdcentral	2019 was used as first year and 2023 as last year due to missing data for 2018 and 2022
2018	Nyby vårdcentral	Uppsala	Uppsala	Gränbystadens vårdcentral	2019 was used as first year and 2023 as last year due to missing data for 2018 and 2022
2018	Kåbohälsan vårdcentral	Uppsala	Uppsala	Kungsgårdets vårdcentral	2019 was used as first year and 2023 as last year due to missing data for 2018 and 2022
2018	Praktikertjänst Öregrund vårdcentral	Uppsala	Östhammar	Östhammar vårdcentral	2019 was used as first year and 2023 as last year due to missing data for 2018 and 2022
2018	Medical vårdcentral och BVC Gårdsten	Västra Götaland	Göteborg	Närhälsan Angered vårdcentral	
2018	Distriktsläkarna Kviberg Vårdcentral och BVC	Västra Götaland	Göteborg	Närhälsan Gamlestadsstorget vårdcentral	
2018	Älvängens Läkarhus	Västra Götaland	Ale	Närhälsan Älvängen vårdcentral	
2019	Premicare Bergsjö	Gävleborg	Nordanstig	Hudiksvall Din hälsocentral	
2019	Capio vårdcentral Höganäs	Skåne	Höganäs	Vårdcentralen Delfinen	
2019	Victoria vård & hälsa (Kalkbrottet)	Skåne	Malmö	Vårdcentralen Limhamn	
2019	Hälsomedicinskt center/HMC i Staffanstorps	Skåne	Staffanstorps	Vårdcentralen Staffanstorps	
2019	Kungsholmens Husläkarmottagning	Stockholm	Stockholm	Essinge vårdcentral	
2019	Kvarnholmens vårdcentral Praktikertjänst	Stockholm	Nacka	Forums vårdcentral	
2019	Meliva Vårdcentral Haninge	Stockholm	Haninge	Handen vårdcentral	
2019	Arkadens läkarmottagning i Märsta	Stockholm	Sigtuna	Valsta vårdcentral	
2019	Vårdcentralen Frösjön Gnesta	Sörmland	Gnesta	Vårdcentralen Gnesta	
2019	Hälsohuset i Enköping	Uppsala	Enköping	Enköpings husläkarcentrum	
2019	Praktikertjänst Bålsta doktorn	Uppsala	Håbo	Knivsta vårdcentral	
2019	Meliva vårdcentral Kungshörnet	Uppsala	Uppsala	Samariterhemets vårdcentral	
2019	Familjeläkarna Luthagen	Uppsala	Uppsala	Svartbäckens vårdcentral	
2019	Praktikertjänst Luthagens vårdcentral	Uppsala	Uppsala	Svartbäckens vårdcentral	
2019	Backaplan Vårdcentral och BVC	Västra Götaland	Göteborg	Närhälsan Brämaregården vårdcentral	
2019	Läkarhus Kyrkbyn	Västra Götaland	Göteborg	Närhälsan Eriksberg	
2019	Medical vårdcentral och BVC Kortedala	Västra Götaland	Göteborg	Närhälsan Hjällbo vårdcentral	
2019	Älvpraktiken	Västra Götaland	Kungälv	Närhälsan Kongahälla vårdcentral	
2019	Borås Vårdcentral	Västra Götaland	Borås	Närhälsan Sjöbo vårdcentral	
2019	Medpro clinic Ämål Vårdcentral	Västra Götaland	Ämål	Vårdcentralen Säfle	
2019	Capio vårdcentral vasastaden	Östergötland	Linköping	Vårdcentralen Kungsgatan	2022 was used as last year due to missing data for 2023
2020	Närvård Knäred	Halland	Laholm	Vårdcentralen centrum Laholm	2019 was used as first year and 2023 as last year due to missing data for 2020 and 2024
2020	Nya Säröledens Familjeläkare	Halland	Kungsbacka	Vårdcentralen Särö	2019 was used as first year and 2023 as last year due to missing data for 2020 and 2024
2020	Kry vårdcentral Storgatan	Skåne	Bromölla	Sölvesborgs vårdcentral	
2020	Mobilia vårdcentral	Skåne	Malmö	Vårdcentralen Borgmästaregården	
2020	Vårdcentralen Hjärtat i Helsingborg	Skåne	Helsingborg	Vårdcentralen Drottninghög	
2020	Blomman vårdcentral i Lund	Skåne	Lund	Vårdcentralen Getingen	
2020	Hälsomedicinskt center/HMC vårdcentral i Bjärred	Skåne	Lomma	Vårdcentralen Lomma	
2020	Kry vårdcentral Osby	Skåne	Osby	Vårdcentralen Osby	
2020	Kry vårdcentral Laurentii	Skåne	Lund	Vårdcentralen Södertull	
2020	Folkets vårdcentral Tyresö	Stockholm	Tyresö	Bollmora vårdcentral	
2020	Kry Vårdcentral Sickla	Stockholm	Nacka	Forums vårdcentral	
2020	Tibble vårdcentral	Stockholm	Upplands-Bro	Kungsängens vårdcentral	
2020	St Aframs Vårdcentral	Stockholm	Södertälje	Södertälje vårdcentral	
2020	Meliva Märsta Närvård	Stockholm	Sigtuna	Valsta vårdcentral	
2020	Läkarhuset Enköping vårdcentral	Uppsala	Enköping	Enköpings husläkarcentrum	2019 was used as first year and 2023 as last year due to missing data for 2020 and 2024
2020	Familjeläkarna Kapellgårdet	Uppsala	Uppsala	Svartbäckens vårdcentral	2019 was used as first year and 2023 as last year due to missing data for 2020 and 2024
2020	Distriktsläkarna Mölndal Vårdcentral och BVC	Västra Götaland	Mölndal	Närhälsan Krokslätt vårdcentral	
2020	Medipart Partille Vårdcentral och BVC	Västra Götaland	Partille	Närhälsan Partille vårdcentral	
2020	Skepplanda Läkarhus	Västra Götaland	Ale	Närhälsan Älvängen vårdcentral	

Appendix B

This appendix presents the media searches performed to access private entries in the regions of Östergötland and Norrbotten, which could not be obtained through regional records. The private PCCs currently in operation in these regions were identified through 1177, and thereafter, Google searches were made to find newspaper articles or announcements that stated their year of entry. Entries between 2015-2020, which were used to identify competition group PCCs, are marked in bold. For three private PCCs in Östergötland, the media search did not deliver clear indications of the year of entry. These PCCs were treated as if they did not enter between 2015-2020, and were thus not used to identify any competition group PCCs.

Norrbotten

- **Norrskens halsocentral: entry 2015.** Source: SVT. (2015). Första Privata Halsocentralen, <https://www.svt.se/nyheter/lokalt/norrbotten/privat-halsocentral-i-kiruna> [Accessed 25 March 2026]
- Sävast Vårdcentral: entry 2023 → not included due to entry after 2020. Source: Via TT. (2023). Nu Öppnar Ny Vårdcentral i Sävast, <https://via.tt.se/pressmeddelande/3375481/nu-oppnar-ny-varldcentral-i-savast?publisherId=3235708&lang=sv> [Accessed 25 March 2026]
- Vårdcentralen NorraHamn: entry 2014 → not included due to entry before 2015. Source: Praktikertjänst. (2021). Vårdcentralen NorraHamn i Luleå Växer: Öppnar ny mottagningsenhet [Accessed 25 March 2026]
- Hermelinen Vårdcentral Luleå Centrum: entry 2021 → not included due to entry after 2020. Source: NSD. (2020). Då Öppnar Ny Vårdcentral i Luleå, <https://www.nsd.se/nyheter/lulea/artikel/da-oppnar-ny-varldcentral-i-lulea/7rkewpzzr> [Accessed 25 March 2026]
- Cederkliniken: entry 2010 → not included due to entry before 2015. Source: Piteåtidningen. (2010). Ny Privat Vårdcentral Öppnar Mitt i Stan, <https://www.pt.se/nyheter/pitea/artikel/ny-privat-varldcentral-oppnar-mitt-i-stan/1656dezzr> [Accessed 25 March]
- Gällivare Halsocentral: entry 2011 → not included due to entry before 2015. Source: Affärer i Norr. (2018). Halsocentralen Nådde Målet Dubbelt Upp, <https://affarerinorr.se/nyheter/2018/maj/haelsocentralen-naadde-maalet-dubbelt-upp/#:~:text=G%C3%A4llivare%20N%C3%A4r%20G%C3%A4llivare%20H%C3%A4lsocentral%20startade,hade%20man%20dubbelt%20s%C3%A5%20m%C3%A5nga.&text=%2D%2D%C3%A5%20fick%20vi%20l%C3%A5na%20pengar,en%20h%C3%B6g%20produktion%20i%20v%C3%A5rden> [Accessed 25 March 2026]

Östergötland

- **Capio Vårdcentral Vasastaden Linköping: entry 2019.** Source: Corren. (2019). Ny Vårdcentral Öppnar i Linköping, <https://www.corren.se/nyheter/linkopings-kommun/artikel/ny-varldcentral-oppnar-i-linkoping/grm3p6j8> [Accessed 25 March 2026]
- Vårdcentralen Drottninggatan Linköping: entry 2026 → not included due to entry after 2020. Source: Corren. (2025). Här Öppnar Privat Vårdcentral – I Centrala Linköping, <https://www.corren.se/nyheter/linkoping/artikel/privat-varldcentral-oppnar-i-linkoping-2-januari/lwo75wyj> [Accessed 25 March 2026]
- Capio Johannelund AB Linköping: entry 2004 → not included due to entry before 2015. Source: Capio. (2021). Capio Stärker sin Närvaro i Östergötland Genom Förvärv av Johannelunds Vårdcentral, <https://www.mynewsdesk.com/se/capio/pressreleases/capio-staerker-sin-naervaro-i-oestergoetland-genom-foervaerv-av-johannelunds-vaardcentral-3088443> [Accessed 25 March 2026]
- Familjeläkarna Mjölby Vårdcentral: entry 2023 → not included due to entry after 2020. Source: Corren. (2023). Personal på Plats på Nyöppnade Vårdcentralen, <https://www.corren.se/nyheter/mjolby/artikel/personal-pa-plats-pa-nyoppnade-varldcentralen/r5okwggj> [Accessed 25 March]
- Kry Vårdcentral Skarptorp Norrköping, and Kry vårdcentral Kneippen Norrköping: entries before 2015 with other owners/names → not included. Sources:
Norrköpings Tidningar. (2016). Fyra Vårdcentraler Byter Ägare, <https://www.nt.se/nyheter/norrkoping/artikel/fyra-varldcentraler-byter-agare/jv54o01r> [Accessed 25 March 2026]
Kry. (2020). Kry Förvärvar Halsa med 14 Vårdcentraler i Fem Regioner, <https://www.kry.se/press/nyheter/kry-forvarvar-halsa/> [Accessed 25 March]
- Hierta Vårdcentral Vilbergen Norrköping: entry before 2015 with other owner/name → not included. Sources:
SVT. (2020). Halsa Lämnar Vårdcentralen i Vilbergen, <https://www.svt.se/nyheter/lokalt/ost/halsa-lamnar-varldcentralen-i-vilbergen> [Accessed 25 March 2026]
Norrköpings Tidningar. (2016). Fyra Vårdcentraler Byter Ägare, <https://www.nt.se/nyheter/norrkoping/artikel/fyra-varldcentraler-byter-agare/jv54o01r> [Accessed 25 March 2026]
- Doktor.se Geria City Vårdcentral Norrköping: entry 2023 → not included due to entry after 2020. Source: Doktor.se. (2023). Doktor.se Etablerar Vårdcentral i Centrala Norrköping, <https://doktor.se/press/doktor-se-etablerar-varldcentral-i-centrala-norrkoping> [Accessed 25 March 2026]
- Doktor.se Vårdcentralen Mirum Norrköping: entry 2021 → not included due to entry after 2020. Source: Doktor.se. (2021). Doktor.se Etablerar Vårdcentral i Norrköping, <https://doktor.se/press/doktor-se-etablerar-varldcentral-i-norrkoping> [Accessed 25 March 2026]
- Doktor.se Geria Söderköping: entry 2021, bought an existing public PCC → not included due to becoming private after 2020. Source: Norrköping Tidningar. (2021).

Bolaget Köper Vårdcentralen – Så Tänker De Om Framtiden,

<https://www.nt.se/nyheter/soderkoping/artikel/bolaget-koper-varldcentralen-sa-tanker-de-om-framtiden/r073zgkl> [Accessed 25 March 2026]

- Kry Vårdcentral Spiran Norrköping: No source found → not included
- Capho Vårdcentral Berga Linköping: No source found → not included
- Trädgårdstorgets Vårdcentral Praktikertjänst Linköping: No source found → not included

Appendix C

This appendix includes the PCCs in the competition group that were identified as the closest located public PCC to more than one private entry. Hence, these are the PCCs assessed in the sub-group analysis (Section 5.1.3).

Region	Public PCC
Halland	Vårdcentralen centrum Laholm
Skåne	Vårdcentralen Drottninghög
Skåne	Vårdcentralen Getingen
Skåne	Vårdcentralen Granen
Skåne	Vårdcentralen Lunden
Stockholm	Forums vårdcentral
Stockholm	Hagalund vårdcentral
Stockholm	Valsta vårdcentral
Uppsala	Enköpings husläkarcentrum
Uppsala	Gottsunda vårdcentral
Uppsala	Gränbystadens vårdcentral
Uppsala	Knivsta vårdcentral
Uppsala	Kungsgårdets vårdcentral
Uppsala	Samariterhemmet vårdcentral
Uppsala	Svartbäckens vårdcentral
Västra Götaland	Närhälsan Hjällbo vårdcentral
Västra Götaland	Närhälsan Älvängen vårdcentral

Appendix D

This appendix includes the competition group PCCs of the metropolitan regions, with overall impression scores available from 2023. Hence, these PCCs are those included in Figure 5.6.

Region	Municipality	Public PCC
Skåne	Malmö	Vårdcentralen Borgmästaregården
Skåne	Höganäs	Vårdcentralen Delfinen
Skåne	Helsingborg	Vårdcentralen Drottninghög
Skåne	Lund	Vårdcentralen Getingen
Skåne	Malmö	Vårdcentralen Granen
Skåne	Malmö	Vårdcentralen Gullviksborg
Skåne	Malmö	Vårdcentralen Limhamn
Skåne	Lomma	Vårdcentralen Lomma
Skåne	Malmö	Vårdcentralen Lunden
Skåne	Helsingborg	Vårdcentralen Närlunda
Skåne	Osby	Vårdcentralen Osby
Skåne	Staffanstorps	Vårdcentralen Staffanstorps
Skåne	Lund	Vårdcentralen Södertull
Skåne	Malmö	Vårdcentralen Södervärn
Skåne	Kristianstad	Vårdcentralen Östermalm
Stockholm	Järfälla	Barkarby vårdcentral
Stockholm	Tyresö	Bollmora vårdcentral
Stockholm	Stockholm	Essinge vårdcentral
Stockholm	Nacka	Forums vårdcentral
Stockholm	Solna	Hagalund Frösunda vårdcentral
Stockholm	Vallentuna	Husläkarmottagningen Korallen
Stockholm	Järfälla	Jakobsbergs vårdcentral
Stockholm	Haninge	Jordbro vårdcentral
Stockholm	Upplands-Bro	Kungsängens vårdcentral
Stockholm	Stockholm	Liljeholmens vårdcentral
Stockholm	Södertälje	Luna vårdcentral
Stockholm	Stockholm	Skärholmens vårdcentral
Stockholm	Stockholm	Surbrunns vårdcentral
Stockholm	Täby	Täby vårdcentral
Stockholm	Sigtuna	Valsta vårdcentral
Uppsala	Enköping	Enköpings husläkarcentrum
Uppsala	Uppsala	Eriksbergs vårdcentral
Uppsala	Uppsala	Gottsunda vårdcentral
Uppsala	Uppsala	Gränbystadens vårdcentral
Uppsala	Knivsta	Knivsta vårdcentral
Uppsala	Uppsala	Kungsgårdets vårdcentral
Uppsala	Uppsala	Samariterhemmet vårdcentral
Uppsala	Uppsala	Svartbäckens vårdcentral
Uppsala	Östhammar	Östhammars vårdcentral
Västra Götaland	Göteborg	Närhälsan Brämaregården vårdcentral
Västra Götaland	Göteborg	Närhälsan Eriksberg vårdcentral
Västra Götaland	Göteborg	Närhälsan Gamlestadstorget vårdcentral
Västra Götaland	Götene	Närhälsan Götene vårdcentral
Västra Götaland	Göteborg	Närhälsan Hjällbo vårdcentral
Västra Götaland	Kungälv	Närhälsan Kongahälla vårdcentral
Västra Götaland	Mölnådal	Närhälsan Krokslätt vårdcentral
Västra Götaland	Göteborg	Närhälsan Kungssten vårdcentral
Västra Götaland	Lerum	Närhälsan Lerum vårdcentral
Västra Götaland	Göteborg	Närhälsan Majorna vårdcentral
Västra Götaland	Partille	Närhälsan Partille vårdcentral
Västra Götaland	Borås	Närhälsan Sjöbo vårdcentral
Västra Götaland	Mark	Närhälsan Skene vårdcentral
Västra Götaland	Trollhättan	Närhälsan Sylte vårdcentral
Västra Götaland	Alingsås	Närhälsan Sörhaga vårdcentral
Västra Götaland	Borås	Närhälsan Trandared vårdcentral
Västra Götaland	Tranemo	Närhälsan Tranemo vårdcentral
Västra Götaland	Åle	Närhälsan Älvängen vårdcentral

Appendix E

This appendix includes the private entrants and competition group PCCs in Figure 5.1.

The first list shows the competition group PCCs (public PCCs) included in the figure, which are here grouped based on the year *before* their private competitor entered (i.e. PCCs receiving an entry in 2016 are placed under 2015). Comparable data for 2014 is unavailable, and therefore the PCCs receiving an entry in 2015 were not included. In cases where data for the year before entry was unavailable, these PCCs were placed in the closest year group with data available. Such cases are noted in the right column.

The second list shows the private entrants included in the figure, which are here grouped based on the year of their entry. Since Figure 5.1 only reaches until 2019 (as the competition group PCCs receiving a competitor in 2020 were assessed based on their 2019 scores), the private entrants in 2020 were not included. In cases where data for the entry year was unavailable, these PCCs were placed in the closest year group with data available. Such cases are noted in the right column.

Year (entry-1)	Public PCC	Note
2015	Vårdcentralen Södervärn	
2015	Hagalund vårdcentral	
2015	Hagalund vårdcentral	
2015	Husläkarmottagningen Korallen	
2015	Jordbro vårdcentral	
2015	Valsta vårdcentral	
2015	Vårdcentralen Ekensberg Nyköping	
2015	Knivsta vårdcentral	
2015	Kungsgårdets vårdcentral	
2015	Närhälsan Götene vårdcentral	
2015	Närhälsan Majorna	
2015	Närhälsan Skene vårdcentral	
2015	Närhälsan Sylte vårdcentral	
2015	Närhälsan Trandared vårdcentral	
2015	Närhälsan Älvängen vårdcentral	
2015	Närhälsan Älvängen vårdcentral	
2016	Vårdcentralen Falkenberg	2015 was used due to missing data for 2016
2016	Zätagränds hälsocentral	2015 was used due to missing data for 2016
2016	Emmaboda hälsocentral	
2016	Vårdcentralen Lunden	
2016	Barkarby vårdcentral	
2016	Liljeholmens vårdcentral	
2016	Skärholmens vårdcentral	
2016	Surbrunns vårdcentral	
2016	Enköpings husläkarcentrum	2015 was used due to missing data for 2016
2016	Enköpings husläkarcentrum	2015 was used due to missing data for 2016
2016	Gottsunda vårdcentral	2015 was used due to missing data for 2016
2016	Gränbystadens vårdcentral	No data
2016	Knivsta vårdcentral	2015 was used due to missing data for 2016
2016	Samariterhemmets vårdcentral	2015 was used due to missing data for 2016
2016	Närhälsan Kungssten vårdcentral	
2016	Närhälsan Lerum vårdcentral	
2016	Närhälsan Tranemo vårdcentral	
2017	Gripens hälsocentral	No data
2017	Vårdcentralen Drottninghög	
2017	Vårdcentralen Getingen	
2017	Vårdcentralen Granen	
2017	Vårdcentralen Gullviksborg	
2017	Vårdcentralen Lunden	
2017	Vårdcentralen Östermalm	
2017	Jakobsbergs vårdcentral	
2017	Vårdcentralen Bagaregatan Nyköping	
2017	Gottsunda vårdcentral	
2017	Gränbystadens vårdcentral	
2017	Kungsgårdets vårdcentral	
2017	Östhammar vårdcentral	
2017	Närhälsan Angered vårdcentral	
2017	Närhälsan Gamlestads torget vårdcentral	
2017	Närhälsan Älvängen vårdcentral	
2018	Hudiksvall Din hälsocentral	
2018	Vårdcentralen Delfinen	
2018	Vårdcentralen Limhamn	
2018	Vårdcentralen Staffanstorps	
2018	Essinge vårdcentral	
2018	Forums vårdcentral	
2018	Handen vårdcentral	
2018	Valsta vårdcentral	
2018	Vårdcentralen Gnesta	2017 was used due to missing data for 2018
2018	Enköpings husläkarcentrum	2018 was used due to missing data for 2018
2018	Knivsta vårdcentral	2019 was used due to missing data for 2018
2018	Samariterhemmets vårdcentral	2020 was used due to missing data for 2018
2018	Svartbäckens vårdcentral	2021 was used due to missing data for 2018
2018	Svartbäckens vårdcentral	2022 was used due to missing data for 2018
2018	Närhälsan Brämaregården vårdcentral	
2018	Närhälsan Eriksberg	
2018	Närhälsan Hjällbo vårdcentral	
2018	Närhälsan Kongahälla vårdcentral	No data
2018	Närhälsan Sjöbo vårdcentral	
2018	Vårdcentralen Saffle	
2018	Vårdcentralen Kungsgatan	
2019	Vårdcentralen centrum Laholm	
2019	Vårdcentralen Särö	
2019	Sölvesborgs vårdcentral	
2019	Vårdcentralen Borgmästaregården	
2019	Vårdcentralen Drottninghög	
2019	Vårdcentralen Getingen	
2019	Vårdcentralen Lomma	
2019	Vårdcentralen Osby	
2019	Vårdcentralen Södertull	
2019	Bollmora vårdcentral	
2019	Forums vårdcentral	
2019	Kungsängens vårdcentral	
2019	Södertälje vårdcentral	
2019	Valsta vårdcentral	
2019	Enköpings husläkarcentrum	
2019	Svartbäckens vårdcentral	
2019	Närhälsan Krokslätt vårdcentral	
2019	Närhälsan Partille vårdcentral	
2019	Närhälsan Älvängen vårdcentral	

Year of entry	Private PCC	Note
2015	Norrskensets vårdcentral	
2015	Blomman vårdcentral	No data
2015	Meliva vårdcentral Ekeby	
2015	Vårdcentralen Östra Göteborg	No data
2015	Strandängshälsan	2016 was used due to missing data for 2015
2015	Helsingborgs vårdcentral	2016 was used due to missing data for 2015
2015	Furuhöjden Husläkarmottagning Roslags Näsby	2016 was used due to missing data for 2015
2015	St Olof vårdcentral	2016 was used due to missing data for 2015
2015	Medpro clinic Noltorp Vårdcentral	2016 was used due to missing data for 2015
2016	Möllevångens vårdcentral	No data
2016	Arenastadens vårdcentral Solna	
2016	Kry Vårdcentral Vallentuna	
2016	Airport Sky Vårdcentral	
2016	Sättilä Vårdcentral	
2016	Alovia vårdcentral	No data
2016	Viskaforskliniken	
2016	Capio Vårdcentral Lödöse	
2016	Medpro clinic Lödöse Vårdcentral	
2015	Vårdcentralen Kasernhöjden	2017 was used due to missing data for 2015-2016
2016	Solna husläkarmottagning i Frösunda	2017 was used due to missing data for 2016
2016	Familjeläkarna Tungelsta Vårdcentral	2017 was used due to missing data for 2016
2016	Vårdcentralen Min Doktor vårdcentral Nyköping	2017 was used due to missing data for 2016
2016	Familjeläkarna Bålsta	2017 was used due to missing data for 2016
2016	Meliva vårdcentral Aros	2017 was used due to missing data for 2016
2016	Bräcke diakoni Vårdcentralen Malmen	2017 was used due to missing data for 2016
2016	Omtanken vårdcentral Majorna	2017 was used due to missing data for 2016
2017	Husläkarna Falkenberg	
2017	Lönngrändens vårdcentral	No data
2017	Meliva Vårdcentral Liljeholmen	No data
2017	Vasastans vårdcentral praktikertjänst AB	No data
2017	Capio vårdcentral Enköping	
2017	Enköpingshälsan	
2017	Capio vårdcentral Sävja	
2017	Capio vårdcentral Liljeforstorg	
2017	Uppsala barncentrum och vårdcentral	
2017	Praktikertjänst Lerums vårdcentral	
2017	Tranehälsan	
2017	Hälsocentralen Ripan	2018 was used due to missing data for 2017
2017	Achima Care Emmaboda Nybro	2018 was used due to missing data for 2017
2017	Familjeläkarna Barkarby Vårdcentral	2018 was used due to missing data for 2017
2017	Wästerläkarna Redegatan	2018 was used due to missing data for 2017
2018	Kry vårdcentral Oskarshamn	
2018	Doktor.se Garnisonsgatans Vårdcentral	
2018	God hälsa vårdcentral Kirseberg	No data
2018	Vårdcentralen Kry nyköping	No data
2017	Meliva vårdcentral Skärholmenhälsan	2019 was used due to missing data for 2017-2018
2017	Praktikertjänst Knivsta läkargrupp	2019 was used due to missing data for 2017-2018
2018	Kry vårdcentral Tuna	2019 was used due to missing data for 2018
2018	Nydala vårdcentral	2020 was used due to missing data for 2018
2018	Blomman vårdcentral i Sofielund	2021 was used due to missing data for 2018
2018	Tryggakliniken Kristianstad	2022 was used due to missing data for 2018
2018	Meliva Vårdcentral Jakobsberg	2023 was used due to missing data for 2018
2018	Praktikertjänst Ultuna vårdcentral	2024 was used due to missing data for 2018
2018	Nyby vårdcentral	2025 was used due to missing data for 2018
2018	Kåbohälsan vårdcentral	2026 was used due to missing data for 2018
2018	Praktikertjänst Öregrund vårdcentral	2027 was used due to missing data for 2018
2018	Medical vårdcentral och BVC Gårdsten	2028 was used due to missing data for 2018
2018	Distriktsläkarna Kviberg Vårdcentral och BVC	2029 was used due to missing data for 2018
2018	Älvängens Läkarhus	2030 was used due to missing data for 2018
2019	Capio vårdcentral Höganäs	
2019	Hälsomedicinskt center/HMC i Staffanstorps	
2019	Kungsholmens Husläkarmottagning	
2019	Kvarnholmens vårdcentral Praktikertjänst	
2019	Meliva Vårdcentral Haninge	No data
2019	Arkadens läkarmottagning i Märsta	
2019	Vårdcentralen Frösjön Gnesta	No data
2019	Hälsouset i Enköping	
2019	Praktikertjänst Bålstadoktorn	
2019	Meliva vårdcentral Kungshörnet	No data
2019	Familjeläkarna Luthagen	
2019	Praktikertjänst Luthagens vårdcentral	No data
2019	Backaplan Vårdcentral och BVC	No data
2019	Läkarhus Kyrkbyn	
2019	Medical vårdcentral och BVC Kortedala	No data
2019	Älvpraktiken	No data
2019	Borås Vårdcentral	
2019	Medpro clinic Åmål Vårdcentral	
2019	Capio vårdcentral vasastaden	No data