

Perceptions of quality and satisfaction with primary healthcare in Ukraine

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SUMMARY

This dissertation focuses on the perceptions of healthcare quality in primary care in Ukraine. Healthcare services in Ukraine, as in other countries, aim to ensure accessible and affordable healthcare of the highest possible quality. This makes quality of healthcare one of the most essential values of the health system. Good quality of healthcare services in terms of healthcare that is effective, safe and patient-centered, and that is accessible and affordable for all, is a known predictor of population health. Quality is a major component of health system performance and quality improvement is an important aim of health policy. To ensure this, health policies at all levels (national, regional, and facility) need adequate instruments to measure, maintain and improve healthcare quality.

Chapter 1 of this dissertation describes the concepts of healthcare quality and satisfaction as well as gives the aim and objectives of the studies included in the dissertation. As explained in the chapter, healthcare quality determines satisfaction with healthcare services, the latter being the driving force of decisions and behaviors as well as a known predictor of healthcare utilization and an influencing factor of health outcomes. Apart from being an element of quality, patient-satisfaction measures are an important tool to gain insight into the aspects of healthcare that patients truly value.

There is little evidence on the perception of healthcare quality in Ukraine. Quality assurance procedures, though legally well-developed, are somewhat chaotic and formal. At the same time, Ukraine is experiencing a transition from central budgeting to capitation financing, from the Semashko model of healthcare organization to more managerial autonomy and free choice of healthcare provider.

Therefore, the central aim of this dissertation is to obtain new knowledge on the perception of healthcare quality by different stakeholders as well as insights on self-reported satisfaction with primary healthcare, specifically, on general satisfaction with primary healthcare in Ukraine.

In **Chapter 2**, the method of systematic literature review is used to study the psychometric properties of self-reported satisfaction with healthcare as a measure of quality. The aim of this chapter is to systematize the evidence on the validity and reliability of subjective measurements of satisfaction with healthcare. In this systematic literature review, we searched for relevant publications in PubMed and JSTOR databases. The key inclusion criteria were: (a) original

research articles in peer-reviewed journals; (b) year of publication from 2008 onward; (c) English language publications. We applied directed qualitative content analysis to the publications included in the review.

Overall, 1167 publications are found and screened. Of these, 39 publications that focus on the psychometric properties of the measurement of patient satisfaction, are included. The majority of the studies validate already existing instruments adapted to different contexts; the rest describe psychometric properties of self-developed tools. Psychometric properties are assessed by means of reliability and validity assessment. Reliability assessment is performed via Cronbach alpha and test-retest reliability. In total, 94.9% of studies find that the satisfaction measures are reliable. Validation is performed by a variety of different methods, among which the most applicable are face validity and factor analysis. Overall, 71.8% of studies find that the satisfaction measures are valid.

Thus, we identified tools to measure quality, which were adapted to different contexts and self-developed, and we systematized evidence on their psychometric properties, specifically, on their validity and reliability. We find that quality measurement tools exist in a great variety depending on their purpose, context, resources, and others. Adaptive subjective measures prevail, which might be explained by their long-term usage, effectiveness as shown by the number of studies, as well as positive experience of usage of the measurements' results on micro- (organizational) and macro- (national) levels. At the same time, the growing number of studies measuring psychometric properties of self-developed patient satisfaction assessment tools shows the desire to have as exact an instrument as possible for the specific domains and specific healthcare facilities.

Because of the complexity of the studies, we could not make strong recommendations on the application of self-reported satisfaction measures. We recommended the following key strategies: (1) developing a unified standard for satisfaction measurement; and (2) identifying a combination of tools to routinely measure satisfaction. We also suggested further research on the issue of subjectivity reduction.

In **Chapter 3**, a combination of qualitative and quantitative data analysis is presented. This chapter provides new insights into primary care managers' perceptions of healthcare quality in Ukraine. Ukraine is reforming its health system to improve healthcare quality. Insight into how primary healthcare managers perceive quality is important for the ongoing reform as well as for the improvement of medical services.

Data were gathered in an online survey, which was conducted as part of the Ukrainian-Swiss project “Medical Educational Development” in April-May 2019. A mixture of sampling methods was used: a total population sampling method and a convenience sampling method. The sampling was based on the contact list of USAID project “Health Reform Support”, and additionally on the database of the National Health Service of Ukraine and other channels. Data were analyzed using descriptive statistics and qualitative data analysis.

In total, 302 healthcare managers took part in the study. We identified fifteen groups of quality attributes important to primary healthcare managers. We also investigated quality assessment practices used by primary healthcare managers. The majority of primary healthcare managers perceive quality in healthcare as process quality. The frequency of mentioning the “compliance to standards” and “indicators” attributes confirms the traditional focus of the Ukrainian approach to quality and shows the lack of association of quality with integrated care.

Primary healthcare managers prefer to assess outcome quality via a system of indicators and feedback. We find a high number of unclear descriptions of measurement tools given by the participants of our survey. This may have two major explanations. Primary healthcare managers do not distinguish between quality assessment (as a process) and the quality level in their facilities. Or the formulation of the question was unclear for the participants.

There appears to be a lack of consensus about healthcare quality. Furthermore, most Ukrainian primary healthcare managers who took part in our survey do not recognize the multidimensionality of quality. This may be due to a lack of awareness of the national strategy for better quality of healthcare service.

The absence of a clear consensus about quality complicates the discussion about quality and how to measure quality in healthcare. This appears to be one of the obstacles to system-wide quality improvement.

The data used in the studies described in **Chapter 4 and Chapter 5** were collected by means of repeated cross-section household surveys via face-to-face interviews by trained interviewers. The survey had a sample size of over 10,000 participants per wave.

Based on these data in **Chapter 4**, we explored perceptions of outpatient care quality among healthcare users in Ukraine by identifying and comparing attributes important to outpatient healthcare users as well as by comparing any changes in their importance over a four-year period (2016 – 2019). We also explored changes in the importance of quality attributes that might have

been provoked by the reform, which started in 2017. Evidence on healthcare users' perceptions of quality is important for future system changes. Data were analyzed using descriptive statistics as well as binary regression analysis.

Healthcare quality in Ukraine is mostly associated by users with “effectiveness of treatment (the correct diagnosis, adequate treatment)” and “qualified medical personnel using modern and safe treatment methods”. Both aspects are predisposed by socio-demographic characteristics. The “effectiveness of treatment (the correct diagnosis, adequate treatment)” aspect is predisposed by gender (more important for female respondents), low income and good self-reported health status. And “qualified medical personnel using modern and safe treatment methods” is predisposed by specialized education and low income. The perceptions of outpatient care users about attributes connected with payment policies and general management of the facility have changed over time. At the same time, quality is least associated with such aspects of quality as “the possibility to stay close to family members of patients” and “respect, trust and empathy to the patient”. Whereas the “the possibility to stay close to family members of patients” aspect is not predisposed by socio-demographic characteristics included in the analysis and “respect, trust and empathy to the patient” is predisposed by gender, health status, occupation and type of settlement (less important to female respondents and respondents with average self-reported health status but more important for employed and urban inhabitants). Our analysis showed an increase in the importance (it more than doubled) of all the quality attributes in 2019 in comparison with other years. The reason behind this increase require further investigation.

This chapter provides new insights into the importance of healthcare quality attributes for outpatient healthcare users in Ukraine, showing the need to develop a national policy on quality and a national quality strategy for healthcare that incorporates quality aspects important to patients. This will help to make the health system more responsive to the needs and expectations of healthcare users.

Based on the same data in **Chapter 5**, we examined the general satisfaction with primary healthcare services in Ukraine among service users and nonusers before and after the implementation of the capitation reform in 2017-2020. We compared primary care users and non-users over a five-year period before and after the reform. Effects were estimated using difference-in-differences methods based on matched samples.

Our findings show that in general, respondents are “rather satisfied” with the services of district/family doctors and pediatricians. Users of primary healthcare in our study rated their

satisfaction with the family doctor and satisfaction with pediatrician higher than nonusers. In total, 72.1% (users) and 69.2% (nonusers) were satisfied with their family doctor in 2016. This was 75.3% and 71.9% in 2020. For pediatrician services, these shares were 73.6% (users) and 71.1% (nonusers) in 2016; and 74.7% and 70.2% in 2020, respectively. The study in this chapter also revealed an increase in satisfaction with the district/family doctor over time. However, this does not seem to be due to the reform. The results for pediatrician services were mixed. Why satisfaction with primary care is fairly high and slightly increasing over time is unclear. However, we offer several possible explanations, such as low expectations of primary healthcare, subjective perception of healthcare quality, improved access and affordability, and general improvements in primary healthcare settings not directly linked to the reform.

Other confounding variables included in our analysis, such as age, gender, education, type of settlement, self-reported health status, and the number of persons in the household, also showed an influence on satisfaction among users. However, only gender and self-reported health status had statistical significance over the years (2016-2020). Whereas age showed no statistical significance, and other variables were statistically significant three years out of five included in the analysis. Thus, the results of our analysis confirm the results of previous analyses described in the literature. At the same time, the reason why some of the variables had an effect in certain years could not be identified in the study.

The final **Chapter 6** outlines and discusses the main findings presented in the dissertation. The main findings of the studies included in this dissertation are presented in the form of five statements.

Statement 1: Satisfaction with healthcare measures aspects of quality that are not measured by clinical quality measurement tools. This dissertation supports the importance of valid and reliable self-reported satisfaction with healthcare as a measure of quality. Including satisfaction in quality measures helps to measure the aspects of healthcare that healthcare users truly value.

The discussion of this statement reveals a vague understanding of quality assessment tools and practices among healthcare managers in Ukraine. Thus, at the research level, there is a need to further study the routine application of measurement tools in healthcare management practice in Ukraine. At the policy level, there is a need to revise quality assessment practices on the levels of the system and facility.

Statement 2: The healthcare financing reform of 2017-2020 has changed the discussion on the quality and satisfaction with healthcare in Ukraine. With the healthcare financing reform 2017-2020, Ukraine experienced dramatic change not only in financing principle and managerial freedom but more importantly in views and perceptions of healthcare professionals and users on the health system in general and on quality in particular.

The discussion of this statement revealed a long history of top-down practices as well as paternalistic views on healthcare, leaving no place for providers' and patients' views on quality. Rapid health system changes and lack of data on quality perceptions lead to the recommendation that at the research level, it is important to collect and analyze repeated cross-sectional data on views and satisfaction of healthcare stakeholders (policy makers, healthcare providers and healthcare users) on quality. At the policy level, it is important to maintain the dialogue between the stakeholders, take into consideration their views and expectations, and to develop a working quality strategy.

Statement 3: Primary healthcare managers and patients in Ukraine perceive quality mostly as process quality. The attention to outcome quality is limited. The discussion of this statement shows that both healthcare professionals (managers, medical doctors and nurses) and healthcare users in Ukraine perceive quality mostly as process quality. At the same time, attention to outcome is limited. This also explains the lack of attention to patient satisfaction.

This means that at the policy level, health system responsiveness should be improved by raising awareness of important attributes of structure (like tangibles) or outcome (patient satisfaction) among healthcare professionals and users. At the research level, we did not find other studies of healthcare managers' perceptions of quality in Ukraine. We perceive the findings of Chapter 3 to be the baseline of such kind. Thus, healthcare managers' perceptions of quality in Ukraine require further study. Also, system responsiveness studies are rare in Ukraine and require further elaboration.

Statement 4: A clear consensus about quality assessment and how to measure it is needed in Ukraine. The discussion of this statement shows little consensus about quality among Ukrainian healthcare managers as well as an unclear understanding of quality assessment. Education and clear messages on quality in healthcare from the Ministry of Health of Ukraine are important in developing a clear consensus about quality assessment and how to measure it.

To achieve this at the policy level, the development and promotion of a national policy on quality and a national quality strategy for healthcare should become one of the priorities of the healthcare sector. Up-to-date quality education should be a part of clinical training as well as continuous professional development programs for medical doctors and nurses. At the research level, the perception of healthcare quality among healthcare managers, medical doctors, and nurses, as well as the routine application of measurement tools in healthcare management practice, require further study.

Statement 5: Paradoxically in Ukraine, satisfaction with primary care is high, although the health system does not perform well. The discussion of this statement reveals that the reasons behind high and increasing over time satisfaction are unclear and seem not to be directly linked to the reform. Healthcare users in Ukraine tend to express satisfaction with the services received on a facility level and relocate their satisfaction with primary healthcare services onto the health system in general.

This implies that at the policy level, healthcare reforms should be strengthened by quality improvements in healthcare settings. At the same time, the principles of health system functioning should be well communicated to healthcare users. At the research level, further research is needed to fully understand the drivers of satisfaction, the extent to which responses are affected by adaptation bias and scale of reference bias, and to assess the impact of healthcare financing reforms on the quality and accessibility of primary care.

During the work on this dissertation, the Ukrainian health system was rapidly changing. Healthcare financing reforms launched changes in managerial and educational practices, triggering different healthcare discussions. In general, healthcare stakeholders became more open and willing to be a part of discussions that had the ability to reshape the health system. Thus, quality perceptions and satisfaction with healthcare services gained more importance. The findings of the studies included in this dissertation will be relevant to policy makers, who could use our analysis to improve health system performance. Our analysis will also be beneficial for healthcare providers, who can use it to improve their quality assessment practices and strengthen the loyalty of their patients. Our findings will also be interesting to the countries with similar health system, experiencing similar transition.