# Methodological Instruments for Public Services Quality Improvement

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#### Summary

The article presents the main findings from a theoretical and empirical research on the instruments for quality improvement applied by public services providers in Bulgaria. It is based on data from an empirical study of 161 healthcare and educational institutions that are publicly owned or/and publicly funded. National and internal quality standards, accreditation and international quality standards turn out to be the most widely applied instruments for quality improvement. At the same time public sector specific instruments for quality improvement like Common Assessment Framework and Model of Excellence are nearly unknown and not applied in Bulgaria.

**Key words:** instruments, quality, public services, health care, education, Bulgaria

#### JEL Classification: 110

Since the year 2000 the public sector in Bulgaria has gone through radical reforms of its regulatory base, forms of ownership, and changes in the models of financing and payment to the providers of healthcare, education, social, administrative and other public services. These changes were due to the significant deformations of the previous system which was split in two sectors unable to compete with each other: (1) public sector with budgetary financing and public property and (2) private sector directly financed by households. According to public opinion, conflicts and tension were distinctive for the process of reforms. The quality of the services provided in the public sector emerged as a systematic problem mainly due to the deficit of the tools to guarantee high quality.

The aim of this paper is to present the main results from the theoretical and empirical examination of the applicable instruments for quality improvement of the public services (in basic areas like healthcare and education) rendered in Bulgaria. The Instruments for quality improvement of the public services research project was funded by the University of National and World Economy (R&D No. 07/2011). It was based on the findings of a survey conducted among 161 public organizations in the sectors of healthcare and education. The project ran from 2011 to 2013. The methodology included systematic-structural approach, analysis and synthesis, induction and deduction, comparative analysis, documentary research, positive and

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normative economic analysis, survey of the applied instruments for quality improvement of public services, statistical methods.

### 1. Terminology

The literary references (www.efgm.org; Dimova, 2004; www.quality.government. bg; Ribov, 1996; Ribov, 2003, etc.) point out that there is no single opinion on the definition of quality as a concept. There also is no generally-accepted definition of public services quality (www.quality. government.bg; IPSG, 2002; Mihaleva, 2007; Mihaleva, 2006; Chobanyaneva, 2004; Butler, 2009; Loffler, 2003 etc.). Different authors adopt different approaches depending to the specific aspects of the whole concept they study.

To delimit the area of research, first an overview of the most commonlyused definitions of quality (relevant for the public sector as well) will be made. According to Crosby (1979, 1984), quality suggests meeting some requirements (the producer's point of view), while according to Juran (1980), it means suitability of use (the consumer's point of view). G. Harrington (in Hristov, 2005) looks at quality as a satisfaction or as an excess of the requirements of the user at an affordable price (the value point of view). However, it must be underlined that most of the public services do not have a clearly defined price because they are granted at zero cost to the consumer. This does not mean that they are free because society (the state, the municipalities, other funds and institutions) pays the so-called social price, which includes all expenses made by the providers.

W. Deming (1982) introduces the external objective assessment of quality. In his view

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quality management means providing a quality upon which the market relies. Once again the emphasis is put on the fact that many public services cannot have market price because they are not products sold on the market.

According to the international standard ISO 9000:2000, quality is the degree upon which an aggregation of intrinsic characteristics satisfies some requirements (needs' awareness or expectations that are usually set by default or considered necessary).

All these definitions cover the various aspects of quality, many of which are intrinsic to public services as well. There are characteristics of quality that are more significant to the public sector: the services must satisfy to the highest possible degree the requirements of the citizens and society; they have to assist all public policy processes directed at the improvement the quality of life; to be adequate on social imperatives and citizens' rights such as accessible education and healthcare, the central government and municipalities should serve people's interests, and other goals.

In healthcare Maxwell (1984) defines quality as a concept that more specifically includes accessibility, effectiveness of medical treatment and the economic effectiveness of the health services for the patients. He highlights six elements of quality: access to healthcare services, adequacy to the needs, healthcare effectiveness, equality of the patients, social acceptability of the price and the results, economic efficiency and frugality. Donabedian (1996) introduces three aspects of the quality of healthcare which are being evaluated at standardization and accreditation ever

since: structure, processes, and results. Donabedian's method is generally used in the public sector, including in education and other public services as a rule.

For the purposes this paper and the project, the following working definition of the quality of public services is used: an aggregation of inherent characteristics which express the degree of the capability of the delivered public services and products to satisfy or exceed the requirements of the clients and of the society at an acceptable social price.

The quality of public services is distinguished by the following elements:

- Adequacy to fulfil the needs of the citizens and the society.
- Accessibility physical, economical, territorial.
- Swiftness of the service to prevent queues, waiting lists.
- Safety refers mainly to health care and entrepreneurial ventures of the public organizations.
- Modern technology use the use of computer-based processes as well as state-of-the-art technologies.
- Frugality to set lower social prices for the service, taking into account not only the prime cost of the services which the organizations offer, but also lower social expenses – including the external effects of other institutions such as social funds, budgetary funds, household expenses, employer's expenses, etc.
- Timeliness for some types of services (like emergency and medical assistance) it is especially important to react fast and in response to the needs.
- Intelligibility public services must be delivered in a transparent and understandable for the citizens' way (with clear documents and invoices).

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- Ecology the environment must be protected from contaminations which are typical of in healthcare, some profiles of the education, for instance.
- Complexity the complex solution of the problems of the citizen brings higher added value for him and for the society versus the practice of narrow specialization.
- Other.

As a second step the concept of management of the quality of public services will be defined.

According to ISO 9000: 2000, the management of quality involves coordinated activities for targeting and control of one organization in terms of quality . In the last draft international standard ISO 9001: 2015 a similar definition is provided. According other sources (Donabedian, 1996; to Feigenbaum, 1991; Maxwel, 1984; McNary, 2008; Morgan, 1994), the management of quality suggests creating policies about the quality, planning of the quality, management (fulfilment of the requirements of quality), delivery, improvement. Both definitions are applicable to public services. Therefore, the management of quality of public services contains not only the policies for quality improvement and their implementation, but also the direction towards their higher level, i.e. quality improvement of the public services. The focus on the rise or improvement of quality is the latest trend in quality management (www.efqm.org; Dimova, 2004; IPSJ, 2002; Mihaleva, 2006; Ribov, 1996; Saraivanova, 2008; Hristov, 2005 and Chobanyaneva, 2004).

Finally, the concept of **instruments for quality improvement** will be defined. It will be interpreted as *an aggregation of methods and tools used for quality management in respect* 

of its constant raising. The instruments for quality improvement of public services can be classified in two main groups: **general** (applied also in other sectors and spheres) and **specific** for the public sector. The main types of instruments which are the object of interest of the present article are listed below:

General instruments:

- Standardization;
- Accreditation;
- Statistical methods histogram, Pareto diagram, control chart, dispersion diagram, etc.;
- Qualitative methods Fishbone diagram, House of quality, matrix diagram, affinity diagram;
- Benchmarking and benchlearning. **Specific instruments:**
- Model of Excellence;
- Common Assessment Framework (CAF);
- Citizen's charters.

### 2. Working hypotheses and methodology

The whole project is based upon the hypothesis that the quality of the public services considerably falls behind the quality in individual member-states and in the European Union as a whole. Instruments for quality management and improvement exist from more than four decades but are still slightly known in Bulgaria, formally or partially used, introduced under external pressure and with unsatisfactory end results. The following statements summarize the working hypotheses of the study:

- (1) The introduction of quality management instruments is uneven in the different types of public services, levels and range of the activity and size of the organizations.
- (2) When quality improvement instruments are used, in most of the cases this is not a consequence of a decision taken by the

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public service supplier but is a result of external stimuli – changes in the normative base, European programs and projects, pressure from the consumers, etc.

(3) The application of all tools is rather formal and does not lead to rise of the quality, effectiveness and the satisfaction of the consumers.

The research team believes that the application of suitable quality improvement tools in the public sector can stimulate the development of different subsectors and of the national economy; it can help bridge the gap between Bulgaria and the EU, and increase the public attractiveness and consumer satisfaction from public services. Therefore, the survey contains questions aimed to identify the real attitude to and need for public services' producers with regard to information, training and expert help in order to improve the quality through adequate instruments for the specific organization.

The questionnaires are structured in seven main sections. Section A is introductory and acquires the "passport" data of respondents, principal questions about the availability of a special structure or a person in charge of quality management and where they are placed in the organization's hierarchy. Section B examines some aspects of the quality improvement policies of the participating organizations. Section C is specifically directed towards the relevance of quality improvement instruments; while in Section D the positive and the negative consequences of their introduction and usage are outlined. Section E examines the intentions behind the introduction of guality improvement instruments and the ways to introduce them in organizations that have not done their best to improve quality. Section F provides respondents with the opportunity to evaluate many assumptions related to guality. Section G encompasses control questions about the

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work of the interviewers. The terrain work was conducted in two waves in the month of May and in the months of October and November of 2012 and the results were processed with SPSS. The survey covered 166 organizations (see fig. 1), 86 of which (51.8%) are working in the sphere of education and 80 (or 48.2%) – in healthcare.



Fig. 1. Types of surveyed organizations



Fig. 2. Surveyed organizations - by number of employees

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The healthcare producers are nearly equally distributed by the level of their activity – national, regional and local, while among the interviewed educational organizations those who work on local level (kindergartens and schools) are dominant. Municipal and state organizations (schools, high schools, kindergartens, diagnosticconsultative centres, big national hospitals) prevail in the sample. Some private businesses operating in the healthcare sector was allowed due to the scale of their activity and their significance in the provision of public healthcare services in our country.

As for their legal status, the prevailing part of the interviewed organizations (62%) is budgetary institutions, 32% are trade organizations, and 9 are nonprofit organizations. The distribution of respondents in the survey by number of employees is even (see fig. 2) – exactly every third of them have under 50 employees, are of average size or are big organizations (with a 100 and more employees).

The surveyed sample does not claim to be nationally representative due to its exceptional complexity in terms of acquiring initial statistical data about the institutions that deliver public educational and healthcare services in Bulgaria. Yet, questionnaires were filled in 34 settlements of all sizes. Done randomly, the sample represents relatively even the areas of education and healthcare, the levels of activity, the scale of the organizations and their legal status.

#### 3. Main findings

The general results show that the questions related to the quality of public services are perceived as important for

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society at large and not like the next fashionable trend in the management theories field. Quality is an indicator of a high level of development of the public organizations, but it can hardly be subject to standardization and the return on investments in it is slower. Top managers are concerned more about quality than about personnel.

In the area of public services quality is perceived as a crucial element of their delivery (66.97% agreed fully and 21.7% agreed with that statement). The special features of education and healthcare impose the modification of the existing instruments for quality improvement and complicate their adoption. Respondents are well aware of all the above-mentioned considerations:

- Quality management as dependent entirely upon equipment and that the solution to most of the problems as contingent on funding is not fully shared by the participants in the survey. When asked if there is a connection between equipment and quality, neutral assessment prevails (36.1%). There are also 15.6% who do not share this opinion.
- Quality measurement and standardization in healthcare and education are not perceived as an easy task (overall 65.7% of respondents disagree or take a neutral position). The costs of its implementation are not considered to be low according to 69.9% of the interviewees.

A great part the interviewed organizations (64.5%) have real experience in the application of quality management and improvement instruments. Under 1/10 of the respondents report just a formal introduction of qualitative, statistical or other methods and only six have declared a commitment to

quality only in the strategic papers of their organization without realizing these goals. An exceptionally low share (3%) does not have any attitude towards quality and those who hesitate about whether to introduce quality management and how to do it are 36%. This refutes the working hypothesis 3 in the part that claims that the available tools are more or less perfunctory.

To depict the situation in further detail, the question about the self-assessment of quality was raised. It was answered by those

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- medical centre – hospital) and the assessment which the interviewees apply to the quality of their services. There is also no significant variance by areas of activity. The assessments are distributed relatively evenly depending on the scope of the organization's work – national, regional and local. There is a link only between the number of employees and the assessment of quality – bigger organizations have a higher assessment of the quality of their services (see table 1).

Number of employees	Good at national and European level	Good at national level but not commensurable to the European	Lower than that of similar Bulgarian and European organizations	Very Iow	l cant assess	Total
Up to 9 people	0.0%	2.5%	0.0%	0.8%	0.0%	3.4%
10-49	9.3%	13.6%	2.5%	0.0%	0.8%	26.3%
50-99	6.8%	22.9%	0.0%	0.0%	2.5%	33.1%
100 + people	15.3%	17.8%	1.7%	0.0%	2.5%	37.3%
Total	31.4%	56.8%	4.2%	0.8%	5.9%	100.0%

Table 1. How do you assess the quality of the public services your organization delivers?

119 organizations that put some efforts into improving quality. The predominant part of the respondents (95%) have given themselves a high self-assessment, 67 believe that the public services they provide are with good quality at the national level, while other 37 think that their quality is comparable to that of the analogous producers in Europe. Just six organizations assess the quality of their services as poor or very poor.

There is no connection between the level of activity (elementary – secondary – higher education or general practice Another essential topic is the source of incentive to work on the problems of quality. The ranking of the answers reveals that mainly external factors have been the reason for the organizations to start putting effort into improving the quality of their services. In the first place these are the requirements of the consumers, and next come the requirements introduced by Bulgarian regulatory acts and on the third – directives in European documents. Just one third of the interviewees believe that the work on quality had begun as a result of the organization's internal decisions –

change in their policy or management. This fully confirms working hypothesis 2 based on the assumption that the Bulgarian producers of the healthcare and educational public services regard quality is an issue imposed by external factors.

There are special **structures** for quality management in 59 of the interviewed organizations. In 52.5% of the cases these are higher-standing authorities (directorate level), for 28.8% – middle level structures (department, managers), and in 18.6% these are advisory bodies – commissions or quality circles. In 121 organizations there are people to whom quality questions were specifically delegated.

Overall 113 of the respondents (or 68%) indicated that their organization pursued a special quality-related policy or the aim to improve quality was part of the written goals of the organization. It impresses us to see that the many available channels for promotion of the quality-related efforts are underused. Their presence is particularly insignificant on the internet. Dominant are internal documents and texts that are available only for the staff of the organization. Altogether missing are whiteboards in the generally accessible areas of the premises, brochures and leaflets to support the organizations in their efforts to render high-quality public services to patients or learners.

The regular effort to review and assess the quality in all interviewed organizations is a positive trend – 108 confirm that they take consistent action to this effect. Yet only in 51 organizations (or 30.7% of all participants in the research and 44% of those who have quality policies) a **quality management system** (QMS) has been introduced. No statistically significant relation can be observed between whether a QMS is used

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or not and the corresponding level and type of the interviewed organization (see table 2).

The introduction of QMS most often takes two or three months (20 and 25 percent of the answers of organizations that use a quality management system respectively). Half of the organizations have invested between one and three months, while in 42.5% of the cases the introduction has lasted 6 months or more. Four of the interviewees said that the process had lasted 12 months; two of them declared that introducing QMS had taken two years.

Type of organization	Yes	No	Total	
Kindergarten	0.0%	0.9%	0.9%	
School	12.1%	26.7%	38.8%	
University	4.3%	1.7%	6.0%	
Other - education	1.7%	2.6%	4.3%	
General practice	0.0%	1.7%	1.7%	
Medical centre	8.6%	7.8%	16.4%	
Hospital	13.8%	14.7%	28.4%	
Other - healthcare	3.4%	0.0%	3.4%	
Total	44.0%	56.0%	100.0%	

Table 2. Introducing QMS by type of organization

The availability of QMS does not depend on the number of employees of the organization. There is no clear trend in the pace of the introduction of QMS, nor has the impact of Bulgaria's accession to the EU been identified, with a peak only in the year 2010.

The most common obstacles to introducing QMS (with 12-15% frequency of mentioning) are the lack of funds (probably for education and for introducing the system), the inconsistent data and organizational problems. The answers expose several additional problematic areas although they are mentioned only once – the required volume of documentation, the

development of computerized quality control systems, the precise definitions of criteria and measurements. All these underline key issues in organizing future training courses or writing manuals on QMS introduction in Bulgarian organizations.

Despite all the problems, the data shows that adopting QMS has been made mostly by the organizations themselves. In only 6.1% of the cases the services of a specialized firm or a non-profit organization have been used. In the group of the public services providers that have introduced QMS, 44.9% have done so on their own; 22.4% have introduced QMS by themselves but after some training; 26.5% have been assisted by consultants. So the efforts to put quality management on a systemic basis can be perfected by training or consulting rather than by creating specialized firms. Methodological Instruments for Public Services Quality Improvement

Traditional stakeholders such as consumers, financial institutions, partners, professional associations and employees are seen as rather important, important or "extremely important". There are only 12 opinions (out of 830 answers) that the stakeholders' point of view is completely unimportant and 22 answers that it is unimportant.

Another way to measure whether organizations implement their assumption that they appreciate the stakeholders' opinion in defining and managing quality is to study how they **involve citizens** at the different stages of quality improvement. One fifth of the participants in the study do not involve citizens at any stage, and half of the organizations do it at the end stages of the process – after the service is delivered and as a final assessment. The low level of citizens' involvement in defining



Fig. 3. How important is the stakeholders' opinion on quality? (number of answers)

Another interesting question was which stakeholders' opinion was perceived as important by the interviewees (see fig. 3).

and improving quality is confirmed when respondents were asked about the forms they use to involve customers. A big portion

of the respondents (slightly over 40%) say they simply inform citizens about the steps they have undertaken to raise the quality – through media releases, websites, etc. The deeper citizens are involved, the lower is the frequency of use of the respective form of interaction between the public organization and citizens. Only 58 organizations use consulting, and 13.5% - public participation. Slightly over one sixth of the respondents have established a real partnership with citizens on all stages of quality management.

A total of 107 of the 166 respondents (or 64.5%) say that they use quality improvement instruments. Twelve respondents point out that the usage is only formal, while another 11 say that they the introduction of such instruments was under way during the survey. Methodological Instruments for Public Services Quality Improvement

instruments is rather formal – only 6.6% of all participants in the survey state that their work is formal. There are four groups of instruments (see fig. 4):

- Frequently used national / regional and internal quality standards (mentioned by over 70% of the organizations that apply quality instruments).
- **2. Averagely used** international quality standards, accreditation, and clinical pathways (30% or more).
- **3. Rarely used** Common Assessment Framework, citizen / patient charters (used by nearly 20% of the organizations).
- Extremely rarely used benchmarking / benchlearning and Model of Excellence (mentioned by less than 10%).





Fig. 4. Frequency of application of different quality instruments

So there are 84 educational and healthcare organizations that really apply quality improvement instruments. That is 50.6% of the initial sample. These findings once again **reject the working hypothesis 3** that the application of quality improvement (see table 3) by types of organizations draws several conclusions: none of the kindergartens use any quality instruments; most instruments are used by schools, medical centres and hospitals.

Different types of standards are used

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	Table 3.	Frequency	of use of	quality	instruments
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Type of organization	International standards	National / regional standards	Internal standards	Accreditation	Benchmarking / benchlearning	Model of Excellence	Common Assessment Framework	Citizen / patient charters	Clinical pathways
Kindergarten	-	-	-	-	-	-	-	-	-
School	15	33	36	4	4	6	8	1	-
University	3	3	3	7	1	-	-	-	-
Other - education	2	1	-	-		-	2	1	-
Education total:	20	37	39	11	5	6	10	2	0
General practice	-	1	-	-	-	-	-	1	-
Medical centre	3	13	14	11	1	1	3	8	5
Hospital	17	23	21	27	3	2	4	10	26
Other – healthcare	3	4	3	3	-	-	-	-	3
Healthcare total:	23	41	38	41	4	3	7	19	34
Total:	43	78	77	52	9	9	17	21	34

at all healthcare and educational levels, while clinical pathways are typical only of the health system. Accreditation is mandatory by law for all universities and advisable but voluntary for healthcare facilities. Nevertheless it is used by other types of organizations because it is a form of external assessment and a guarantee of quality. Citizen charters are used mainly in healthcare. The Model of Excellence and the CAF are slightly known and rarely applied.

Such findings suggest that **working hypothesis 1**, based on the assumption that the introduction of quality instruments is uneven depending on the type of the public service, is in part valid. This is true for the accreditation, citizen charters and clinical pathways. But when the size of the organization and the type of its activity are taken into account, the application of quality instruments is far more diversified.

Thirty nine of the participants use different qualitative methods: matrix diagrams, fishbone diagrams, affinity diagrams and house of quality. Statistical methods are used by 64 organizations (see figure 5). Specific methods, equivalents, cause-effect relations and inquiry are mentioned among the other qualitative methods used. Among the statistical methods that respondents have added are qualitative measurements, expert opinions, comparative tables, variation and alternative strategic analysis, statistical processing of inquiry cards and clinical methods.





A logical consequence of the frequency of use of national and internal quality standards is that most of the organizations (97 of all 107 that apply quality instruments) have written documents concerning quality management. Even though 65% say that they work systematically to improve quality, this has not been suggested considering the volume of the respective documents. Most of the respondents who use quality instruments (81.3%) have some kind of guidelines in place, but only 36.4% have standard operating procedures, 29% - handbooks, and just 20.6% - guality management system. That is a clear indicator that all interviewees are at the starting stage of the long road to the systemic quality management.

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One of the main topics of the project was to find how useful the quality instruments were to the organizations that apply them. The survey did not aim to measure any changes in consumer satisfaction or in the motivation of the personnel employed by the educational and healthcare organizations. So the participants offered their personal opinion on the efficiency and adequacy of the qualityrelated instruments that their organization was using. Education and healthcare have their own specific features, so there is no direct transfer of the quality instruments from the business field. So the research team expected higher scores for specific instruments like accreditation, patient charters, CAF or Model of Excellence. To facilitate the comparison between the efficiency and adequacy of each instrument, every score is weighted by the frequency of valid answers and then all answers are summed up1. The total scores can be seen on table 4.

Table 4.	Total	scores	for a	the	effici	ency	and	adeq	uacy
of the q	uality	instrum	ents	;					

Instrument	Efficiency	Adequacy		
Accreditation	456,4	449,3		
Citizen/patient charters	452,3	432,9		
Inner quality standards	445,2	440,8		
Clinical pathways	438,8	413,1		
National/regional quality standards	438,7	431,6		
International quality standards	423,4	423,3		
Benchmarking/ benchlearning	421,8	412,5		
Model of Excellence	416,7	450,0		
Common Assessment Framework	408,3	392,0		
Qualitative methods	397,5	400,0		
Statistical methods	384,7	384,7		

<sup>&</sup>lt;sup>1</sup> The efficiency is measured on scale from 1 to 5 where 1 means the instrument is totally ineffective, 2 - the instrument is ineffective, 3 is a neutral score, 4 means the instrument is effective, and 5 – the instrument is highly effective. The adequacy is measured on scale from 1 to 5, where 1 means the instrument is totally inadequate, 2 – the instrument is inadequate, 3 is a neutral score, 4 means the instrument is adequate to the work of our organization, and 5 – the instrument is highly adequate.

Several conclusions can be drawn by the data presented in table 4. Arranging the total scores for both criteria shows relatively similar results for the applied guality-related instruments. The scores of the individual instruments do not differ significantly. There are some minor divergences: the Model of Excellence is first by adequacy (and with a low score for efficiency) while the efficiency of the clinical pathways is much higher than their adequacy. The accreditation, inner standards, citizen charters, national and regional standards receive high scores along the two criteria. For example, the accreditation is highly effective (67.3% of the answers) and highly adequate (64.7% of the answers); both scores for citizen charters are 57.1%. Qualitative and statistical methods and the CAF get lower scores. These instruments are assessed as fully ineffective or ineffective by 7-8% of the respondents and as fully inadequate or inadequate by 5-10%. Typical for the public-sector instruments like the Model of Excellence, benchmarking/benchlearning and Common Assessment Framework are

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the instruments, the lack of competence to process statistical data, the lack of flexibility in adjusting the instruments to the characteristics of the public sector, and other factors.

A positive finding is that almost all interviewees share the opinion that the quality of the services they deliver has increased due to the application of different quality improvement instruments. There is only one answer that there has been no improvement of the quality. The core idea is that quality instruments improve the services (68 answers 'yes' and 39 - 'partial improvement'). These views are not contingent on the area of occupation or the size of the organization. Interviewees from universities and hospitals are more convinced of that than organizations operating at the lower levels of both systems. The introduction of quality instruments has had a number of positive effects (see fig. 6).

The data presented on figure 6 outlines some interesting trends. It turns out that quality management is not directly connected to savings or to refinement of the production processes. Quality improvement



Fig. 6. Introducing quality instruments - positive outcomes

perceived as inefficient and non-applicable.

The reasons behind these opinions can be the object of a follow-up study. Possible explanations are the poor understanding of is directed mostly towards consumers – it builds better image and guarantees higherquality services. The second conclusion is that the efforts to raise quality are perceived

as a serious managerial tool to motivate the personnel and to improve the organizational climate. Making it easier to establish the contacts with foreign or domestic financing institutions and partners is not a common effect. That data rejects that part of working hypothesis 3 based on the assumption that the introduction of quality-related instruments does not improve quality and consumer satisfaction, but verifies the part about the lack of efficiency improvement.

Of course, the efforts to improve quality are also connected to some negative outcomes: bureaucratization of the job (65 answers), increased costs for quality control (42 cases), demotivation of personnel and lack of effect on the end product (9 and 7 answers respectively). The negative effects occur far less often and mainly stem from the task to manage quality. The standardization of the procedures and the introduction of QMS require creating some volume of bureaucracy. It is also worth noting that quite a few interviewees say that there has been an increase of workers' motivation.

The introduction of quality improvement instruments in the Bulgarian public services is still at its initial stage, there is not enough data about specific Bulgarian problems and solutions. Therefore it was interesting to find out whether the respondents in the survey were willing to share their experience. Slightly more than half of the respondents (56.1%) would definitely share what they have learned while introducing quality-related instruments; 37% hesitate; and 12% refuse to share the knowhow. Far more positive answers were given (120 cases or 72.3%) when the participants were asked whether their institution could be serve as an example of the good practice in a case study in the education sector.

There was a section in the questionnaire about the intentions of those organizations that have not yet introduced quality instruments, or use such partially or formally. That group consisted of 59 institutions. Only

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five respondents said that they did not plan to introduce quality instruments over the next three years. The major reasons pointed out were "it is not necessary at that point" and "there is no time to do it due to the great bureaucratic and administrative burden". One participant said that quality was a personal, not organizational responsibility.

More than half of the organizations (56.1%) plan to introduce quality instruments and 42.9% of them intend to do it within a year. The remaining 20 organizations plan to start their work on quality over the next three years. Only 5.4% said that they would resort to the services of a specialized consultant firm. The rest planned to do it by themselves (27%) after additional training (37.8%) or with the help of individual consultants (29.7%). The data shows that the organizations are going to need some help but plan to work mostly by themselves.

All participants were asked to choose some methods for additional improvement of the quality of their services. Their answers (see figure 7) once again highlighted the idea that quality is a managerial subject. The most often choices were raising the qualification of the staff, better equipment and funding, refinement of management as a whole.

Just 43.9% of the participants think that they need specialized quality-related training. Organizations from the sphere of secondary education most often choose qualification and financing, followed by better equipment and regulations. The higher level of qualification and increased financing are most valued in higher education. The same methods are leading for the hospitals and the medical centres.

The main finding of the survey confirmed that there is a lag of the quality of the public educational and healthcare services. Just 31.4% of the participants say that they deliver services with European level of quality. In addition there are other specifics in the quality improvement efforts, depicted by the analysis of the working hypotheses.



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Fig. 7. Methods of additional quality improvement

Working hypothesis 1 "The introduction of quality management instruments is uneven in the different types of public services, levels and range of the activity and size of the organizations" is not fully rejected. There is no statistically significant link between the number of personnel and the efforts on quality; neither is there a link between the area of work (education or healthcare) and the use of quality instruments. At the same time detailed data shows that the practice of institutions working on different levels (local, regional or national) is uneven.

Working hypothesis 2 "When quality improvement instruments are used, in most of the cases this is not a consequence of a decision taken by the public service supplier but is a result of external stimuli" is fully corroborated.

Working hypothesis 3 has more components and the results of the survey verify some of them while rejecting others. The formality of the application of quality instruments is fully rejected. Respondents are of the opinion that the use of qualityrelated instruments improves quality and increases consumer satisfaction with public services. The hypothesis is verified concerning the lack of increased efficiency. So after testing, working hypothesis 3 should be rephrased as follows: "The application of all tools is not formal, it leads to a rise of the quality and the consumers' satisfaction, but it does not lead to a rise in efficiency".

In conclusion, the view of the research team that the specialized instruments for public services quality improvement are still vaguely known, applied due to external stimuli, and with inconclusive results is confirmed. The quality issue is considered important but it still does not influence the real practice of Bulgarian educational and healthcare organizations.

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