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Review Article

Application of Balanced Scordcard Units in Care Primary Health Functional: The USF Case of Aces Entre Douro E Vouga II - Aveiro North

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Abstract

The aim of this study is to analyze the way the Balanced Scorecard (BSC). It can be applied in functional units (UF) of the Health Primary Care (PHC) in the attainment of certain profitability levels required respect.

The paper was prepared comprising the literature about the activity of the health and performance of systems, specifically the BSC, culminating in the practical application of the Strategic Map to two USF ACES Aveiro Norte.

The results obtained in the five perspectives BSC show that there lineariadade USF in St. John and Calâmbria. Its application for each of them can integrate the performance management process, also serving additional functions such as communication priorities, allocation of resources, goal setting, performance assessment and strategic control. The application of the BSC will thus make the crossing in key areas for USF.

Keywords: *Balanced Scorecard (BSC); Functional Units (UF); Health Primary Care (PHC)*

Introduction

PHC is the first individual contact level, the family and community with the health system, allowing assistance as close as possible to the places where people live and work. These health care is a fundamental aspect of economic and social development, and are of great importance in our socio-political domain. So we can say that there is a high need to strengthen PHC, reducing in this way the unnecessary demand for care in hospitals, which increases costs to the National Health System (NHS).

The management of functional units (UF) of the Primary Health Care (PHC) needs to be carefully assessed taking into account the technical and social importance of their performance. So, despite recognizing the overall complexity of the problem, we will deal more specifically the Balanced Scorecard (BSC). In essence, the question focuses on the need to better address the rights and duties of citizens and the effective quality of CSP form an integral part of the health system and social development and global economic community.

The challenge that we propose, refers to an institutional environment work and has as its object the realization of a case study to ACES between Douro and Vouga II - Aveiro North (EDVII-AN) and to assess the importance of applying the BSC to two of the aforementioned UF ACES.

Initially the BSC was proposed as a performance assessment tool, depending on their capabilities were becoming evident, this concept quickly evolved into a performance management system. Thus, Second It is no longer seen as a simple assessment tool of organizational

performance, to become an integral part of that performance management process, serving additional functions such as communication priorities, resource allocation, goal setting, performance evaluation and control strategy [9].

It is important to answer the following research questions:

- What is our image before the financiers?;
- How should we be seen by our users?;
- What processes have to be excellent?; and
- How can we develop capacities for change and growth?

Create the link cause and effect between performances and indicators is one of the most complex aspects to implement a BSC but overcome this difficulty, it means that we get a system that links strategy, enables communication between all stakeholders and promotes a constant articulation strategy with the surroundings of the ACES concerned.

The justification for the choice of subject BSC and its connection to the CSP, is related to the fact that it is still something little applied in health and perhaps be an essential tool for CSP. The ACES are complex systems composed of various services sectors and departments with a variety of professional groups. if Constitution as organizations which hosts a range of interpersonal relationships of complex nature. Therefore, the CSP should be organized and designed so that there is quality, lower costs and more information and consistent results. To this end, ACES must have their mission very well defined.

Although the management of CSP presents similarities with the management of any other service business, especially in financial terms, there are fundamental differences that distinguish one from the other. Any manager has the concern that the objectives set are met and a BSC view, is dependent on the optimization of the four perspectives involved: financial, customer, internal processes and learning.

Over the past few years, the BSC was seen as a prominent tool in the "performance" for its "ability to align, integrate and interact with other improvement methodologies, creating a strategic switchboard adaptable to any type of organization" [23]. Regardless of it being a business, a non-profit or public services.

Thus, carried out a study the Family Health Units (USF) - study of two cases. The goal is to understand performance trends in order to evaluate this new management model and its impact on the delivery of health care. The two USF used in this study are the USF model B - St. John, St. John's Wood and USF model The - USF Calâmbria Cambra Valley.

Theoretical foundation

Evolution of health centers in Portugal

In 2005, it is given the boot for the change is based on the approach to the citizen, in connection to the country's reality, autonomy in multidisciplinary and integration. This year, the Council of Ministers decreed the creation of the Mission for Primary Health Care (MCSP) [18] "with the nature of mission structure, for driving the global launch design, coordination and monitoring of the reconfiguration strategy of health centers and implementation of family health units" [20].

The main mission objectives for the CSP spent to improve health care, quality and continuity of these, as well as the efficiency and increase the satisfaction of professionals and users. To this was considered necessary to modernize and reconfigure the CS by following

certain principles, such as community orientation, organizational flexibility and management, bureaucracy, teamwork, autonomy and accountability, continuous quality improvement, contracting and evaluation [2].

The ACES are defined as public health services, with administrative, off-center of the respective Regional Health Administrations (ARS), but under its power of direction, made up of several units. They are responsible for ensuring the provision of CSP to the population of a given geographical area. Comprise the following functional units: the functional units of Public Health (USP), the Shared Resource Units (URAP), Community in Care Units (CCU), the Personalized Health Care Units (UCSP) and the Health Units family (USF). There are still the Management Support Unit (GSU) to support the Executive Director, the Executive Council, the Council and the Council of Clinical Community Health Centers Grouping (ACES) [2].

This new reorganization led to a profound change in the structure and functioning of the services and consequently the management of human resources they contain. Currently, it has gained special status the paradigm Centered Medicine in Person (MCP), a concept which covers comprehensively the needs, concerns and experiences of each user in relation to health and begins to position itself as central in clinical practice. These facts imply a more integrative and comprehensive model to fill gaps in the user's relationship with the professionals, in addition to essentially aspects linked to the disease, which opens up a more effective way to fight against the dehumanization of medicine.

The degree of satisfaction of all stakeholders clearly improved since the best adherence, reducing anxiety and complaints of bad practices and the reduction of health costs are very positive consequences. Not surprisingly, therefore, that obtain better results and more effectiveness and efficiency of care.

Family health units

The process of moving to the "new health centers" would: the establishment of USF, creating ACES, introducing a new model of management, clinical governance institution and reorganization of support services, including deactivation of the sub-regions Cheers.

The USF is defined as basic units to provide health care, individual and family, which are based on multidisciplinary teams, consisting of doctors, for nurses and administrative staff and can be organized into three development models: A, B and C (Decree-Law No. 298/2007 of 22 August). The classification of a USF in a given level is determined by the compliance criteria in the following areas of differentiation: the degree of organizational autonomy, retributive model differentiation and professional incentives, and financing model and appropriate legal status.

According to Decree-Law No. 298/2007 of 22 August, the characterization of models is made as follows:

- Model A: Corresponds to a phase of learning and improvement of the work in family health team; comprises the USF general government with rules and defined remuneration by the public authorities applicable to the sector and the respective careers of the professionals that integrate and possibility of a contractual an additional portfolio of services, paid in overtime regime, as well as contractually the achievement of goals, which translates into institutional incentives to revert to the USF;

- Model B: Suitable for teams with greater organizational maturity, where the work in family health team is an effective practice and should be willing to accept a more demanding performance contracting level and participation in the process of accreditation of USF, a maximum of three years; USF covers the general government; have a special remuneration scheme for integrating medical base remuneration, supplements and compensation for the performance and financial incentives for nurses and medical secretaries, according to the results obtained by the respective professional team; such as the model, contratualizam incentives from institutional incentives and provides for the possibility of a contractual an additional service portfolio;

- Model C: Experimental model, to be regulated by specific legislation, with supplementary character in relation to any shortcomings demonstrated by the NHS, and the USF to be defined according to quotas established by the regional health authorities and face the existence of citizens without family doctor assigned; USF covers the social, cooperative and private sectors, in conjunction with the health center, but no hierarchical dependence on this, basing its activity in an established program contract with the ARS.

Currently there are only USF model A and B.

The USF is therefore an integral part of the IC, and its activity is developed with organizational, functional and technical independence, a network integrated with other functional units of the health center or local health care unit (ULS). They are required to ensure the provision of personalized health care, without neglecting the goals of efficiency, quality and accessibility; and are subject to a process of evaluation, objective and permanent, with a view to continuous improvement and the achievement of health gains (Decree-Law No. 298/2007 of 22 August).

Assist a number of users ranging from four to eighteen thousand. The lists of users per doctor are calculated in units Weighted (UP)[1]. As already mentioned in connection with the draft board Remuneration Special, the UP represent the weight of users. In USF, every doctor should be responsible for a minimum list of one thousand nine hundred and seventeen UP which corresponds on average to one thousand five hundred and fifty users[2] (Silva and Simões, 2000).

The Legislative Order No. 24100/2007 states that the criteria and methodology for classifying USF in these models are produced by the MCSP [18] in conjunction with the ARS and Institute of Management Computer and Financial Health (IGIFS).

1. Contracting in primary health care: process and performance indicators

The contracting process in primary care values the multidimensional performance of institutions and is based on the recruitment of health care, organized into two sub-processes:

1. The external contracting, held between the ARS and the respective ACES, formalized with the negotiation of Performance Plans (PD) and the signing of the Contract-Program (CP).

2. The internal contracting, held between ACES and the respective UF, formalized with the negotiation of Action Plans and the signing of the Commitment Letters.

The Executive Directors and Clinical Directors and Health ACES assume full responsibility for internal contracting process with UF, competing to the Departments of Contracts of ARS monitoring the quality and consistency of processes, ensuring their suitability and technical robustness.

The external and internal contracting processes are dynamic and interdependent, with a clear and prior alignment with National Plans, Regional and Local Health, the process design starts in December and is completed by March next year.

The internal contracting the ACES covers all functional units (USF UCSP, UCC, and URAP USP) having the same conceptual framework and methodology including:

[1]The weighted units are calculated by assigning different weighting factors to the population list, depending on their age distribution per year.

[2]Children under 6 are weighted by a factor of 1.5, adults between 65 and 74 by a factor of 3, adults 75 years or more by the factor 2.5.

1) It is marked by the Local Health Plan and the Health Profile definition of site;

2) Requires the negotiation of a three-year action plan with annual targets; and

3) Considering the specificities of the different portfolios of UF services.

Monitoring and evaluation are operationalized through a Global Performance Index (GDI).

Diversity or the contexts of care of each UF type, either of their levels of development and organizational maturity, led to the design of a model in order to evaluate (quantify and qualify) the performance of all UF, promotes continuous improvement and reduction in variability of the results achievable in the context of fairness between different organizational types.

The operation of this goal is through the performance evaluation based on a multidimensional array that brings an integrated view of the overall performance of each type UF.

For each area defined multidimensional array is different subareas, dimensions, metrics and indicators, identifying the expected results. The indicators used in the contracting process must set out the PHC Indicators Matrix and respect all your requirements and attributes and respect the rules of the Indicator Matrix.

According to the operacionaçização Guide 2018 and from possible and appropriate, we use indicators such as:

1) Compounds or indexes in complex care processes that require reading and multidimensional monitoring (e.g. indicators of access, efficiency, result, scientific technical suitability);

2) In "result" (E.g. preventable hospitalization, patients with chronic controlled conditions, response times).

The GDI is obtained by the weighted sum of Sector Performance Ratios of the Areas (IDS_A)[3], Which in turn is obtained by the weighted sum of Sector Performance Ratios of Subareas (IDS_S)[4], Which in turn is obtained by the weighted sum of the Sectoral Performance Ratios of dimensions (IDS_D)[5] (See table 1).

IDG Global	IDG Sector		Dimensions
	Area	Sub area	
IDG (100)	Performance (100x0,5)	Access (100x0,2) - Access Qualification	Coverage (1 000x0,1)
			Personlização (000x0,1 1)
			Telephone answering (1 000x0,1)
			TMRG (000x0,4 1)
			Consultation on (100x0,1)
			Path (100x0,1)
			Distribution on (100x0,1)
			Child health (100x0,25)
			Women's health (100x0,25)
			Adult Health (100x0,25)
			Health of the Elderly (100x0,25)
		Disease Management (100x0,2) - course management/care plan, results in the management of acute and chronic illness	The person with diabetes management (100x0,25)
			The person with hypertension management (100x0,25)
			Management person with D. Respiratory (100x0,25)
			Management person with multimorbidity (100x0,25)
		Prescription qualification (100x0,2) - Scientific Technical Adequacy, Effectiveness, Efficiency.	Prescription pharmacotherapeutic (100x0,05)
			Prescription MCDTs (100x0,03
			Prescription Care (100x0,02)
		Satisfaction (100x0,2)	

[3]Sector performance indices of areas.

[4]Sector performance indices of subareas.

[5]Weighted sum of sector performance ratios of dimensions.

IDG (100)	Services (100x0,1)	Assistance (100x0,8)	Character service Assitencial
		Do not care (100x0,2)	Clinical Governance activity in ACES
			Not Assitenciais activities Regional Services or the Ministry of Health Centers
	Organizational quality (100x0,2)	Continuous improvement (100x0,4)	Access (100x0,25)
			Relief Integrated Processes (100x0,75)
		Safety (100x0,4)	Users (100x0,4)
			Trade professionals (100x0,3)
			Risk management (100x0,3)
		Centralization Citizen (100x0,2)	
	Formation (100x0,1)	internal (100x0,8) For professionals UF	Multidisciplinary team (100x0,5)
			Internal/students (100x0,5)
		external (100x0,2)	UF and/or its employees and external trainers
	Investigation work (100x0,5)	Articles, Communications, Conferences (100x0,5)	
		Investigation work (100x0,5)	

Table 1: *IDG calculation [10].*

Source*: Prepared own c/based on doc. Twilds Reference p/health care contracts in the SNS in 2021.*

The result of each GDI IDS_A, and IDS_S IDS_D is a value between 0 and 100 (actual continuous scale).

The weightings of IDS_A, IDS_S and IDS_D are correct object in the following situations:

1) Omission of performance matrix components (e.g. existence of a dimension of the matrix without validated metrics or indicators; existence of a subarea matrix in which all the dimensions were to operate);

2) UF on grounds (or other context) not attributable to itself, can not take/not require any dimension of the multidimensional array activity, in which the calculation of the IDG is obtained by correcting the weights of the remaining dimensions.

All indicators of the indicators matrix with CSP results are available, whether or not used in calculating the GDI 2021. The indicator reading result has the metric previously reported (0,1,2) [6].

According to the document to the CSP contracting for 2021 and after calculating the performance levels of each USF we know that ranking belongs, as the following table 2.

Echelon	Criterion
THE	<50
B	≤ 50 and <75
Ç	≥ 75 and <85
D	≥ 85 and <95
AND	≥ 95

Table 2: *IDG performance levels.*

Source*: (ACSS, 2021) Terms of Reference for Contracts CSP 2021 - calculation of the GDI - UCSP and USF [1,13].*

When you want to analyze the performance of an organization, usually refers to the determination of a set of performance indicators, commonly known as Key Performance Indicators (KPI). In the case of the USF, the indicators used in contracting are grouped into four main areas: access, care performance, quality perceived and economic performance, as shown in the table.

To relax and simplify the process, they are contracted fifteen indicators, and the distribution made on the following basis: four access eight of healthcare performance, quality perceived and two economic performance (Table 3).

Area	Number[1]	Indicated
Access	3:12	Percentage of queries to the user by his own family doctor
	3:15	Global utilization rate of consultations
	4:18	Medical domiciliary visit rate per 1000 subscribers
	4:30	Home visits nursing rate per 1000 subscribers
Performance assistance	5.2	Percentage of women between 25 and 64 with updated coloproctology
	5.4 M	Percent diabetic at least 2 HbA1C[2] recorded in the last 12 months since covering 2 semesters
	5:10 M	Percentage of hypertensive patients with at least one PA assessment[3] in each semester
	6.1 M	Percentage of children PNV[4] upgraded to 2 years
	6.1.M	Percentage of children PNV[5] upgraded to 7 years
	6. 12	Percentage of first consultations in life made up to 28 days
	6.9 M	Percentage of first pregnancy consultations in the first quarter
Efficiency	7.6	Average cost per user of the prescribed medicament
	7.7	Average cost of MCDT[6] prescribed by user

***Table 3**: Common indicators to USF.*
***Source:** ACSS (2021).*

According to the provisions of Decree No. 212/2017 of 19 July, and guide Operationalization of CSP IDG in 2021, we can say that the evaluation process for each of the contracted results indicators one of three qualitative ratings: "hit", "almost reached", "not reached".

The this reflects a scoring system two, one and zero, respectively. The following table summarizes the evaluation of the metric USF (Table 4).

[1]Number of indicators - national scorecard of the NHS list.

[2]HbA1c - glycated hemoglobin analyzes the hemoglobin level that glycation suffered the bloodstream, helping to control and diagnosis of diabetes. It is a simple test that can establish a mean blood glucose level of the patient in the last three months.

[3]PA - Blood Pressure.

[4]PNV - National Immunization Program.

[5]PNV - national vaccination program

[6]MCDT - Media Complementary Diagnosis and Treatment

Score	Punctuation	Access performance assistance Quality perceived	Performance Economic
Reached (result within the expected range)	2	<90%	≤ 100%
Almost reached (result within the acceptable range)	1	[80-90%]	[100 -105%]
Not reached (not fulfilled)	0	<80%	> 105%

Table 4: *Av metrics of indicators contracted by USF.*

Source*: (DGS, 2021) Terms of reference for health care in the SNS contracts for 2021 [6,7].*

Balanced scorecard (BSC)

The BSC helps organizations overcome two fundamental questions: the effective evaluation of organizational performance and implementation of the strategy [14], assuming with a performance management system in line with the strategic implementation.

The BSC was developed by Robert Kaplan, a professor at Harvard University, and David Norton, a consultant also from Boston. In 1990, Kaplan and Norton led a study with a dozen companies, aiming to explore new performance evaluation methods. Robert Kaplan and David Norton in 1992 after a research project in 12 large companies designed the BSC, a set of measures that complemented the traditional financial measures, more targeted to past events, with operational measures to create future value, particularly in customer satisfaction areas, internal processes, learning and growth, all in an integrated way [14].

It allows Thus, to those organizations, in addition to seeking achieve good financial results, monitor progress in the acquisition of intangible assets required for growth by becoming the bridge between long-term and short-term action strategy (Kaplan and Norton, 1996). The objectives and measures constituting the four BSC perspectives - financial, customer, internal processes and learning and growth - derive from the strategy and vision of the organization.

In the early design tool BSC interest focused mainly on addition of intangibles evaluation, allowing a long term view [14].

At a later BSC phase was seen as a management system directed to the improvement and planning [15], then through an evaluation system to a strategic management system with the vision and the strategy to be placed on Scorecard center [16].

Describing the cause-effect relationship between the objectives of each perspective has emerged a new instrument, now of crucial importance in implementing the BSC - Strategic Map. Strategy maps, which the authors themselves have at least the same importance as the BSC, can communicate both the organization's strategy and the processes and systems that will help implement it, through a visual representation of critical objectives and the crucial relationships between them. From a broader perspective, strategy maps show how the organization will convert the resources and initiatives into tangible results [17].

Thus, the BSC has evolved into a communication system and the strategy translation strategy into operational terms [22] in stages:

1. Performance evaluation system;
2. System strategic management - Evolution 1;
3. System of communication strategy - Evolution 2;
4. System change management.

The BSC can be used as performance appraisal system, strategic management system and as a communication tool [19].

In the case of public services, this perspective functions more as a facilitator or as a constraint in implementing the strategy of the organization, i.e. reflected in the objective of respect for granted budget the establishment and use of efficient and effective resources available [21]. In addition, it occupies a leading role, after the mission, and emerging from it.

The perspective of identifying internal processes which are those where the organization should be excellent, which existing processes, which may be the subject of actions to improve or create new processes. The measures violate the internal processes that have more impact on customer satisfaction and the achievement of the financial objectives of the organization. In this way, and public services, indicators of this perspective relate to the choices made from the perspective of customers and stakeholders, also having connection with the reduction of costs and maintaining financial perspective quality (Maia, 2011).

The set of cause-effect relationships between perspectives, goals, objectives and indicators is a basic principle in the operation of BSC and sets it apart from other performance assessment systems [22]. Their merit lies in the proper combination of these methods and processes, building a consistent conceptual proposal and the innovative combination of these elements:

- The social perspective - Increase user satisfaction;
- Optimizing health and preventing disease;
- Improve the quality and efficiency of services provided;
- Improve communication.

If it is found we can continue to create value for the services.

2. BSC application in the health sector

Considering all performance management systems, the BSC is probably what can be used in health care. It is endowed with capabilities that are unique and that can be extremely useful for the management of public services in health.

The design and development of performance management systems based on the BSC methodology in the health sector have the following benefits [24]:

- Link performance assessment to strategy;
- Align professionals with a more targeted strategy for users;
- Facilitate, monitor and evaluate the implementation of the strategy, providing continuous feedback about this, which holds regular strategic adjustments;
- Facilitate the selection of initiatives and optimize the allocation of resources;
- Communicate the strategy to all levels of the organization;
- Encourage communication and collaboration among health professionals;
- Assign accuracy and help convey relevant information to the public;
- Find a common language to different professional groups and facilitating the relationship between management and these, since it is a simple and multidimensional tool.

Inamdar and Kaplan [11] conclude that the BSC, as an implementation tool of a performance management system, can be successfully applied in the health sector, enabling organizations to improve the satisfaction of users, the market position and financial results as well as a reminder of the importance of the commitment of managers and top management, ensuring all the necessary resources and specific training of professionals. When this compromise fails, it is most likely the failure of the implementation of the BSC.

Research Methodology

Framework

This work is an investigation that, as to the method can be classified as a descriptive observational research. Coutinho [14]. This area of research involves studying, understanding and explaining the current situation of the investigation. In this research we used the "case study", which according to the same author, is a type of study that has been widely used in all the sciences, especially in the social sciences. The case study is an empirical approach that investigates a current phenomenon in its real context, when the boundaries between certain phenomena and their context are not clearly evident, and which are used many data sources.

Research tools and data collection

In order to obtain the information necessary to carry out this study, the data collection technique was adopted document analysis. This research focused mainly on publications (articles and theses) already produced about the BSC methodology, official documents - documents already processed information (such as letters of commitment from USF Calâmbriga and USF São João) and official information websites already treated and available to the public.

1. Proposal for performance management model according to the BSC applied to two USF Aces EDVII-AN

This study aims at analyzing how one can apply the BSC two USF different models of the same ACES, USF Calâmbriga and USF St. John. Based on this, the nature of the object to investigate, was adopted qualitative methodology, the works mentioned in the theoretical framework of this study, to develop this research.

Therefore, we proceed in the following points application BSC philosophy as presented above, i.e., following the guiding line [17].

We should've caveat that it is difficult to apply the BSC to USF, for practical reasons related to the necessary permits and the slowness of the same in obtaining them. We were able to use the information that is available on the Internet and accessible to all who need to consult.

We left already our proposal for future application of this strategic tool for those who, in time, get access to all information for all perspectives in the study.

We apply a theoretical way the same model both USF.

Mission, values and vision

The mission of the two UFS are - Ensure the provision of CSP to the population of a given geographical area.

The values - Develop activities to promote health and disease prevention, care in sickness as well as the connection to others, services for continuity of care.

Develop epidemiological surveillance, health research, monitoring and evaluation of the results and participate in the training of various professional groups in its different phases, pre-graduate, post-graduate and continuous.

The vision - relate to legislative part that we are required to do.

Objectives, indicators, targets of the strategic plan of USF

Having regard to the diagnosis of ACESEDVII-AN situation, prepared by the local observatory of health, the priority areas of intervention of Calâmbriga USF and USF St. John, are as follows:

- Cardio-cerebrovascular diseases;
- Oncologic diseases;
- Diabetes mellitus;
- Mental health disorders;
- HIV infection AIDS;
- Tobacco consumption;
- Overweight/obesity/promoting healthy eating;
- Teenage pregnancy.

Besides these areas, and considering the issues and national priorities, the two USF also include the following areas:

- Respiratory diseases;
- Diseases attributable to alcohol;
- Accidents.

In the case study, the USF Calâmbriga and St. John USF:

- The goal will be to maximize user satisfaction.
- The goal seek greater effectiveness and efficiency in the service of users.
- The indicator for excellence will be the get enough of users.

Initiatives to put into practice go through: Provision of primary health care [3] oriented to the citizen and the community surrounding the municipalities of São João da Madeira and Vale de Cambra, based on the principles of proximity, accessibility, equity and quality, thus contributing to their satisfaction.

The perspective of users

Coordinators for the USF study users are primarily interested in the proper functioning of the USF.

The objectives of this perspective are:

- Increase user satisfaction;
- Improving the performance of employees (doctors, nurses and assistants).

To assess these indicators objectives can be based on:

- Waiting period for consultations and appropriate care by the family doctor or nurse;
- % of satisfied and very satisfied users;
- Number of complaints;
- Waiting lists for nursing care;
- Mortality and morbidity;
- Number of acute episodes with episode encoding (ICPC2) [13]/Total number of episodes;
- % of hypertensive patients with blood pressure recording in each half;
- % of newborns term low birth weight;
- amputations of diabetic incidence in the population residing/inhabitant 10,000;
- Incidence of stroke in the population resident/inhabitant 10,000;
- Consumption anxiolytics, sedatives and hypnotics and antidepressants in the NHS market, in the clinic (Defined Daily Dose/1000 inhabitants/day);
- Number of incidents reported and bad clinical practice;
- Number of clinical acts scheduled and unrealized;
- Average registered by physician;
- Average assisted by a health professional;
- Average medical consultation by assisted.

The financial perspective

Thus, the aim of this perspective is to improve the management of each USF study at this stage are defined financial performance indicators to measure the achievement of the level of achievement of financial goals - outcome indicators. According to the Indicators and Targets of the USF Contracts are examples:

- Cost of drugs per patient;
- Operating Profit per patient;
- Value of prescriptions for the patient;

- % of generic drug packaging/total drug packs;
- Average cost per user billed drugs;
- MCDT's average cost billed by the user;
- Average cost per medical consultation;
- Personnel costs rate.

The internal process perspective

The value proposition allows help generate successful action indicators from the audience, which will then be supplemented with more traditional measures of results (outcome indicators) such as audience satisfaction. To achieve the goals of users and, finally, our financial goals, it is necessary to develop performance measures to control the main internal processes and activities that support the value proposition of the target audience. According to the Indicators and Targets of Contracts ACES EDVII-AN and in turn the USF Calâmbriga and St. John USF are examples:

- Global utilization rate of medical appointments;
- Utilization of family planning consultations (PF);
- % of first appointments in life made up to 28 days;
- % of users with National Immunization Program (NIP) updated to 14 years;
- Between 50 - 74% subscribers for screening colorectal cancer effected;
- Coverage rate in organized screening of cervical cancer (25 - 64) on the eligible population;
- Organized screening coverage rate of breast cancer (45 - 69 years) in the resident population;
- Rate medical home visits for 1000 subscribers;
- % of users with updated PNV to 7 years;
- Degree of achievement of the objectives contracted.

The perspective learning and growth

The prospect of learning can be related to the need to have employees with expertise in the health area, so that human resources can contribute to the optimal management of USF.

Learning and Growth indicators really are the "enablers" of other perspectives. Motivated professionals with the right skills and tools requirements, operating in an organizational climate designed to sustain improvements, are the key ingredients in the driving process improvement, meeting customer expectations and ultimately enable financial returns. In measuring skills [5] suggests that any organization can be as successful as any other. The only distinction is how to develop their own employees [19] makes the following suggestions for measuring the development of human resources:

- Use core competencies to measure their development - identify skills differentiating necessary to achieve the strategic objectives;
- Carry out a plan of personal development to increase the competencies of holders;
- Encourage healthy lifestyles;
- Measure the level of employee training;
- Measure the level of employee satisfaction.

The social perspective

Once the health area manages the needs of users, will be to consider the possibility of considering a social perspective, since it is expected of USF to defend and protect the health of all citizens. This perspective is based on the idea that, ultimately, the user does not expect to never lose any visit made so your family doctor or family nurse or return to worst home can expect to maintain its weak health so uses his USF.

Thus, the aim of this perspective is the increase/maintain the welfare of the wearer.

To the Directorate of USF (case study), we consider a fifth perspective, the social, the treatment of the BSC, for present terms that it is important for the success of the strategy defined, that is relevant in the sense of the need to protecting the interests of users and other stakeholders in health care.

In this perspective, it is intended to define a set of indicators to measure the social attributes of the USF and USF St. John Calâmbriga According to the indicators and targets, are examples:

- Presence of social worker for monitoring of road users in case of need or socioeconomic grace period;
- % of satisfied and very satisfied users;
- Number of complaints;
- Consumption of anxiolytics, hypnotics and sedatives and antidepressants in the NHS market, find out the cause for the taking of these drugs;
- Number of incidents reported and bad clinical practice;
- Number of clinical acts scheduled and unrealized.

Cause-effect relationships

Relations between the various perspectives, objectives, indicators and targets are which are listed in below provides strategic map.

The philosophy of the BSC enables us to verify the relationship linearity in the identification of the four perspectives present: financial, customer, internal processes and learning objectives, targets and indicators" [23].

It is this same characteristic that distinguishes the balanced scorecard of any performance appraisal system. Figure 1 shows an application of this relationship and can be applied to any USF, or other public or private entity as mentioned above.

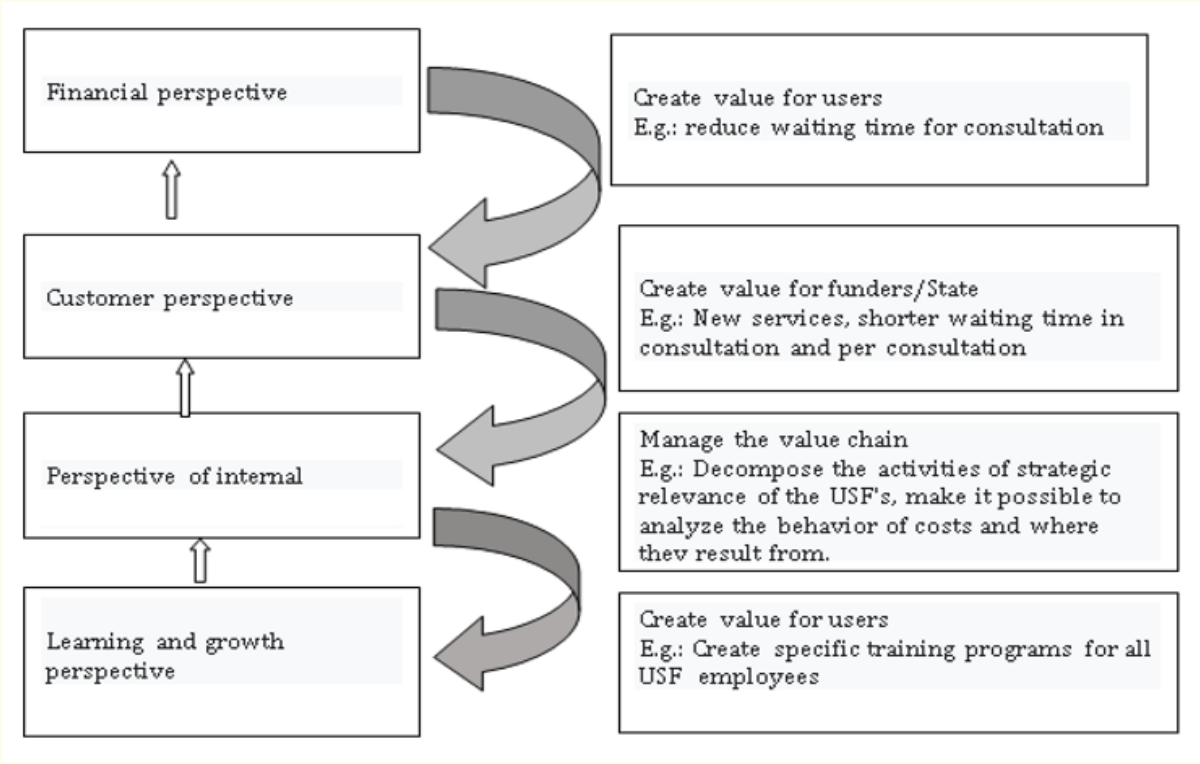

Figure 1: *Linearity relations.*

Source: *Adapted Pinto [23].*

The process of cause and effect/linearity help to identify the infrastructure and expertise that each USF needs to develop to withstand the internal processes and thus satisfy the users.

A well constructed BSC should describe the strategy into objectives and indicators chosen the most appropriate way. The indicators should be linked by cause-effect from the perspective of learning and growth (the cause) to the financial perspective (the effect), identifying in this way to influence the final result.

Create a cause-effect link between performance indicators and is one of the most complex aspects to implement a BSC, but managed to overcome this difficulty, means that we get a system that links strategy, which allows communication to all stakeholders and fostering constant joint strategy with the surroundings of the organization.

In practice, the cause-effect allow you to test the model, ie assess whether the BSC is actually reflect the organization's strategy.

Thus, the objectives set at the base of BSC, induce higher-level objectives, and these, in turn, shall work to achieve the ultimate goal - the vision of each USF.

This cause-effect relationship is present in the model from the beginning.

Strategic map

In the strategy map position to the objectives of each of the USF, arranged in a matrix ordered horizontally by the five perspectives and vertically by major strategic guidelines. It is a powerful tool for viewing the objectives and cause-effect relationships between them. A reform of this magnitude and complexity is a strong fundamental strategic framework, allowing expendable avoid delays in critical reform initiatives through a more detailed and timely programming. The following are the map's consolidated strategy for each USF, where all the perspectives and objectives within each of them, are intertwined with the strategy and the organizational mission.

Here we must highlight that we were unable to fill all indicators, as they are not available for public consultation and the application for authorization does not include this part, let stand the structure and how they can be applied by computer, or even in the "excel".

In these cases the differences are few, since USF Calâmbriga seems to meet conditions to spend this year for the Model B, then the values in table 5 are similar indicators.

In figure 2 we systematized in a simple way all perpetivas and algudos of goals that can be implemented.

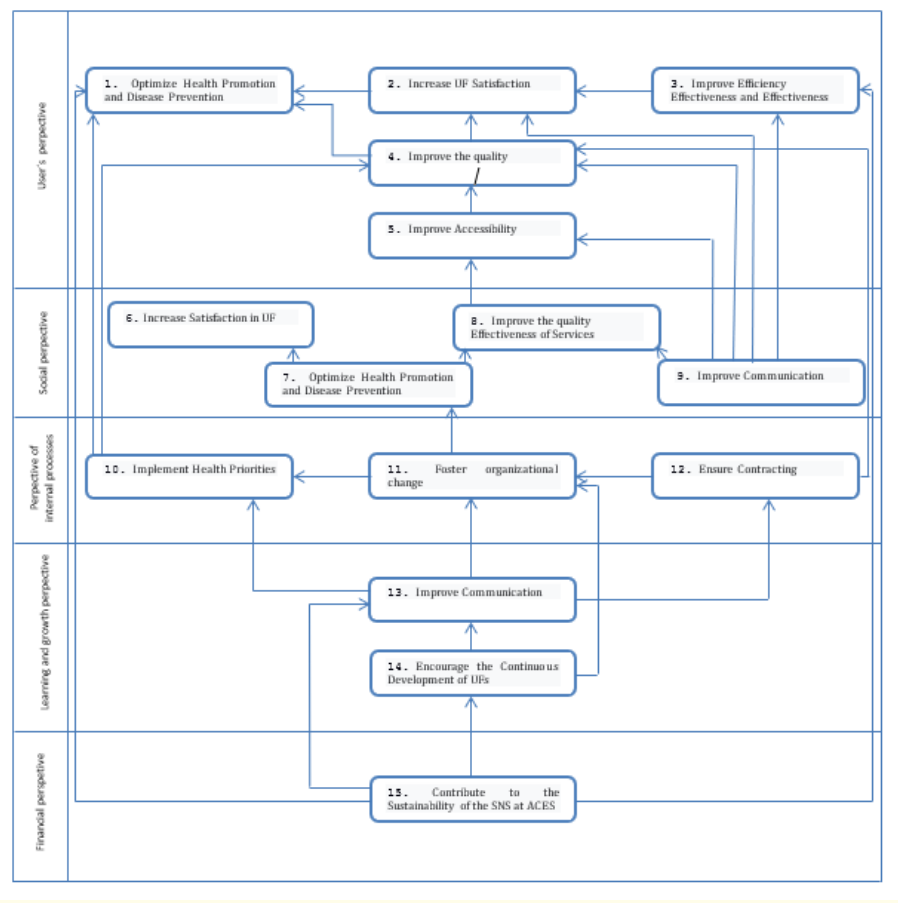

Figure 2: *LThe four BSC perspectives with the fifth perspective (social).*

Source: *Own based DGS - 2021 [6,7].*

In table 5, we present the "five" BSC perspectives applied to both USF, with the data we were able to collect in each of them. We grouped the five indicators depending on the perspective of the BSC and the way we consider the indicator best met the perspective in question.

Observed the following table data, we continue to observe two USF different models, but with very similar values.

We can even say that USF model A, has one of the headings in different perspectives enough higher percentages.

As is the case of the Perspective of the Users - morbidity index and other types of diseases at USF Calâmbrica 65.5% and USF São João 38.0%.

The utilization rate of medical visits is much lower in USF St. John, probably related to what we have already mentioned above, this USF is located in an urban area with a large supply of private health care, leading to the naturally people refer more these services.

The index, senior rate, chronically ill with flu vaccine, relates to the explained above with respect to the elderly and the indicator of "health of the elderly" table 5.

BSC	USF Model (A) Calâmbriga	USF Model (B) São João
Financial perspective		
PVP prescription drugs. Co-paid, by standard subscription	102,3	94,3
Value of prescriptions per patient		
% of generic drugs in packaging		
Average cost of drug billed per patient	8,6	-
Average cost of MCDT billed per user	38,5	34,0
Users' perspective		
Number of satisfied users		
Number of complaints		
Care waiting list		
List of mortality and morbidity and other types of diseases	65,5	38
% of hypertensive patients with blood pressure recorded in each semester	84	83,9
% of newborns with low birth weight		
Incidence of strokes in the resident population		
Consumption of anxiolytic, sedative and antidepressant drugs		
Number of reported clinical malpractice incidents		
Average of assisted by a health professional		
Average enrollments per doctor		
Average of medical consultations per assisted	92,2	93,3
Social perspective		
Consumption of anxiolytic, sedative and antidepressant drugs	75,4	
Proportion of DM2 with indication of insulin therapy	82,5	85,7
Number of reported clinical malpractice incidents		
Proportion of elderly people with chronic illness with flu vaccine	38,7	0
Number of clinical acts scheduled and not performed		

Rate of consultations performed by family nurses	78,8	80,4
Medical Appointments Usage Fee	92,2	30,3
Perspetive of internal processes		
Rate of consultations carried out by family doctor	92,7	
Family Planning Usage Fee		
Pregnant with ultrasound in the 2nd trimester		68,7
Laboratory tests in the 3rd trimester of pregnancy		0,3
Laboratory tests in the 2nd trimester of pregnancy		0,4
% of first life consultations performed within 28 days	95,7	
% of users with updated PNV up to 14 years old	99	
% of enrollees aged 50-74 with colon uterus cancer screening performed	74,7	
Coverage rate in organized cervical cancer screening (25-64 years)	69,7	
Breast cancer screening coverage rate (45-69 years old) pop. resident		
Elderly or chronic illness rate with flu vaccine	39,8	30,3
% of users with updated PNV up to 7 years old		
Nursing consultation utilization rate - 3 years	93,4	
Learning and growth perpective		
staff retention rate		
Pathology training fee		
Hours of training on pathologies		
Employee satisfaction rate		
Number of users with family doctor	92,7	93,7
Absenteeism rate		
Number of professionals doing research		
Number of new ideas to implement		
Number of attendances at seminars		
Investment in new technologies		

***Table 5**: BSC perspectives for both USF.*

***Source**: Own based DGS (2021 b) on the site and bicsp.min-saude.pt [8].*

Conclusion

This report had as study object two UF do ACES EDVII-AN, operating in the area of Primary Health Care (PHC) through a CS network. This is a case study, markedly theoretical wherein deepened and described a number of elements within the management from the operating level to the strategic level.

The aim of this work was to develop a BSC, such as Strategic Management Instrument Performance, adapted to the Health Service study, in the case of being implemented, will provide an effective management of organizational performance, efficient use and effective use of resources in a balanced and aligned strategically.

An economic and social environment in constant change, is more than justified that organizations seek ways and means to gain greater control of their performance so that they can, in time, to put in place corrective measures, if the performance is not desired.

We set out to study how would the BSC implementation process in an area such as health. From what we consider relevant realize to what extent the implementation of the BSC could help to improve the performance of this area.

Identifying health activity features compared to most other economic activities.

Framing the health area, as well as identifying their main duties, among which we highlight the management of patients and average term of service of each of them.

Approaching the theoretical model of the BSC, and the constant evolution that has suffered since 1992, concluding that remains a performance evaluation model to consider, both for the design and final information it provides, which aims to be easy to read by users, and so also by USF.

Applying the four traditional perspectives to the Health area, given that there are some particular characteristics with regard to the prospect of customers/users, since in our case the users are the main key to the whole process (without them nothing would have ratio exists).

Justifying that way makes sense to consider a fifth perspective, the social, the implementation of the BSC to an area that involves human capital management originating from users and health professionals.

Identifying cause and effect/linearity, The Strategic Map, between objectives and indicators.

The practical application, based on the strategic map shown above, allowed to expose a practical way (one of the objectives of the BSC, simplicity) the relationship between the strategies, strategic objectives, through the identification of critical factors, indicators to consider for each one of the objectives and the goal to achieve. The map would not be complete but there was indication of a program of action, that is, which is that the Health Area (USF) is proposing to do to implement the method, or to follow-up.

Like any performance evaluation method is not enough to master the technical aspect, it is necessary, even we would say essential that there is political and commitment will of the ARS and ACES concerned regarding the project BSC, since it involves and requires the collaboration various segments of the USF. Therefore, management must be aware that a constant scenario modernization and competition, a new process that allows additional assessments and more sophisticated, in this case the BSC, is very important, so that existing resources are optimized with a view to obtain either greater efficiency or greater efficiency.

Compare common indicators both models USF - model A and model B in the UF study are almost similar and there is linearity in the identification of the four BSC perspectives: financial, customer, internal processes and learning.

We understand pertinent to consider a fifth perspective, the social, the perspective of the need to protect the interests of users and professionals involved.

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