SILESIAN UNIVERSITY OF TECHNOLOGY PUBLISHING HOUSE

SCIENTIFIC PAPERS OF SILESIAN UNIVERSITY OF TECHNOLOGY 2019
ORGANIZATION AND MANAGEMENT SERIES NO. 136

PROFESSIONAL AND MANAGERIAL COMPETENCIES ENHANCING ORGANIZATIONAL COMPETENCES OF EMERGENCY MEDICAL UNITS

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Abstract: This article is focused on identifying within managers of Emergency Medical Units (EMU) the common professional competencies of medical personnel, as well as the managerial competencies that significantly shape such organizations. The proposed lists of managerial and professional competencies were created based on the analysis of healthcare competencies models as literature studies and own author's observations in the analyzed entities. To capture the complexity and dynamic quality of the EMU manager's role and reflect the dynamic realities in health leadership today, the managerial competencies model distinguishes five domains with 26 competencies, while the model of professional competencies of medical staff employed in Polish EMU takes in eight domains. To achieve superior organizational performance of such entities and to gain strategic goals, it is very important to identify which set of professional and managerial competencies is required. Thus, it is can be essential to clarify the areas of strategic competence in which these organizations must be competent, if the personnel of such are to succeed. Hence, there is a need to integrate professional and managerial competencies with organizational competences. Unfortunately, this area is not yet fully developed. The author's future empirical research would entail focusing primarily on the competences of EMU in Poland and the role that people competencies (whether managerial and professional) play in developing these.

Keywords: Emergency Medical Units, managerial competencies, organizational competences, professional competencies.

1. Introduction

The overriding objective of Emergency Medical Units, in accordance with the Polish health policy, is to ensure patients have effective healthcare by providing effective emergency medical services. Taking into account the expectations and values of patients, this objective requires that the managers of such units hold appropriate medical competencies and managerial competencies, as well as organizational competences. The multidimensional concept of competency is not, however, explicitly formulated in literature in the field of management

http://dx.doi.org/10.29119/1641-3466.2019.136.24 https://www.polsl.pl/Wydzialy/ROZ/Strony/Zeszytynaukowe.aspx

sciences (Elleström, 1997; Robotham, and Jubb, 1996). Thus, J. Winterton, F. Delamare-Le Deist and E. Stringfellow have attempted to organize the definitions and classifications of competences on the basis of the world's literature (Winterton, Delamare-Le Deist, and Stringfellow, 2006).

Competency identification systems need to identify both personal (professional and managerial) competencies and organizational competences (Boam, and Sparrow, 1992). This article is focused on identifying within managers of Emergency Medical Units, the common professional competencies of medical personnel and managerial competencies that significantly shaping the overall competences of such organizations.

Before starting the discussion on the relationships between personnel competencies, managerial competencies and organizational competencies of Emergency Medical Units, it is important to make a brief review of the definitions. Yet, despite attempts to organize and classify concepts by different authors, there is no compatibility in the literature as to the interpretation of the terms “competences” and “competencies".

M. Mulder (Mulder, 2007) took the opportunity to search for the roots of the term in Latin, English, French and Dutch, and also analyzed different ways of perceiving competencies in different conditions from the 16th century onwards. He came to the conclusion that this term is often understood twice – not only as a skill or ability to do something, but also as having the possibility to do it.

The term “competency” was first used in management sciences to identify the characteristics that distinguish superior from average managerial performance (Boyatzis, 1982). “Competency” (plural “competencies”) referred to an underlying individual characteristic that is casually related to effective or superior performance in job. Still, there is a range of factors rather than one factor that differentiates superior managers from average ones. The term “competence” (plural “competences”) refers to the set of resources held by the organization that are related to the performance of activities that lead to achieving goals by developing adequate capabilities to perform tasks (Guallino, & Prevot, 2008). Summing up: ‘competences’ stand for general ability (holistic development orientation), and ‘competencies’ refer to the components of competence.

D. McClelland postulated that in the aspect of predicting the future efficiency of people's work, one should not study their intelligence, but their competencies (McClelland, 1973). R. Boyatzis built upon this by defining the list of competencies that distinguished effective managers. The competency model in his approach includes: goals of action, leadership, human resources management, focus on others and specialist knowledge (Boyatzis, 1982). Based on the typology introduced by R.M. Grant, one of supporters of the resource-based view (RBV), resources and capabilities can be tangible, intangible and human. While all are important for ensuring the success of organizational activity, both in theory and practice, human resources are of far greater importance (Wright, Dunford, and Snell, 2001; Pfeffer, 1994). Indeed, E.T. Penrose noticed that in organizational competences, in order to gain competitive

advantage, beyond the organization's resources, of primary importance are having the skills to use them (Penrose, 1959).

Nowadays, the role of competencies has become more significant in the context of the services market (Walsh, and Beatty, 2007). These are mostly human-based services, such as the emergency medical services.

2. An identification of managerial competencies in emergency medical units

There are many tools that can be used to manage the problems that arise within any organizations. However, the question of 'how to select an appropriate method' remains. Managerial competencies seem to be the answer. There are several universal managerial competences: holding leadership skills, building know-how, developing external cooperation skills, having the ability to make optimal use of opportunities created by the environment, creating a "team mind", stimulating the learning process in the organization, holding the ability to rapidly and flexibly design new products and services, being able to build a good organization image.

With regard to Poland's Emergency Medical Units, the proposed list of managerial competencies was created based on the analysis of healthcare leadership/managerial competencies models (Krawczyk-Sołtys, 2017b) within literature and by observations.

The first model of the Competency Task Force was proposed in 2002, by the Healthcare Leadership Alliance (HLA), a consortium of major professional associations in the healthcare field that grouped together more than 100 000 managers. The Task Force understands competences as being transcendent unique organizational settings that are applicable across the environment (Ross, Wenzel, and Mitlyng, 2002). According to Stefl (2003; 2008), management competency consists of five domains. These are:

1. Communication and Relationship Management – capability to communicate with internal and external clients to build and maintain relations and interactions;
2. Leadership – capability to inspire excellence (individual and organizational), to create and attain a shared vision, and to successfully manage change to attain the EMU's strategic ends;
3. Professionalism – aligning personal and organizational conduct with standards including responsibility to the patient, a service orientation, and a commitment to learning and improvement;
4. Knowledge of the Healthcare Environment – understanding of the healthcare system and the environment;
5. Business Skills and Knowledge – capability to apply business principles including systems thinking, to the healthcare environment.

The second model, the Competency Directory Model, was put together by the Global Consortium for Healthcare Management Professionalization. This Consortium was set up by The International Hospital Federation (International Hospital Federation, 2015). The model categorizes competencies into five critical domains:

- Leadership (including: Leadership Skills and Behavior, Engaging Culture and Environment, Leading Change, Driving Innovation);
- Communication and Relationship Management (incorporating: Relationship Management, Communication Skills and Engagement, Facilitation and Negotiation);
- Professional and Social Responsibility (encapsulating: Personal and Professional Accountability, Professional Development and Lifelong Learning, Contributions to the Profession, Self-Awareness, Ethical Conduct and Social Consciousness);
- Health and the Healthcare Environment (enfolding: Health Systems and Organizations, Health Workforce, Person-Centered Health, Public Health);
- Business acumen (including: General Management, Laws and Regulations, Financial Management, Human Resource Management, Organizational Dynamics and Governance, Strategic Planning and Marketing, Information Management, Risk Management, Quality Improvement, Systems Thinking, Supply Chain Management).

The third model, the National Center for Healthcare Leadership (NCHL) Competency Model was derived from consulting practicing health leaders. This model incorporates benchmark data drawn from other health sectors and insurance companies, and brings under one banner several composite leadership competencies. The NCHL Competency Model contains three domains: Transformation, Execution and People, with 26 competencies (National Center for Healthcare Leadership (NCHL), 2005).

The first domain – Transformation, takes in: visioning, energizing and stimulating change processes that connect communities, patients and professionals. It includes competencies such as: Achievement Orientation, Analytical Thinking, Community Orientation, Financial Skills, Information Seeking, Innovative Thinking and Strategic Orientation.

The second domain – Execution, encapsulates translating vision and strategy into optimal organizational performance. It contains competencies such as: Accountability, Change Leadership, Collaboration, Communication, Impact and Influence, Information Technology Management, Initiative, Organizational Awareness, Performance Measurement, Process Management and Organizational Design, Project Management.

The third domain – People, brings together: creating an organizational climate that values personnel from all backgrounds and provides an energizing environment for them, leader’s responsibility to understand his/her impact on others and to improve own and others capabilities. Competencies include: Human Resource Management, Interpersonal Understanding, Professionalism, Relationship Building, Self-Confidence, Self-Development, Talent Development and Team Leadership.

The notions behind the Personal Competency Framework (PCF) were also brought into the fold in constructing the list of Polish EMU managerial competencies. PCF stems from the findings of the Job Competences Survey (JCS) and consists of 45 competencies in six scopes (Sanghi, 2010). These include: intellectual, personal, communication, interpersonal, leadership and result-oriented. This model was likewise used in creating the author's professional competencies list of medical personnel.

Based on the assumptions of the above presented models and own author's observations (as a consultant) in such entities, a specific model of EMU managerial competencies was constructed. It contains five domains and 26 competencies. The domains capture the complexity and dynamic quality of the Emergency Medical Unit's manager's role and reflects the dynamic realities found in health leadership today.

The first domain – Leadership Competencies includes:

1. leadership abilities and behaviors (clear communication of mission, goals and priorities of the organization; including concepts, methods and management techniques to manage the organization, detecting and analyzing organizational problems, encouraging creative solutions and giving support to employees to enable co-decision and adopting a leadership role);
2. creation of an organizational culture based on mutual trust, transparency and focusing on improving the quality of provided medical services (encouraging teamwork, supporting diversity, encouraging the involvement of employees, openness to views, opinions and the ideas of others, care for subordinate development, tolerance, raising trust);
3. leading change (promoting permanent learning and organizational improvement, responding to emerging needs of change and leading change processes);
4. encouraging employees to creativity, innovation and development;
5. management skills (planning, organizing, motivating, controlling).

The second domain – Communication and Relationship Competencies – brings together:

1. relationship management (displaying appropriate interpersonal relations and the ability to maintain such in dealings with all stakeholders, horizontal and vertical cooperation skills, openness, patient orientation);
2. communication skills (oral communication, written communication, listening, business communication - business reports, schedules, presentations, presenting analysis results in a reliable and understandable way for stakeholders, public relations);
3. facilitation and negotiation (conflict management through mediation, negotiation and other methods of conflict solving, improving problem-solving skills, building and participating in interdisciplinary teams so as to solve organizational problems).

The third domain – Professional and Social Competencies, brings together:

1. professionalism (promotion and participation in health policy initiatives, protection of patients' and their relatives rights and responsibilities, care for the quality of medical

services and safety and social commitment in providing them, supporting and mentoring high-potential talent both within one's organization and in the profession of healthcare management in general);

2. professional development and lifelong learning (commitment to self-improvement, reflection and personal development);
3. contributions to the development of management in health care (sharing knowledge and experience, developing others through mentoring, consulting, coaching and personal mastery, support and mentoring for potential talents);
4. awareness of goals, values, strengths and weaknesses (both in self-assessment and on the basis of the opinions of others);
5. ethical behavior and social awareness (demonstrating ethical behavior, transparency and responsibility for actions, balancing personal and professional responsibility, recognizing the most important need of patients and of society).

The fourth domain – Sectorial competencies is about the health care system and its environment, brings together:

1. knowledge of how the health care system and entities of this system work (understanding the structure of the health care system, financing mechanisms and organization of medical services, balancing the interrelations between access to medical services, their cost, quality and allocation of resources, care for the health needs of society, perceiving the managed organization and its effectiveness as a part of the health care system, using monitoring systems to ensure the legality, ethicality, safety and highest quality of medical, administrative and business aspects of the managed organization, promoting and creating alliances and networks – both in the health sector and cross-sectorial, at the national and global scale);
2. ability to optimize employment in the organization (taking into account the health needs of the society, as well as shortages of medical staff, the scope of specialization);
3. personalizing health care (recognizing and promoting the opinions of patients and their relatives about health care, respecting the comments and opinions of patients, their relatives and public opinion in making decisions related to health care, taking into account cultural differences and respecting individual expectations);
4. public health competences (promoting disease prevention, promoting health and physical fitness through organized efforts for environmental hygiene, controlling infectious diseases, spreading the principles of personal hygiene, organizing medical and care services for early identification, prevention and treatment, and developing such social mechanisms that will provide everyone with a standard of living enabling them to preserve and strengthen their health, using effectively basic statistical data and basic health indicators to make decisions and analyze population health trends, risk management and risks during disasters and crises, evaluate key processes of the public health surveillance and control system, recognizing the local implications of global

health events, understanding the interrelations of factors affecting the health situation of society).

The fifth domain – Business Competencies incorporates:

1. knowledge of basic business practices and the ability to manage projects (creating an effective management system and its permanent improvement, collecting data and information, analyzing them and making the right decisions);
2. strict adherence to procedures, regulations and legal norms, as well as holding the ability to create internal regulations on their basis;
3. financial management (effective application of accounting principles and financial management tools, budgeting, cost accounting, planning, organization and monitoring of the organization's resources to ensure the highest quality of medical services provided);
4. human resource management (analysis and planning, recruitment, selection, adaptation, motivation, assessment, staff improvement, coaching and mentoring, talent management);
5. strategic management (setting a vision and/or mission, determining the direction in which the unit should be aim to, analyzing the environment in order to identify existing, future or likely future opportunities and threats, analyzing resources and organizational skills, to establish its strengths and weaknesses, creating conditions and resources to take action to exploit emerging opportunities to succeed making on these grounds the selection of the most favorable strategy, as well as the proper way of implementing the chosen strategy chosen);
6. information and knowledge management (skillful using of data to evaluate effectiveness and monitor indicators and trends, ensuring compliance with applicable privacy and security requirements, creating and improving information management systems, creating and improving knowledge management systems, implementing key knowledge management processes: locating knowledge, its acquisition and developing, supporting for knowledge sharing and dissemination, using of knowledge and its preservation, implementing knowledge strategy);
7. risk management (effective risk assessment and analysis, as well as its reduction);
8. improving the quality of medical services (development and implementation of quality assurance programs, patient satisfaction and safety in accordance with applicable standards, development and monitoring of indicators for measuring the quality of medical services, patient satisfaction and safety, permanent improvement of the quality of medical services);
9. systems thinking (holistic understanding, not separate components, showing the ability to perceive and analyze processes through the holistic view, noticing mutual relations and connections, and identifying the principles of the health care system).

6. An identification of professional competencies in emergency medical units

The Team for Research on Hospital Management "Avicenna" of the Jagiellonian University identified 13 competencies of medical staff. These were divided into three groups of interpersonal and social competencies, i.e. threshold, desirable and expected competences: communication, resistance to stress, empathy, assertiveness, optimism, availability, responsibility, regularity, accuracy, openness, creativity, perseverance, willingness and motivation to constantly improve knowledge and skills (Kęsy, 2013).

Threshold competencies include communication skills; the ability to build messages so as not to aggravate the asymmetry of information between the staff and the patient; empathy; regularity (which is not only a basis for improvement at work, but also in the field of medical knowledge and permanent learning) and openness (allowing to shorten the distance between the patient and the staff).

Desirable and expected competencies encapsulate facilitating the performance of duties for medical employees (including responsibility); assertiveness focused on the ability to argue, justify the diagnosis and organize the treatment process, etc.; resistance to stress, optimism and accuracy.

R.M. Epstein and E.M. Hundert (Epstein, and Hundert, 2002) defined professional competencies of medical staff as the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and community being served. Professional competencies build on the foundation of basic clinical skills, scientific knowledge and moral development. They include a cognitive function (acquiring and using knowledge), an integrative function (availing biomedical and psychosocial data in clinical reasoning), and a moral function (willingness, patience, emotional awareness). Such competencies are developmental, impermanent, and context-dependent and depend on habits of mind. This understanding of competencies is similar to the detailed typology of competencies often cited in the literature proposed by G. Cheetham and G. Chivers (Cheetham, and Chivers, 1996; 1998): cognitive competencies, functional competencies, personal (behavioral) competencies, ethical competencies, and meta-competencies (connected with the ability to deal with uncertainty).

The national standards brought together by the Paramedic Association of Canada (Paramedic Association of Canada, 2011) highly influenced the model of EMT competence in Poland. The Paramedic Association of Canada (PAC) established the National Occupational Competency Profile (NOCP) to create national standards for education programs, and to provide a tool to assist paramedic regulators in establishing common workplace standards and enhancing labor mobility.

The proposed model holds eight domains of professional competencies. Professional Responsibilities include: Communication; Health and Safety; Assessment and Diagnostics; Therapeutics; Integration; Transportation; Health Promotion and Public Safety.

Under the first domain – Professional Responsibilities Competencies, are:

1. functioning as a professional (maintaining patient dignity, reflecting professionalism through use of appropriate language, dressing appropriately, maintaining appropriate personal interaction with patients, maintaining patient confidentiality, participating in quality assurance and enhancement programs, promoting awareness of emergency medical system and profession, behaving ethically);
2. participating in continuing education and professional development (developing personal plan for continuing professional development, self-evaluating and setting goals for improvement, as related to professional practice, interpreting evidence in medical literature and assess relevance to practice);
3. possessing an understanding of the medicolegal aspects of the profession (complying with scope of practice, recognizing the rights of the patient and the implications on the role of the provider, including all pertinent and required information on reports and medical records);
4. recognizing and complying with relevant Polish legislation (functioning within relevant legislation, policies and procedures);
5. functioning effectively in a team environment (working collaboratively with partners, accepting and deliver constructive feedback);
6. making decisions effectively (employing reasonable and prudent judgment, practicing effective problem-solving, delegating tasks appropriately);
7. managing scenes with actual or potential forensic implications (collaborating with law enforcement agencies in the management of crime scenes, complying with ethical and legal reporting requirements for situations of abuse).

The second domain – Communication Competencies – brings together:

1. practicing effective oral and written communication skills (delivering an organized, accurate and relevant report utilizing telecommunication devices, delivering an organized, accurate and relevant verbal report and patient history, providing information to patients about their situation and how they will be cared for, interacting effectively with the patient, relatives and bystanders who are in stressful situations, speaking in language appropriate to the listener, and using appropriate terminology, recording organized, accurate and relevant patient information);
2. practicing effective non-verbal communication skills (employing effective non-verbal behavior, practicing active listening techniques, establishing trust and rapport with patients and colleagues, recognizing and reacting appropriately to non-verbal behaviors);

3. practicing effective interpersonal relations (treating others with respect, employing empathy and compassion while providing care, recognizing and react appropriately to persons exhibiting emotional reactions, acting in a confident manner and assertively as required, employing diplomacy, tact, discretion and conflict resolution skills).

The third domain – Health and Safety Competencies, incorporates:

1. maintaining good physical and mental health (developing and maintaining an appropriate support system, managing stress, practicing effective strategies to improve physical and mental health related to career);
2. practicing safe lifting and moving techniques (practicing safe biomechanics, transferring patient safely from various positions using applicable equipment and/or techniques and emergency evacuation techniques, securing patient to applicable equipment);
3. creating and maintaining a safe work environment (assessing scene for safety, addressing potential occupational hazards, conducting basic extrication, exhibiting defusing and self-protection behaviors appropriate for use with patients and bystanders, practicing infection control techniques, cleaning and disinfecting equipment and work environment).

The fourth domain – Assessment and Diagnostics Competencies, takes in: conducting triage in a multiple-patient incidents, obtaining patient history, conducting complete physical assessment demonstrating appropriate use of inspection, palpation and percussion, assessing vital signs, utilizing diagnostic tests).

The fifth domain – Therapeutics Competencies, brings together: maintaining patency of upper airway and trachea, preparing oxygen delivery devices, delivering oxygen and administering manual ventilation, utilizing ventilation equipment, implementing measures to maintain hemodynamic stability, providing basic care for soft tissue injuries, immobilizing actual and suspected fractures, administering medications.

The sixth domain – Integration Competencies, includes: utilizing differential diagnosis skills, decision-making skills and psychomotor skills in providing care to patients, providing care to meet the needs of unique patient groups, conducting ongoing assessments and provide care.

The seventh domain – Transportation Competencies, encapsulates: preparing ambulance for service, driving ambulance or emergency response vehicle, transferring patient to air ambulance and transporting patient in air ambulance.

The last domain – Health Promotion and Public Safety Competencies – holds:

1. integrating professional practice into community care (participating in health promotion activities and initiatives, injury prevention and public safety activities and initiatives, working collaboratively with other members of the health care community, utilizing community support agencies as appropriate);

2. contributing to public safety through collaboration with other emergency response agencies (working collaboratively with other emergency response agencies and within an incident management system);
3. participating in the management of a chemical, biological, radiological, nuclear and explosive incident.

4. Medical emergency units organizational competences

Placed under the banner of Competences of Emergency Medical Units are the organizational processes and engaged people that, together, result in superior emergency medical services. Such competences include organizational competences. Herein, organizational competences can be defined as a combination of differentiated skills, complimentary assets and routines that provide the basis for an organization's competitive capacities and sustainable advantage. These are embedded in the organizational processes and systems and absorbed by all its members and structures (Escrig-Tena, and Bou-Llusar, 2005). Sanchez, Heene and Thomas (1996) state that there are three conditions that organizational competences must have: an organizational component in the sense of the coordination and development of assets, an intention component as it must imply certain premeditated activities to sustain the coordinated deployment of assets, and a goal attainment component as the coordination of assets must help an organization achieve its aims.

R. Sanchez (Sanchez, 2002) identifies five modes of competences that are expressed through specific kinds of activities and processes. These are distinctive kinds of organizational flexibility that enable appropriate response to changing and diverse environmental conditions. The modes of competences are:

1. cognitive flexibility to imagine alternative strategic logic;
2. cognitive flexibility to imagine alternative management processes;
3. coordination flexibility to identify, configure and deploy resources;
4. resource flexibility to be used in alternative operations;
5. operating flexibility in applying skills and capabilities to available resources.

In the resource-based view, among the potentials of organizational success, as previously mentioned, competences occupy a special place. These competences include the long-term capacity to use the human and human-related resources that are actively involved in the implementation of set goals and tasks, and which lead to the achievement of expected market positional and economic effects. The basis for shaping and developing competences are the integration and coordination of resources and organizational capabilities. Integration, first of all, enables the achievement of synergistic effects by way of simultaneous use of resource compositions that are assigned to specific abilities (composition of abilities). Coordination, on

the other hand, includes the management processes that enable effective use of various resource compositions and capabilities in pursuit of expected market and economic effects.

Along with the development of Emergency Medical Units capacity and competence, its broadly understood potential for competitive advantage increases. Resources, capabilities and competences create a hierarchy of potentials (Matwiejczuk, 2011), in which core competences and metacompetences are at the highest levels. The Emergency Medical Units resources are sources of development of its capabilities, and at the same time, its capabilities are oriented towards the use of resources as sources of competitive advantage. Their competences arise on the basis of its capabilities, creating premises for even more effective involvement and use of resources in the provision of emergency medical services. It can be, therefore, stated that they are the result of integrating the capabilities and resources involved in achieving the assumed goals.

A special type of competence of the Medical Emergency Units are its core competences (Besler, Sezeler, 2011; Ljungquist, 2008), i.e. innovative combinations of knowledge, capabilities, adequate technologies, information and methods, as a result of which emergency medical services are provided to the patient according to needs and expectations. Therefore, core competences arise at the interface of resources, processes (activities) and skills (skill sets) of such organizations, by creating innovative and difficult to copy methods of conduct in the provision of emergency medical services. This allows the gain and maintenance of competitive advantage. In this regard, the role of knowledge resources should be emphasized (Conner, and Prahalad, 1996) in developing organizational competence and in achieving benefits due to competitive advantage (Krawczyk-Sołtys, 2017a). Among the distinctive potentials of Emergency Medical Units, one can also point out metacompetences, defined as the overarching competences that enable an organization to educate, develop, use and verify competences (core competences).

To achieve superior EMU organizational performance, it is very important to identify which set of professional and managerial competencies is required to gain their strategic goals. Moreover, it can be essential to clarify the areas of strategic competence (areas in which such organizations must be competent), if it is to succeed in its mission. In addition, it is necessary to possess superior capabilities in each strategic area of competence.

5. Conclusions and further research

All concepts convergent with assumptions of RBV (resource based view) pointed toward knowledge management (Grant, 1996), core competences (Hamel, and Prahalad, 1996), distinctive capabilities (Stalk, Evans, and Shulman, 1992; Kay, 1993), dynamic capabilities (Teece, and Pisano, 1994; Teece, Pisano, and Shuen, 1997; Ambrosini, Bowman, and Collier,

2009; Zollo, and Winter, 2002), organizational learning (Argyris, and Schön, 1978), learning organizations (Senge, 1990), and intelligent organizations (Pinchot, and Pinchot, 1990) as sources of competitive advantage, also emphasize the intersection of strategy and human resources issues.

Competences are a multidimensional concept and require an integrated approach to building a competence model that reflects the real complexity and dynamics of competence development processes that are at play in Poland's Medical Emergency Units.

The competency of such organizations (in addition to the systems and processes that underlie them) arise from the people who are involved in the process, the skills they individually and collectively must possess, and the behavior they must engage in (individually and interactively) to implement the process – their competencies.

P.M. Wright, B.B. Dunford and S.A. Snell (2001) argued that organizational core competences arise from the combination of the organizations stock of knowledge (human, social, and organizational capital embedded in both people and systems) and the flow of this knowledge though creation, transfer and integration in a way that is valuable, rare, inimitable and organized.

A.A. Lado and M.C. Wilson (1994), coming from the perspective of exploring the role of HR in influencing the competences of the organizations, suggest that HR systems (as opposed to individual practices) can be unique, causally ambiguous and synergistic in how they enhance organization competences, and thus could be inimitable.

A.W. King and C.P. Zeithaml (2001) in their studies, assessed the causal ambiguity of competences. They asked managers to evaluate their organizations competences and the generated measures of causal ambiguity based on these responses.

D.P. Lepak and S.A. Snell's (1999) model provides tools for linking the organization's competency, the people that comprise it, and the systems that maintain it. O. Nordhaug and K. Grønhaug (1994) argue that organizations have individuals with different competences that they refer to as a 'portfolio of competences'. They further propose that a core (or distinctive) competence exists when an organization is able to collaboratively blend the many competences in the portfolio, through a shared mindset, in order to better perform something than their competitors.

The diagnosis of professional competencies of Medical Emergency Units employees is to determine currently owned and achievable competencies that are necessary for effective, appropriate and quality achievement of goals and tasks. The competence test should be carried out with a clear indication and definition of the individual competencies components, in particular: knowledge, skills and attitudes.

The special significance of competencies in services, especially professional services (so-called human based) to which emergency medical services belong, is indicated by S.G. Hein and C.D. Riegel (2012). This result is reinforced by the empirical research of J.A. Chapman

and G. Lovell (2006) who have concluded that the competence framework in professional services sets the key skills and attitudes necessary to provide the service.

As mentioned in the introduction, the Emergency Medical Units competency identification system need to identify both personal (professional and managerial) competencies and organizational competences. Therefore, there is a need to integrate professional and managerial competencies with organizational competences (Lustri, Miura, and Takahashi, 2007; Yang, et al., 2006; Wickramasinghe, and De Zoyza, 2011) but this area is not yet fully developed – empirical research is limited. Hence, future empirical research should entail focusing primarily on the competences of Emergency Medical Units and the role that people competencies (managerial and professional) play in developing these. Such research includes recognizing that the inimitability of these competencies may stem from unobservability (e.g., causal ambiguity), complexity (e.g., social complexity), and/or time compression diseconomies (e.g., path dependence).

The above considerations will be a source of general guidance in stimulating the author's future research in this area. Therefore, her empirical studies will be concentrated upon finding relationships between the professional, managerial competencies and organizational competences of Medical Emergency Units in Poland, to understand specific, meaningful personal competencies that are related to the strategic needs of these units in a significantly contingent context.

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