

# Student-Run Multidisciplinary Allied Health Practice Centre

Project number: **598602-EPP-1-XK-EPPKA2-CBHE-JP** (2018-3220/001-001) "This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein."





GJ







# Table of Contents

Table of Figures	4
Abbreviations	5
Introduction	6
Elaborated Key Concepts	7
Multidisciplinary Collaboration	7
Example	
Innovation and Entrepreneurship	11
Entrepreneurship	11
Innovation	14
Examples	
Co-creation and Co-configuration	
Example	20
Evidence- Informed Practice	21
Examples	
User-Involvement	
Alongside and together	Crror! Bookmark not defined.
Examples	
Allied Health	27
Example	





Patient/ Client-centredness	29
Network Communication	31
Student-Run	32
Bibliography	34





# Table of Figures

Figure 1 Levels of Multidisciplinary Collaboration (Jeglinsky & Sipari, 2015)10
Figure 2 Team Work11
Figure 3 Competences of Entrepreneurship in Education Field14
Figure 4 Students' Innovation Competence (Hero, Lindfors, & Taatila, Individual Innovation
Competence: A systematic Review and Future Research Agenda, 2017)15
Figure 5 Innovation Process16
Figure 6 The journey to co-creation
Figure 7 (Photo) (Taavi Tihkan, 2015)25
Figure 8 Interactions between the components of ICF (WHO, 2018) and Allied Health Areas
modified by (modified by K. Juntunen)
Figure 9 Patient/ Client Centredness Therapy, Patient Participation and Effectiveness (Özkan,
2017)





# Abbreviations

EBP	Evidence-Based Practice
EIP	Evidence-Informed Practice
ICF	International Classification of Functioning, Disability and Health
SMAHPC	Student-run Multidisciplinary Allied Health Practice Centre
WHO	World Health Organization





# Introduction

The "Student-run Multidisciplinary Allied Health Practice Centre" operates as an integrated platform connecting patients, providers and students. The triangle of actors is led by the vision of offering top quality services to ensure social well-being, while gaining expertise within the respected fields. It has been widely documented that team-work under a common goal encompassing various branches of knowledge leads to better creation of insight. Thus, the centre contains in its core the concept of multidisciplinarity. Bridging across disciplines is expected to stimulate human-centred entrepreneurship to assist the end-users in the daily operations and beyond.

Entrepreneurship, in such a rapidly developing sector, means innovating and transforming, to provide answer that increase efficiency and enable access. Students in cooperation with companies, and users are expected to critically assess the current needs and potential feasible responses. Operating under the strategy of co-creation that allows and encourages the blending of different perspectives, innovation in healthcare shall bring a value to society, put differently, solve a social issue. Hence, Student-run Multidisciplinary Allied Health Practice centre will foster a supportive environment to new ideas, with less strict structures, open to new information, and values risk-taking.

Processes as clinical decision making and patient pathways, must be backed by sufficient evidence to ensure best treatment for the patients. Evidence-informed practices (EIP) requires synthesizing information from sources as literature review, patient experience, resource utilization, to come to a proper scientific and professional answer. EIP strongly relates to the core vision of offering top quality services, considering the circumstances of the patient. The element of *best-practices* shall be further developed through online communication networks between professionals with potential embedded screening algorithms.





Such multidisciplinary centre, whom main pilar is allied health professionals, backed in their practice by evidence and information, characterized by an approach of user involvement in stages of designing, implementing and delivering, and including new innovative approaches as digital platforms for online consultation to aid the professional in tailoring their intervention, will help students develop their professional competences, and patients receive high quality services to positively impact their wellbeing, increase utility and productivity.

# Elaborated Key Concepts

# Multidisciplinary Collaboration

The terms multidisciplinary, interdisciplinary and transdisciplinary are all terms which refer to the involvement of different disciplines to varying degree on the same continuum and these terms should not be used interchangeably. Multidisciplinary collaboration means working together with different disciplines (e.g., health sciences, medicine, social sciences, engineering etc.) within their boundaries (Choi & Pak, 2006).

Nowadays Collaboration and multi-disciplinary working is becoming more as norm, increasing the average student's exposure to entrepreneurial activities and thinking (Supporting Entrepreneurial Connectivity, 2018). Multidisciplinary teamwork or collaboration is a new approach designed to guide thinking and practice within healthcare systems (Merjola-Partanen, 1993), which nowadays is increasing more and more.

In terms of healthcare, multidisciplinary collaboration is a key term that is considerably important for sustainable health system, thus, it is described as integrated team approach.

Healthcare practice is highly dynamic, increasingly multidisciplinary and largely dependent on joint human collaboration. The term multidisciplinary team is used to refer to a group of professionals from two or more disciplines who work on the same project, independently or in





parallel, so the collaboration between team members in order to deliver integrated patient-centred care is considered as vital. (Choi & Pak, 2006) (Reeves, Scott, Lewin, & Zwarenstein, 2010).

Multidisciplinary collaboration can in its best be co-creation. Co-collaboration and co-creation are a situation in which networks, collaborator organizations, partners and customers create to build something together. It is important that the final users of the product are also involved as innovators. The value of co-creation is the diversity of the result. Partners with different competence: knowledge and skills, and backgrounds have a same focus of interest and the interaction creates something more valuable and sustainable than by doing the creation alone.

Collaboration can be divided in different kind of levels which are hierarchical collaboration, parallel collaboration and co-operative collaboration. In hierarchical multidisciplinary collaboration communication between disciplines is more like announcing information from one discipline to another. In parallel multidisciplinary collaboration different professionals in different disciplines are communicating collaboratively and reflectively. In co-operative collaboration different disciplines communicate dialogically and they have shared professional communication. (Jeglinsky & Sipari, 2015).

Healthcare and services should be delivered by a range of professionals functioning as a team under one organizational umbrella or by professionals from a range of organizations, including private practice, brought together as a unique team.

The concept of 'collaboration' in the healthcare context is a process of problem solving, shared responsibility for decision-making and the ability to carry out a care plan while working towards a common goal.

Due to complex structure of health issues, the health professionals whom have specialization in different fields are interconnected to each other. In comparison to personal operations, cumulative knowledge and experience of health professionals are leading innovative solutions in which play an important role on development and success. While initiating multidisciplinary collaboration, it has to be settled that a team approach includes health specialists; access to multi operational





therapeutic selections caring system, which reflects standards of quality. Therefore, the decisions have to be made with adequate information. In addition, it is important that participation of patients to debates of "patients care, management" while getting appropriate information of health specialists. Consequently, a multidisciplinary approach to health services leads e.g., to patient satisfaction and higher financial performance.

Different definitions have been developed about multidisciplinary collaboration, having characteristics like objectivity, methods, regularity, common goals, population's/patient's perspective and individually shared responsibility. As a patient's condition changes over time, the composition of the team may change to reflect the changing clinical and psychosocial needs of the patient.

A lot of research and development are currently ongoing in hospitals and health centres on the multidisciplinary topic. This approach has been useful not only in the health care system, but also in other social sciences systems. The leadership in health care system has the responsibility to create an environment for collaborative relationships. In multi professional relationships health care workers can find their professional roles and evaluate their skills and knowledge base, and assess their needs for continued education.

Overall, collaboration was found to be positive or neutral in every study that compared collaboration with a non-collaborative alternative (Saint-Pierre, Herskovic, & Sepúlveda, 2018).





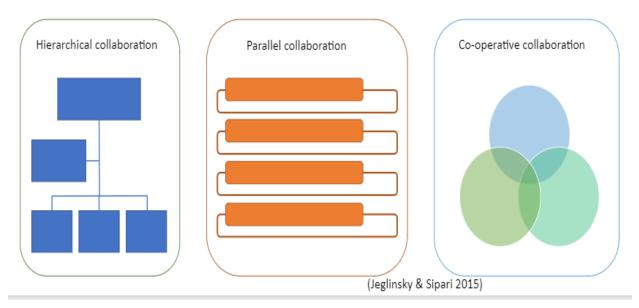


Figure 1 Levels of Multidisciplinary Collaboration (Jeglinsky & Sipari, 2015)

#### Example

To build an excellent Multidisciplinary Student-Run Centre; get all the participant involved and make changes in the world based on common understanding. Building understanding together in dialogue based on different kind of knowledge: personal experience and perceptions, scientific knowledge, theories, legislation, roles and norms, common understanding, expert knowledge. When focusing to create a Student-Run Centre, the co-collaboration and co-creation would involve the organization and its networks, students, teachers, clients and other potential stakeholders.

Multidisciplinary co-work and collaboration at the centre is the key to a whole new knowledge, competence and skills: Hybrid skilled competence. How is this done? With Cooperation, co-coordination and in dialogue, by Imitation for learning, by shared and parallel doing.

For example, developing a new kind of web-based service for young mothers. There is a need for multidisciplinary collaboration in teams which include nurses, occupational therapists, physiotherapists and engineers (web page designers), lawyers, economists. This is a





multidisciplinary collaboration because all the members represent their own discipline and bring their knowledge. All the members are working within their own discipline domains.

Another example would be a multi-professional and disciplinary 6-week service program as part of education and work placement for families and/or people living alone who has need for assistance and support but whose needs cannot be met by public social and health services. Aims of the program is strengthening the customer's sense of capability and making the resource plan of life as well as assisting in its implementation and enabling a student's wide-ranging learning in a multi-professional team. In the service program, students have the opportunity to challenge themselves and learn the things pragmatically, customer-oriented at customers' home.



Figure 2 Team Work

#### Innovation and Entrepreneurship

#### Entrepreneurship

One of the basic building blocks of development and prosperity in a country is entrepreneurship. The idea of business development, which emerged by entrepreneurial activities, refers to the ability of starting a business depending on the innovative skills of entrepreneurs.





Entrepreneurial education is becoming more prominent, with many students seeking extracurricular activities and taking on additional classes in order to learn more about how to succeed in different fields (Supporting Entrepreneurial Connectivity, 2018).

The term "entrepreneur" is a French word derived from the verb "entreprendre", which means to do or to undertake. Entrepreneurship is defined as a concept that encompasses the whole process of entrepreneurship taking risks, pursuing, implementing and innovating opportunities. Entrepreneurship, a creative and innovative activity, is highly motivated to expand energies on the creation of a new enterprise or organization. For this reason, entrepreneurship and business start-up activities are directly proportional to the entrepreneurial abilities of individuals and many factors that affect business start-ups.

Universities have realized cooperation with industry to benefit from them and their students as: to learn about the views of employers and the particular knowledge and skills that graduates are expected to have; to find placements for students who prepare them for the world of work and to provide various services (training courses, joint innovative activities, etc.) to enterprises that not only benefit recipients but also generate additional income.

Entrepreneurship and Innovation are fuzzy concepts that have been given multiple meanings. They are often considered as overlapping concepts, for example Schumpeter defines entrepreneurs as "individuals that carry out new combinations (i.e., innovations)" (1934: 74).

Entrepreneurship in healthcare industry is similar to other industries in environmental conditions, structure, and strategies. It is characterized by turbulent and harsh environmental conditions. In the light of these environment variables, health care has undergone structural and strategic changes and innovations to achieve organizational economies of scale, improve utilization of resources, enhance access to capital, increase political power and expand the scope of the market (Zuckerman, Dowling, & Richardson, 2000)

Health sector is one of the most dynamic sectors within the service sector due to its structure. This dynamic structure brings many opportunities, creates new markets, makes important economic





breakthroughs and creates new employment areas. With a good assessment of potential opportunities, students in health education are provided with the opportunity to recognize the sector they are specialized in and to have entrepreneurial tendencies to evaluate these opportunities. From this point of view, health students who are educated in the field of health should be educated as people who can take risks, take responsibility, have a self-motivation and features such as a structure open to innovation, change and transformation.

Entrepreneurship and innovation competence are transversal competences, which applies to all phases of education and studying. Students' personal growth and development of skills to entrepreneurship are facilitated by culture, pedagogy and education. Visibility of "entrepreneurship path" is seen throughout the curriculum and during education as a growing awareness of entrepreneurial skills and knowledge. Education and culture enable the widespread development of entrepreneurial mind-sets, which benefit individuals and society as a whole.

As summary, it can be said that stakeholders and environment support the development of student's competences and generation new entrepreneurs. It was seen that competences of entrepreneurship can be developed at different environments and platforms. Also, it was made clear that during studies, students are actively participating in society and working life. They work together with companies and entrepreneurs to practice their entrepreneurship skills through relevant activities such as projects and trainings. In the end of their studies, students are able to enter the job market, self-employed themselves and co-found new companies with their peers.







Figure 3 Competences of Entrepreneurship in Education Field

#### Innovation

Over the past two decades, innovation has become critical to economic growth and progress in all industries, especially in the healthcare system... "Innovation in healthcare system will be more pervasive in people's lives because it will be focused on keeping people within the "magic" circle of wellness" (Shrestha, 2018), not just treating them when they're facing any sort of health issues. Innovation has become one of those buzz words that connotes different things to different people – newness, discovery, or perhaps an advance in technology. But no matter how it's defined, constant innovation has undoubtedly brought the science of medicine to another stage, contributing to an ever-improving healthcare system (Hwang, 2019).

European policy making has the learning for innovation in developing higher education as a central element. To benefit business, solve different problems faced by the society and to ease the everyday life, is the innovation required. By collaborating with regional companies and organization, the students will learn to develop new solutions, products and services. These authentic creative collaborations offer an attractive learning environment and increasing innovation competence. (Hero, Lindfors, & Taatila, 2017).





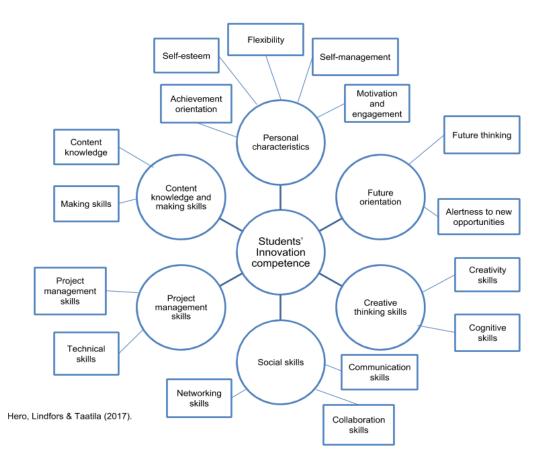


Figure 4 Students' Innovation Competence (Hero, Lindfors, & Taatila, 2017)

The Department of Commerce Advisory Committee on Measuring Innovation in the 21st Century Economy has defined innovation as "the design, invention, development, and/or implementation of new or altered products, services, processes, systems, organizational structures, or business models for the purpose of creating new value for customers and financial returns for the firm (The Department of Commerce Advisory Committee on Measuring Innovation in the 21st Century, 2006). "Viewed comprehensively, innovation represents the implementation of new or significantly improved products, services, or processes. It can also imply new organizational





models, methods of service delivery, ways of relating to customers, and approaches to marketing (AWF, 2018).

Innovation can be defined as the introduction of innovative thought into the market. Innovation created by the impact of the economy of creativity represents the development process of new approaches, technology and working styles. Innovation starts with a good idea. It then proceeds by transforming this idea into a marketable product or service, a new or improved production or distribution method, or a new social service (Figure 5). In summary, innovation is the whole of the creative process that makes good.

Today, institutions are able to achieve success, improve their activities and make effective innovations.



#### **Figure 5 Innovation Process**

Going forward, the emphasis on innovation promises to accelerate rapidly and produce exponential change in important areas including prevention, more personalized care tailored specifically to a patient's genetic profile and needs, more efficient and proactive technology-enabled care models, more integrated and comprehensive delivery organizational designs, and additional creative technology-enabled options for effective health encounter (Haughom, 2014).

Through well thought and implemented Innovation management a good working culture, where innovations can occur and the company still maintains its functionality, is possible to reach. Innovations are usually born when there is:

1. less strict structures,





- 2. open access to information,
- 3. encouraging environment for the disruptive ideas,
- 4. support for experimenting new things and room for the failures,
- 5. support for taking the ideas further into innovations,
- 6. wide collaboration and an approbative atmosphere and co-creation processes for feedback are essential for the greater customer understanding.

Any new idea of improving health, preventing disease and improving patient care management can be used as an innovative tool. The health sector is one of the leading sectors with high technological potential, both technological and knowledge intensive. In this context, health institutions need to be innovative with the idea of providing sustainability and competitiveness and responding better to the needs of patients, health personnel and stakeholders. Innovative products and services provided by innovation increase early detection and treatment facilities and prevent future costs. In this way, alternative solutions can be created for the benefit of the patient in the long term with the efficiency increase provided in the health system. Moreover, cheap and accessible solutions can be produced by using advanced technologies in health services. In addition, positive contributions can be made for many sectors which are horizontally and vertically connected with health. Early adoption and acquisition of innovation culture is important. The courses, practices and opportunities that will develop the culture of innovation during the education of the students who will serve as health professionals should be provided within the framework of this project.

Innovation management is about balancing between creating space for ideas and new solutions and having structures to support the functionality. Since the innovation processes are often messy and filled with tensions, the management needs to be flexible and make their adaption to the situations based on the pro innovation values that everybody in the company or organization have approved.





#### Examples

- Students are practicing entrepreneurship and innovation skills and competences in different educational contexts, activities and projects. They are for example planning and implementing sales and marketing related to Student-Run Centre and are creating cooperation with private, public and third sectors.
- Culture at Student-Run Centre is based on empowering students act as an entrepreneur and it provides students the appropriate tools to assess and effectively develop key competences of entrepreneurship.
- Universities cooperate with industry to benefit from them and their students as: to learn about the views of employers and the particular knowledge and skills that graduates are expected to have; to find placements for students which prepare them for the world of work and to provide various services (training courses, joint innovative activities, etc.) to enterprises which not only benefit the recipients but also generate additional income.
- A company or other working life organisation gives a challenge and order an innovation from Student-Run Centre. A multidisciplinary student group comes up with creative, future oriented ideas and develops a concept. After they have made the project plan and an agreement, is the development project carried out for the benefit of working life and for society.

# Co-creation and Co-configuration

The concept of co-creation has been central to a variety of service industries for several decades. A tool to fuel innovation and customer satisfaction, co-creation acknowledges that the success of any given enterprise depends not only on the expertise, assets, and core competencies of the service provider but also on the knowledge and perspectives of the target customer as well. Co-creation extends beyond consultation with or participation of consumers. It is about integrating customers into the processes of product and service ideation and execution so that their unique perspectives





and cooperation may ultimately drive value for both the producer and the customer becoming a win - win situation for all involved stakeholders (Galvagno & Dalli, 2014) and (Palumbo, 2016).

Co-creation is an initiative that brings different parties together in order to jointly produce a mutually valued outcome. Co-creation brings a blend of ideas from direct customers or viewers which in turn creates new ideas to the organization (Cranfield & Jensen, 2018).

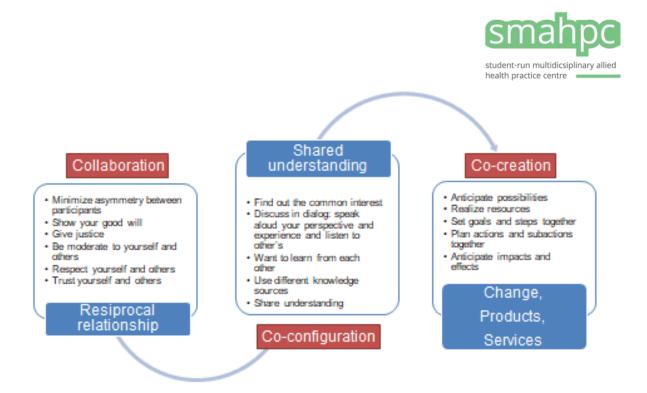
Co-creation is described as a resource integration process involving actors that are linked within the desired service (Gummesson & Mele, 2010).

Co-creation is a teamwork approach where the service-user and the service-provider are equal partners in the development and creation of problem-solving methods, techniques and program development. All the stakeholders gather together for brainstorming problem identification and problem solutions. When co-creation takes place, it facilitates incorporation of individual and corporate cultures, values, priorities, achievable expectations and subjects that are meaningful for all stakeholders. All participants are co-producers of programs, learning methods, health interventions and community development that will bridge gaps in areas that prevent individuals and communities from reaching their desired health and educational outcomes.

Co-configuration can take place in an environment where patients, clients or students are involved in decisions about their needs or services, and where stakeholders share their experiences, knowledge, ideas and/or suggestions. People in such an environment or those with this understanding perceive dialogue as a means of making progress or improving performance (Daniels, Edwards, Engeström, Gallagher, & Ludvigsen, 2010).

In the context of student-run multidisciplinary allied health practice centre co-configuration and co-creation has special meaning. Co-configuration refers to building common understanding. Co-configuration is a dialogical process in multiprofessional group.







Based on Harra (2014), Co-creation means collaboratively planned actions for developing process for best solutions in meaningful and purposeful way. It enhances participant's wellbeing, capability, commitment, opportunities and sense of agency. Both co-configuration and co-creation are based on reciprocal relationship in frames of justice, good will, respect and trust.

#### Example

Reciprocal relationship can be built up in collaborative process. Co-configuration is needed e.g., in the beginning of innovation project when participants (students, entrepreneurs, clients and experts) want to uncover the challenge. Through co-configurative dialog participants are able to share experiences, theoretical knowledge, observations, evidence and other kind of knowledge of participants and build better understanding about the challenge. It gives a space for client's voice and can give an authentic view to user's needs.

In co-creation the group will first of all enable user-involvement in innovation process. Then the group will create together the common aim and plan for user-involved development, testing and





marketing processes of new products or services. Through co-creations the agents are not dependent only the given possibilities, because they are able to build new possibilities together. So, the patient is a person who experiences the course of a health condition (first symptoms, examination, treatment, follow-up, rehabilitation, etc.). Patients/clients should, therefore, be considered co-creators for the development of healthcare services and encouraged to express their ideas or to share their knowledge/experiences. In this way, problems can be approached from patients' perspectives, technical and functional quality can be improved, innovative and creative processes can be developed and patient commitment to treatment can be positively affected (Elg, Engström, Witell, & Poksinska, 2012). Not only patients but all stakeholders (patients, clients, students, health professionals, educational staff etc.) can be encouraged to share their ideas and suggestions to propose solutions for problems, to develop programs and to determine learning objectives and methods in order to ensure that they, as co-creators, can provide targeted or anticipated health or educational service (Levy, 2008).

## **Evidence- Informed Practice**

Evidence informed practice is used to design health promoting programs and activities using information about what works. It means using evidence to identify the potential benefits, harms and costs of any intervention and also acknowledging that what works in one context may not be appropriate or feasible in another. Evidence informed practice brings together local experience and expertise with the best available evidence from research (Victorian Department of Human Resources, 2019).

Evidence-informed practice (EIP) is a process for informed clinical decision-making. In EIP, research evidence is integrated with clinical experience, patient values, preferences and circumstances. Although the term evidence-informed is used frequently of late rather than evidence-based, few authors have clarified the distinction.





Evidence-based practice is defined as using the best and most accurate evidence in a clear, honest and rational manner in decisions on individual patient treatment. In evidence-based health care settings, appropriate resources, patient preferences, expert opinion, and evidence from scientific research are combined to provide the best care for patients. In other words, the best evidence obtained through systematic research is combined with personal experience and clinical decision skills gained in clinical practice, and patient's values and preferences. Evidence-based practices strengthen the link between knowledge and decision-making, and make the diagnosis, treatment and care process scientific and professional. Thus, it is possible to provide effective health care to the patients with the available resources.

In EIP practitioners and clients are in real dialogue where research evidence is integrated with clinical experience, patient values, preferences and circumstances. Miles and Loughlin (2011) claimed that EBP, in which evidence is the prior knowledge base, has taken humanity out of clinical practice, so they promoted the use of the term evidence-informed practice to indicate that the process be client-centred rather than focused on the science of reducing the quantitative evidence. Nevo & Slonim-Nevo (2011) argued that research findings should not be overestimated, but considered as part of clinical reasoning as well as client's values, wishes and expertise.

#### Examples

For example, when rehabilitation or care is conducted as evidence-based practice it means that the therapist co-ordinate the protocol prior the evidence instead of the individual information about client. The situation has a different kind of nature, EIP, when therapist take first into the consideration the individual situation of the client and use evidence because to find of best solutions just for the one special client.

Project number: **598602-EPP-1-XK-EPPKA2-CBHE-JP** (2018-3220/001-001) "This project has been funded with support from the European Commission. This publication reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein."

kolegji-heimerer kolegii heimerer kolegi



Evidence-based health care is the practice that covers lifelong learning approaches that aim to reach clinical information about diagnosis, prognosis, treatment, decision-making, and cost. The following steps are followed in the evidence-based implementation process:

- Converting information needs related to patient care into answerable questions.
- Answering questions identified by the best, most accurate evidence (Clinical reviews, related literature, laboratory studies for diagnosis, other sources)
- Evaluation of evidence with a critical approach in terms of validity (proximity to reality) and usability (in terms of clinical applications)
- Application of the results to clinical trials
- Evaluation of performances

Evidence used in the health promotion context can come from a range of sources, and can be numerical information analysed statistically or can be descriptive information gathered from interviews or open-ended questions. For it to be evidence it needs to be collected in a systematic manner and it needs to be informed by research and/or evaluation.

### User-Involvement

User involvement support people to speak up about the services they use, and is making sure the voices of people are heard and they are able to actively shape and improve the services they use and influence local, national and international policies (The Advocacy Project, 2018).

It means that instead of doing things yourself, you ask and you include other people as well, but not just telling them what to do but consulting them.

Associated with such concepts as authority and partnership, user involvement/participation defines an effective process in which people take action or express their opinions in an environment where they are respected. People who are actively involved in or encouraged to be involved in decision-





making processes should be made to feel that they are a part of change and development and that their interests and wishes are taken into account (Fletcher, 2003).

In an education setting, students are given opportunities to interact with and to take responsibility for their own learning. Course instructors plan their lessons to include student creativity in designing methods for learning and demonstrating their knowledge of information learn. Instructional material is disseminated in a way that accommodates all student learning styles (i.e., visual, auditory, kinaesthetic, tactile, etc....).

At Student-Run Centre the service-user is identified as an active participant and an equal actor for his/her own wellbeing/rehabilitation

The service-user (patient, client, and student) is empowered and encouraged by the serviceprovider (health professional, education staff) to express their priorities regarding their desired health and educational outcomes. The service-user is allowed and encouraged to be involved in the full health and education provision process. In other words, in the health context, they are asked permission before services can be provided. They are given choices of intervention. They are included in the goal-setting process and intervention plans are developed in collaboration with the service-user. Intervention strategies are designed to take in account the service-users' values and views.







Figure 7 Alongside and Together. Ho is the service-provider? (Taavi Tihkan, 2015)

In such an environment, differences should be respected, diversity should be addressed, and inclusion should be of primary importance. Encouraging people to share their ideas, considering their rights and needs, and organizing activities for this purpose are prerequisites for user involvement (Aydin, Kutbay, Yalman, & Yavuz, 2015). Users can be involved in a process in many ways. For example, they can play an active role in planning, management, inspection, service follow-up, preparation of learning materials, innovation process (product development, design improvement, etc.) and employee evaluation and development. Taking users as educators contributes to the healing process of people benefiting from centres, the functioning and development of the centres, and research and training (Diamond, Parkin, Morris, Bettinis, & Bettesworth, 2003). For such reasons, types and levels of involvement should be clearly determined by health centres, people's involvement in processes should not be seen as a burden on





time and resources, and employees should be encouraged to regard this process as an opportunity to turn problems into creative solutions (Fletcher, 2003).

#### Examples

- Co-Creation: planning services involves always those persons who are part of a system or a service (service-users and service-providers).
- Sequencing helps the planning: services should be visualized by sequences, or key moments in a customer's journey.
- Service-users need to be aware of elements of a service. Evidencing creates loyalty and helps customers understand the entire service experience.
- A holistic design takes into account the entire experience of a service. Context matters.
- Using the Service design toolkit to plan and implement better services
- Being aware of the non-verbal communication helps to understand each other. Non-verbal signals win always the verbal signals!
- Remember the symmetric discussion. Ask and be genuinely interested in service-users' views.
- Remember the strength of your team and teamwork; you don't have known and do everything by yourself.
- Dare to step out from your comfortable zone and try something new; best way to become a better human-centric professional
- The trust increases confidence: see and hear everyone, be presence, believe in everyone's ability to learn, give experiences of success
- By observing, identifying and reflecting especially the strengths and resources of the service-user, the desired change is achieved, the internal motivation and commitment is maintained and the active role in own wellbeing/rehabilitation is strengthened.





- Help the service-user to trust her/his own abilities and skills. Give a lot of concrete and positive feedback to increase the self-efficacy and self-esteem of the service-user.
- Reflect your interaction culture and the environment; do they encourage and empower to the co-creation and success experiences

### Allied Health

While occupational groups in the field of integrated health vary from country to country, specialists aim to promote healthy life, improve quality of life and provide the best possible service. These people provide such health services as identification, evaluation and prevention and/or treatment of diseases (ASAHP, 2018).

Allied health encompasses a broad group of health professionals who use scientific principles and evidence-based practice for the diagnosis, evaluation and treatment of diseases; promote disease prevention and wellness for optimum health, and apply administration and management skills to support health care systems in a variety of settings. (ASAHP, 2018).

Allied Health involves all health professions providing diverse health or related services pertaining to the identification, evaluation, rehabilitation, reablement, promotion and prevention of health, functioning and disability.

Allied health professionals must also attend to the prevention of disease and the management of patients with chronic disease. Thus, the scope of allied health practice extends to the individual, the family, and the community and to public education. In addition, healthcare administration and health systems management are important components of allied health. (ASAHP, 2018).

The training needs of many specialists, from physiotherapists to emergency medical technicians, differ from each other. Therefore, each professional group should have appropriate laboratory environments, hands-on experiences, practical activities, appropriate health facilities and patient populations for educational processes. Practitioners who provide a variety of diagnostic, technical





and therapeutic health services to improve patients' health outcomes should generally collaborate with multidisciplinary healthcare teams to meet patient needs and assess them from a holistic perspective.

Allied health professions have holistic view of human beings and are working toward the common goal of providing the best possible service in health care and health promotion. The international classification of functioning, disability and health (ICF) provides common language of functioning and disability for different professions and persons with disabilities and basis for understanding and studying health status and functioning. In the ICF (Figure 8) person's functioning is "a dynamic interaction between her or his health conditions, environmental factors, and personal factors." (WHO, 2018).

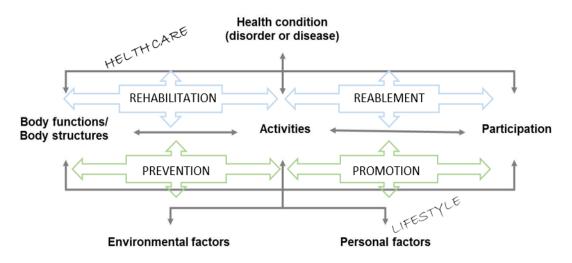


Figure 8 Interactions between the components of ICF (WHO, 2018) and Allied Health Areas modified by (modified by K. Juntunen)

#### Example

Allied health professions at Student-Run Centre are students of laboratory technician, nursing, occupational therapy, and speech therapy.





Laboratory technicians are essential part of identification the health condition of clients and the effect of treatments. All students can participate, for example, in planning of a health promotion program for a workplace to enable employers to increase control over their own health and quality of life. Nursing an occupational therapy students can implement evidence informed falls prevention program for seniors with disabilities. Further, they can be involved in reablement process of older adult after hospital period assisting him/her to regain functional capacity and improve independence at home. All students have specific role in rehabilitation process of children with disability, to measure, achieve and maintain optimum functioning in interaction with their environments.

#### Patient/ Client-centredness

Health reform promotes the delivery of patient-centred care. Occupational therapy's rich history of client-centred theory and practice provides an opportunity for the profession to participate in the evolving discussion about how best to provide care that is truly patient centred. However, the growing emphasis on patient-centred care also poses challenges to occupational therapy's perspectives on client-centred care (Mroz, Pitonyak, Fogelberg, & Leland, 2015).

A patient/client centeredness approach is a process in which health professionals align their knowledge and recommendations with the needs and preferences of the individual to prevent, manage and treat the disease of individuals. In a patient/client centeredness approach, it is possible to consider the patient's values, preferences and needs, as well as the current medical condition. Patients and their relatives should be included in the process. It is important to make an effective communication and to make sure that they are understood by the patient. It includes an understanding of the agenda and an understanding that requires sharing of responsibility with the health team in the decision-making process following the disclosure. With a patient/client centeredness approach, the cost of health decreases and inequality in health care is eliminated, and patient satisfaction, quality of care and health improvements are increased. We compare the





conceptualizations of client-centred and patient-centred care and describe the current state of measurement of client-centred and patient-centred care. We then discuss implications for occupational therapy's research agenda, practice, and education within the context of patient-centred care, and propose next steps for the profession. (Mroz, Pitonyak, Fogelberg, & Leland, 2015).

Patient participation is considered to be a necessary strategy for realizing the three main goals of health care (improving health care quality, improving community health and reducing costs). In this context, the following points should be realized for effective and efficient patient participation.

- Patients have the knowledge, skills, abilities and willingness to manage the health and care of themselves and their family members.
- The health institution has the culture that prioritizes and supports the participation of patients
- Active cooperation between patients and service providers is required to design, manage and achieve positive health outcomes

Patient participation has emerged as a health care model. The model for patient/client centredness treatment, patient participation and efficacy are presented in Figure 9.





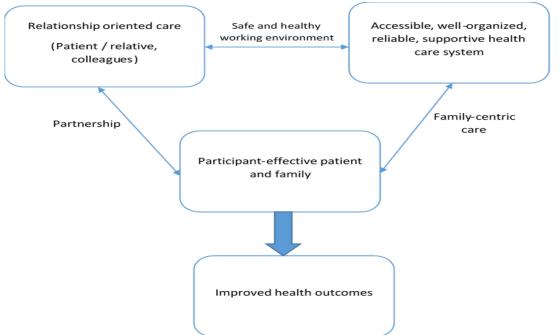


Figure 9 Patient/ Client Centredness Therapy, Patient Participation and Effectiveness (Özkan, 2017)

### Network Communication

For an organization to be successful it should increase the communication network within the organization. This in order to reach more successes by doing things in two ways: seeking and giving advices. Network communication is a social network, which promotes the team work by analysing and using theories, techniques and procedures developed for network communication (Kolleck, 2013).

Communication networks among employees are of great importance for the success of institutions. The fact that a large or small institution has effective communication networks for sharing information between the departments or with the outside world connects institutions or units.

Developing institutions have recognized the vital importance of internal communication. As a result, some institutions develop communication plans while others establish communication





policies. The coordination of the units that provide health services in health institutions is necessary to ensure that the relationship between the health care provider and the provider is realized in an effective and positive manner and health services are made more effective.

It is stated that approximately 5.1 billion dollars are wasted every year due to internal communication problems. Therefore, one of the main objectives of the health sector is to help health workers to focus more on the patient and to make an effort to communicate and collaborate effectively with and among patients.

With the use of clinical communication technology networks, it is possible for health professionals to transfer consistent and engaging care experiences and operational developments to each other and thus to increase their connection and cooperation. New communication tools need to be evaluated to improve this communication and cooperation. At this point the following items must be taken into account:

- Considering existing workflows
- Providing joint working time for inpatients
- Improvement of cooperation among healthcare workers
- Inclusion of the patient and the family in the care plans.

#### Student-Run

Student-run defines a process that it allows participant students to explore their own talents, to enrich their learn experience, with promoting opportunities/options with expanding their vocational development.

Student-run projects start with passionate students who have a deep interest in topics or areas for which there is no obvious opportunity to become involved. Student run projects endorse students to get responsibilities and apply their knowledge whereby they are recommended to be physically





and mentally active. These projects are led by students who seek hands-on experience and the opportunity to apply their knowledge in a setting beyond those experiences readily available and outside of the traditional academic model (Zielinska & McDermott, 2018).

These projects empower cooperative learning, interdisciplinary teamwork and entrepreneurship in which students effectively taken roles.

These projects are not constrained by the bounds of university-driven or externally funded research, they may promote innovation and creativity beyond what might be expected in preplanned projects (Zielinska & McDermott, 2018).

These projects prepare grounds for project preparation, development/evolution, problem solving and leadership skills. The students, through trial and error and intrinsic motivation, gain skills in project development, leadership, communication, collaboration, interdisciplinary teamwork, project evaluation and sustainability that may otherwise be hard to come by.

Therefore, student's connection to other institution, university and organizations enhance.





# Bibliography

- Ahlstrand, A. (2017). *Moikattan varpailla. Oivalluksia ohjaamisesta, likkumisesta ja oppimisesta*. Helsinki: Oppimateriaalikeskus Opike.
- Aksay, K., & Orhan, F. (2013). Assessment of Innovtion Process in Hospitals for Risk Management: A Model Proposal. University of Dicle: Journal of Faculty of Economics and Administrative Sciences, 2 (3), 10-23.
- ASAHP. (2018, 07 30). *What is Allied Health?* Retrieved from The Association of Schools Advancing Health Professions: https://www.asahp.org/what-is
- AWF. (2018, 09 30). *Innovation in Healthcare: Why it's needed and where it's going?* Retrieved from Health Catalyst: https://www.healthcatalyst.com/innovation-in-healthcare-why-needed-where-going
- Aydin, H. S., Kutbay, N. H., Yalman, Z., & Yavuz, C. (2015). User involvement in context of innovation: user innovation. *International Journal of Innovative Reserach in Education 2* (2), 68-73.
- Bacigalupo, M., Kampylis, P., Punie, Y., & Van den Brande, L. (2016, 09 30). EntreComp: The European Entrepreneurship Competence Framework EUR 27939 EN. Luxembourg (Luxembourg): Publications Office of the European Union. Retrieved from European Commission.
- Bayin, G., & Akbulut, Y. (2012). Evidence-Based Approach and Health Policy, 1(2), *Journal of Ankara Health Sciences*, 115-132.
- Billet, S., Ovens, C., Clemans, A., & Seddon, T. (2007). Collaborative Working and Contested Practices: Forming, Developing and Sustaining Social Partnerships in Education. *Journal* of Education Policy 22(6), 637-656.





- Blok, F. (2018). Overcoming barriers to Multidisciplinary Collaboration in healthcare. Unpublished Masters' Thesis. Erasmus University of Rotterdam.
- Borg, M., & Kristiansen, K. (2004). Recovery-oriented Professionals: Helping Relationships in Mental Health Services. *Journal of Mental Health*, 13 (5), 493-505.
- Boyce, R. A. (2001). Organizational Governance Structures in Allied Health Services: A decade of change. *Australian Health Review*, 24 (1), 22-36.
- Brown, C., & Stoffel, V. C. (2011). Occupational Therapy in Mental Health. A Vision for Particiption. Philadelphia: F.A. Davis Co.
- Brown, D., White, J., & Leibbrandt, L. (2006). Collaborative Partnerships for Nursing Faculties and Health Service Providers: What Can Nursing Learn from Business Literature? *Journal of Nursing Management*, 14, 170-179.
- Care Issues. (2019, 03 21). *Multidisciplinary Healthcare*. Retrieved from International Hospital: https://www.interhospi.com/fileadmin/artimg/multidisciplinary-healthcare.pdf
- Cevher, E. (2016). The importance of Entrepreneurship Education at the Development of Innovative Entrepreneurship: A Research on Vocational Schools Students. *Journal of Social Sciences and Humanities Researches 17 (37)*, 1-17.
- Choi, B. C., & Pak, A. W. (2006). Multidisciplinarity, Interdisciplinarity and transdisciplinarity in Health reserach, services, education and policy: 1. Definitions, objectives and evidence of effectiveness. *Clinical and Investigative Medicine*, 29 (6), 351.
- Conklin, J. E. (2006). *Dialogue Mapping: Building Shared Understanding of Wicked Problems*. New York: Wiley.
- Corden, R. E. (2001). Group discussion and the importance of a shared perspective: Learning from collaborative research. *Qualitative Reserach 1 (3)*, 347-367.





- Cranfield, A., & Jensen, T. (2018). Where to now? New E-learning Concepts and Co-creation at the Technical University of Denmark. *5th European Conference on Information Literacy* (pp. 576-584). Saint Malo: Springer.
- D'Amour, D., Ferrada-Videla, M., San Martin Rodriguez, L., & Beaulieu, M. D. (2005). The conceptual basis for interprofessional collaboration: core concepts and theoritical frameworks. *Journal for Interprofessional Care 19* (1), 116-131.
- Daniels, H., Edwards, A., Engeström, Y., Gallagher, T., & Ludvigsen, S. R. (2010). Activity Theory in Practice: Promoting Learning across Boundaries and Agencies. London: Routledge.
- Diamond, B., Parkin, G., Morris, K., Bettinis, J., & Bettesworth, C. (2003). User Involvement: Substance or Spin? *Journal of Mental Health*, *12* (6), 613-626.
- Dowling, B., Powell, M., & Glendinning, C. (2004). Conseptualising Successful Partnerships. *Health and Social Care, 12 (4)*, 309-317.
- Elg, M., Engström, J., Witell, L., & Poksinska, B. (2012). Co-creatiob and learning healthcare service development. *Journal of Service Management*, *23*(*3*), 328-343.
- Engeström, Y. (2008). From teams to knots: activity-theoritical studies of collaboration and *learning at work*. New York: Cambridge University Press.
- Filion, L. J. (2013). Defining the Entrepreneur Complexity and Multi-dimensional Systems
  Some Reflections Author. In L.-P. Dana, *World Encyclopedia of Entrepreneurship* (p. 512). Cheltenham, UK and Northampton, MA, USA: Edward Elgar.
- Fletcher, G. (2003). Building sustainable partnerships in user involvement. *The Obstetrician Gynaecologist 5 (4)*, 218-220. doi:10.1576/toag.5.4.218.26924





- Gallagher, A., Daniels, H., Edwards, A., & Engeström, Y. (2010). *Activity Theory in Practice: Promoting learning across boundaries and agencies.* London: Routledge.
- Galvagno, M., & Dalli, D. (2014). Theory of value co-creation: a systematic literature review. *Managing Service Quality*, 24(6), 643-683.
- Gummesson, E., & Mele, C. (2010). Marketing as value co-creation through network interaction and resource integration. *Journal of Business Market Management*, 4(4), 181-198.
- Güneş, Ü. (2017). Steps of Evidence-based Practice Process in Nursing. *International Refereed Journal of Nursing Researches*, 9, 171-187.
- Harra, T. (2014). *Terapeuttinen yhteistoiminta*. *Asiakkaan osallisuuden mahdollistaminen toimintaterapiassa*. Rovaniemi: University of Lapland.
- Harra, T., Heitto, M., Kokkala, C., Reijonen, M., Numminen, S., & Janhunen, M. (2018, 09 30).
  Hyvissä handuissa himassa: Kotona asumista ja hyvinvointia täydentävä palveluohjelma Idän palvelualueen ja Metropolian yhteistyönä. Retrieved from Metropolia: https://www.metropolia.fi/fi/tutkimus-kehitys-ja-innovaatiot/hankkeet/hyvissa-handuissahimassa
- Haughom, J. (2014). Innovation in Healthcare: Why it's needed and where it's going? *Health Catalyst*.
- Head, B. W. (2016). Toward more "evidence-informed" policy making? *Public Administration Review*, 76 (3), 472-484. doi:10.1111/puar.12475
- Health Innovation Network. (2019, 05 11). What is Person-centred Care and Why is it Important? Retrieved from Health Innovation Network: https://healthinnovationnetwork.com/system/ckeditor\_assets/attachments/41/what\_is\_per son-centred\_care\_and\_why\_is\_it\_important.pdf





- Healthcare Business Insights. (2014). *Designing Communication Networks to Optimize Health Outcomes.* Beckers' Hospital Review.
- Hero, L.-M. (2018). *Superteam tournament: A pedagogical innovation activity system*. Thesus: Metropolia.
- Hero, L.-M., Lindfors, E., & Taatila, V. (2017). Individual Innovation Competence: A systematic Review and Future Research Agenda. *International Journal of Higher Education*, 6 (5), 103-121. doi:10.5430/ijhe.v6n5p103
- Humphry, R. (2005). Model of Processes Transforming Occupations: Exploring Societal and Social Influences. *Journal of Occupational Science*, *12*(1), 36-44.
- Hwang, J. (2019, 01 15). *What Innovation means to Healthcare?* Retrieved from Healthleaders Media: https://www.healthleadersmedia.com/strategy/what-innovation-means-healthcare
- Interaction Design Foundation. (2019, 06 07). *The Principles of Service Design Thinking -Building Better Services*. Retrieved from Interaction Design Foundation: https://www.interaction-design.org/literature/article/the-principles-of-service-designthinking-building-better-services
- Jeglinsky, I., & Sipari, S. (2015). GAS-menetelmä moniammatillisesti asiakkaan arjessa. In S. Sukula, K. Vainiemi, & T. Laukkala, GAS: Menetelmästä sovellukseen (pp. 47-55). Helsinki: Kelan tutkimusosasto.
- Kolleck, N. (2013). Social network analysis in innovation research: using a mixed methods approach to analyze social innovations. *European Journal of Futures Research*, *1*, 25.
- Laukkala, T., Tuomi, J., & Sukula, S. (2015). Menetelmän taustaa. In S. Sukula, K. Vainiemi, &
  T. Laukkala, *GAS: Menetelmästä sovellukseen* (pp. 11-13). Helsinki: Kelan tutkimusosasto.





Laundan, L. (1996). Beyond Positivism and Relativism. Boulder: Westview Press.

- Levy, D. (2008). An Independent NHS: What;s in it for the patients and citizens? Oxford: Picker Institute Europe.
- Li, J. (2011). An Introduction of Teaching Model for Entrepreneurship Education. doi:10.1109/ICMSS.2011.5997963
- McCloughen, A., Gillies, D., & O'Brien, L. (2011). Collaboration between Mental Health Consumers and Nurses: Shared Understandings, Dissimilar Experiences. *International Journal of Mental Health*, 20, 47-55.
- Merjola-Partanen, T. (1993). Multi-disciplinary team work in health services development. *Sairaanhoitaja, 1991*(8), 32-34.
- Miles, A., & Loughlin, M. (2011). Models in the balance: Evidence-based medicine versus evidence-informed individualized care. *Journal of Evaluation in Clinical Practice*, 17(4), 531-536. doi:10.1111/j.1365-2753.2011.01713.x.
- Mroz, T. M., Pitonyak, J. S., Fogelberg, D., & Leland, N. E. (2015). Client Centeredness and Health Reform: Key Issues for Occupational Therapy. *The American journal of occupational therapy: official publication of the American Occupational Therapy Association*, 69(5), 8. doi:10.5015/ajot.2015.695001
- Nevo, I., & Slonim-Nevo, V. (2011). The myth of evidence-based practice: Towards evidenceinformed practice. *British Journal of Social Work*, *41*(6), 1176-1197.
- Oktay, A. (1993). İşletme bilimine giriş [Introduction to business management]. Trabzon: Derya Kitabevi.
- Özbey, H., & Başdaş, Ö. (2018). Innovation in Nursing. *ERU Faculty of Health Sciences* Journal, 5(1), 1-7.





- Özkan, O. (2017). Patient-Oriented Approach in Health Services: Patient Engagement. *Hitit University Journal of Social Sciences Institute*, *10*(2), 1759-1770.
- Öztürk, Y. E., Köksal, O., & Kıraç, R. (2014). Entrepreneurship Scale for Health Management Students. *International Journal of Human Sciences*, *11*(2), 582-597.
- Palmadottir, G. (2006). Client-Therapist Relationships: Experiences of Occupational Therapy Clients in Rehabilitation. *British Journal of Occupational Therapy*, *69*(9), 394-401.
- Palumbo, R. (2016). Contextualizing co-production of health care: a systematic literature review. *Int J Public Sector Manage*, 29(1), 72-90.
- Pickens, N., & Pizur-Barnekow, K. (2009). Co-occupation: Extending the dialogue. *Journal of Occupational Science*, *16*(3), 151-156.
- Pierce, D. (2009). Co-occupation: The Challenges of Defining Concepts Original to Occupational Science. *Journal of Occupational Science*, *16*(3), 203-207.
- Reeves, S., Scott, S., Lewin, S., & Zwarenstein, M. (2010). *Promoting Partnership for Health: Interprofessional Teamwork in Health and Social Care.* Chichester, West Sussex: Blackwell.
- Rittel, H. W., & Webber, M. M. (1995). Dilemmas in a General Theory of Planning. *Policy Sciences*, *4*, 155-169.
- Sackett, D. L., & Rosenberg, W. M. (1995). The need for evidence-based medicine. *J R Soc Med*, 88(11), 620-624.
- Sackett, D. L., Rosenberg, W. M., Gray, J. M., Haynes, R. B., & Richardson, W. S. (1996). Evidence based medicine: what it is and what it isn't. *BMJ (Clinical research ed.)*, 312(7023), 71-72.





- Şahin, G., & İğde, F. A. (2014). Patient-Centered Care-Sharing Decision Making and the Quality. *Turkey Clinics*, 3, 38-43.
- Saint-Pierre, C., Herskovic, V., & Sepúlveda, M. (2018). Multidisciplinary Collaboration in Primary Care: a systematic review. *Fam Pract.*, 35(2), 132-141. doi:10.1093/fampra/cmx085
- San Martin-Rodriguez, L., Beaulieu, M. D., D'Amour, D., & Ferrada-Videla, M. (2005). The Determinants of Successful Collaboration: A Review of Theoretical and Empirical Studies. *Journal of Interprofessional Care*, 1, 132-147.
- Schepman, S., Hansen, J., De Putter, I. D., Batenburg, R. S., & De Bakker, D. H. (2015). The common characteristics and outcomes of multidisciplinary collaboration in primary health care: a systematic literature review. *International Journal of Integrated Care*. doi:10.5334/ijic.1359
- Schumpeter, J. A. (1934). *The Theory of Economic Development*. Cambridge Mass: Harvard University Press.
- Şengün, H. (2016). Communication Management in Healthcare Services. Journal of Istanbul Faculty of Medicine, 79(1), 38-42.
- Şengün, H. (2016). Innovation in Health Care Delivery. *The Medical Bulletin of Haseki*, 54, 194-198.
- Shrestha, R. (2018, 11 11). Delivering on the Promise of Healthcare Innovation. (P. Jaret, Interviewer) Retrieved from https://www.siemens-healthineers.com/en-us/news/msointerview-shrestha.html





Sierchio, G. P. (2003). A multidisciplinary approach for improving outcomes. Journal of infusion nursing: the official publication of the Infusion Nurses Society, 26(1), 34-43. doi:10.1097/00129804-200301000-00005

- Simpson, S., & Long, J. (2007). Medical student-run health clinics: important contributors to patient care and medical education. *Journal of General Internal Medicine*, 22(3), 352-356. doi:10.1007/s11606-006-0073-4
- SOCRE. (2019, 07 11). *Teachers' Handbook*. Retrieved from Erasmus Socre: https://www.erasmussocre.eu/
- Sumsion, T., & Lencucha, R. (2007). Balancing Challenges and Facilitating Factors when Implementing Client-Centred Collaboration in a Mental Health Setting. *British Journal of Occupational Therapy*, 70(12), 513-520.
- Supporting Entrepreneurial Connectivity . (2018, 09 30). *Student Entrepreneur*. Retrieved from Enterprising Oxford: https://eship.ox.ac.uk/student-entrepreneur/
- The Advocacy Project. (2018, 12 09). *User Involvement*. Retrieved from The Advocacy Project: https://www.advocacyproject.org.uk/what-we-do/user-involvement/
- The Department of Commerce Advisory Committee on Measuring Innovation in the 21st Century. (2006). *Innovation Measurement: Tracking the State of Innovation in the American Economy*. Washington: U.S. Departament of Commerce.
- Turnbull, C., Grimmer-Somers, K., Kumar, S., May, E., Law, D., & Ashworth, E. (2009). Allied, scientific and complementary health professionals: a new model for Australian allied health. *Australian health review*, 33(1), 27-37.
- Victorian Department of Human Resources. (2019, 06 25). Advice for public health and wellbeing planning in Victoria: planning cycle 2017-2021. Retrieved from Victoria State





Government:

https://www2.health.vic.gov.au/about/publications/policiesandguidelines/public-health-wellbeing-planning-advice-2017-2021

- WHO. (2018, 10 23). The International Classification of Functioning, Disability and Health (ICF). Retrieved from World Health Organization: https://www.who.int/classifications/international-classification-of-functioning-disabilityand-health
- WHO. (2019, 04 12). *What are integrated people-centered health services?* Retrieved from World Health Organization: https://www.who.int/servicedeliverysafety/areas/people-centred-care/ipchs-what/en/
- Zielinska, P., & McDermott, H. (2018, 12 28). The Growing Impact of Student-Run Projects. Retrieved from Evotis: http://www.evotis.org/students-v4/2014/7/23/the-growing-impactof-student-run-projects
- Zuckerman, H. S., Dowling, W. L., & Richardson, M. L. (2000). The Managerial Role. In S. M. Shortell, & A. D. Kaluzny, *Health care Management: Organization Design and BehaVior* (pp. 34-60). Albany: Delmar Publishers.

