

Chapter 3

The Development of Interprofessional Collaborative Practice and Education in Japan: Past and Present Status

1. Introduction

After the Second World War, mean life expectancy in Japan grew and Japan became one of the countries with the longest life expectancy in the world. From the 1980s onwards, a gradual paradigm shift in terms of views on health has occurred in Japan, and “quality of life” (QOL) has come to be seen as important. The long-term care insurance system was established in 2000 to cope with the increase in the number of the elderly, and in the 21st century the population has aged further. In the last few years the shortage of medical doctors has brought about disparities among regions in the maintenance and promotion of the health of citizens, and this has become a major issue for the country. It is now difficult for professionals from only a single occupation to meet the diverse demands for medical, health and social care from the increasing number of the elderly, so the necessity of “a team approach and collaboration in health and social care” has been re-acknowledged. Medical service is included in the term “health care”, designated as *‘iryō’* hereafter, and “social care,” designated as *‘fukushi’*.

Medical accidents caused by management mistakes in a hospital, the suicide of a former celebrity singer exhausted from providing long-term care to her mother, and child abuse deaths similar to the Victoria Climbié case in the United Kingdom have been reported in the media, producing a sense of crisis in schools and universities providing professional education in health and social care. From approximately ten years ago interprofessional education (IPE) began to be incorporated into professional education, based on the lessons learned from the countries that are more advanced in this area, such as the United Kingdom.

On the other hand, looking at the history of interprofessional collaborative practice (interprofessional working, IPW) in regions, collaboration between health and social care based on a preventive perspective has been carried out for a long time in Japan. The former Sawauchi Village, which challenged itself to achieve a zero infant mortality rate, actually became well-known for making medical costs for infants and the elderly free. Furthermore, in the case that social welfare activities are also included, then the concept of “Comprehensive Regional Health and Social Care” is used, meaning that those involved in educational practices should also learn from active practitioners in the community.

In this chapter the author will present collaborative activities in regions by various leaders, then describe development of IPE in universities.

2. Collaboration between health and social care in regions

Japan has become a super-aging society, so in order to control the increase in medical expenditure the priority location for geriatric care has changed from hospitals to welfare facilities, then to homes in each region in which long-term care is provided.

It is certainly important not only to prepare the hardware such as hospital buildings and medical equipment, but also to develop three types of soft power (Ref. 1), namely, medical and health care, social care networks in local communities and education on various levels in the region. (Figure 3-1)

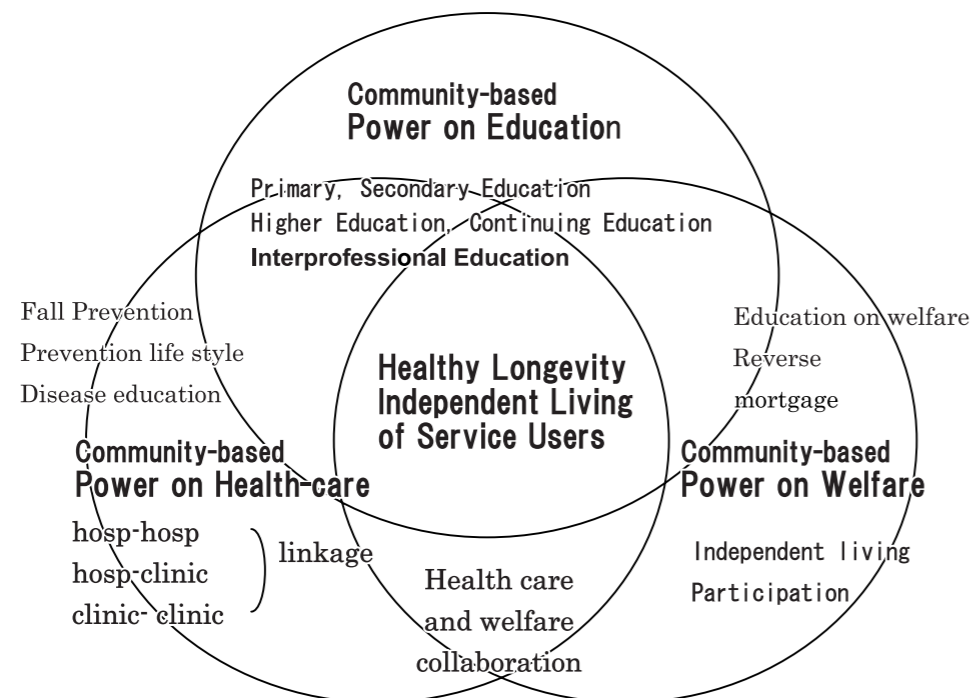


Figure 3-1. Community-based three soft powers
Aiming for healthy longevity and to maintain independent living

Therefore, wherever an advocator works, his leadership could result in the creation of a team with cooperative members, with whom objectives could be shared, resulting in good outcomes. A common mission of the team is to extend healthy life expectancy, the period of independent living, and to improve quality of life (QOL) of the users. Depending on where those advocators work, whether in hospitals, universities, medical associations, welfare facilities, or communities, distinctive medical, health and social care networks have been built in the respective regions and communities. Moreover, collaboration among multiple professions is being born in response to various demands, diseases or disasters.

Collaborative practices among multiple professions on various issues in Japan are described below with a few examples, although there are many more excellent accomplishments.

1) Regional collaboration centered on hospitals

Medical and health care through interprofessional collaboration has been implemented in regions throughout the country. One example is Saku Central Hospital in Nagano Prefecture, which after the Second World War, and before anyone else, implemented an initiative which not only considers health problems from the perspective of the treatment of illness, but also offers a comprehensive health system including prevention, health promotion, and rehabilitation understood at the level of everyday living. In 1946 Dr. Toshikazu Wakatsuki became the director of the hospital, and from 1959 he became the first person in Japan to offer medical check-ups for an entire rural community, working hard on disease prevention and health promotion for the residents. He established departments to support the medical care and welfare of the community, centered on home-visit treatment and home-visit nursing called community care. Implementation of collaboration on the ground by doctors, public health nurses, nurses, medical technologists, and certified social workers has been carried out based on the concept of primary health care over 60 years since the war, and has produced excellent outcomes. Moreover, the central philosophy of the hospital is the medico-polis concept which revitalizes regional industries (agriculture, forestry, tourism, and others), employs young people and the disabled, and gives meaning to living for the elderly (Ref. 2).

In spite of the fact that the ratio of doctors to population in Nagano Prefecture is 35th out of 47 prefectures in Japan, Nagano is a prefecture with a long mean life expectancy (2005) that is first for men and fifth for women. The dissemination of the medical care and welfare network has had a huge impact on this result. In addition to the case of Nagano Prefecture, cooperation in community medical care and welfare is being carried out in regions throughout the country centered on hospitals or hospital groups.

2) Regional collaboration centered on universities

(1) Kumamoto University

In Kumamoto Prefecture collaboration related to patients is being carried out centered on information sharing and the regional cooperative clinical pathway (for example, femoral neck fracture (Ref. 3), stroke (Ref. 4)), a tool for sharing objectives such as the final goals of the care. The formation of this network was made possible by the high level of specialized abilities of each profession, information disclosure, and clarification of areas of responsibility in acute phase hospitals, recovery phase hospitals, recuperation-type medical institutions, long-term care facilities, and other facilities, and the consent and trust among these hospitals and facilities. This creation of organizations in this region is thought to originate from the Kumamoto Rehabilitation Research Society, established in

1967 under the leadership of Professor Tatsuji Tamai, Kumamoto University Orthopedic Department. The members participating in this society were all professionals involved in rehabilitation medicine, and at the time it was a pioneering society unlike any other in the country. Its members considered collaboration in the region as a matter of course, and this led to the development of the regional collaborative critical pathway for femoral neck fractures, the first of its kind implemented in the country. Currently, the Kumamoto Regional Rehabilitation Support Meeting comprised of 34 groups including prefectural medical associations, district and municipal medical associations, dental associations, pharmacists associations, psychiatric hospital associations, nurses associations, therapists associations, and welfare-related organizations has received the commission and has built a regional rehabilitation promotion structure (Ref. 5).

(2) Jichi Medical University

Jichi Medical University was founded in 1972 with the objective of training medical doctors working in remote areas. Each prefecture has sent two selected high school students and supported the university financially. The Division of Community and Family Medicine, established in 1981, proposed the development of an organization aiming to achieve team medicine in the form of “community-oriented primary care.” Since 2004 it was reorganized as the Division of General Practice Center. The members comprising the team were government officers, public health nurses, nurses, home helpers, doctors in private practice, nutritionists, physiotherapists, and social workers (Masaji Maezawa, 1987). This meant that workshops were held with the participation of these professions in order to provide student education. Every year two graduates from each prefecture, educated at this university return to their home prefecture. They have a duty to stay and practice within the prefecture of their origin for nine years. Many of them have become excellent leaders involved in community medical care, and have implemented team medicine, and furthermore some of them as hospital directors have been active in interprofessional collaborative practice, involving residents as a human resource for health and social care in the community (Ref. 6).

3) Regional collaboration centered on medical associations

(1) Onomichi City Medical Association, Hiroshima Prefecture

One example of a regional health and social care is the “Onomichi type.” The Onomichi City Medical Association in Hiroshima Prefecture has built a cooperative structure for comprehensive community medical care under the leadership of its chairman Hisashi Katayama, using the method of ensuring a forum for information sharing and objective sharing called the Care Conference (Ref. 7). The professionals responsible for medical functions, long-term care functions, and social welfare functions gain shared knowledge with respect to care management methods and fulfill their respective roles at the Care Conference. The medical association has developed an environment in which the three principles of

functioning as a primary physician (implementation of home medical collaboration with multiple functions, flexible provision of patient-centered services, and explanations of evaluations of accountability, and the forecasts and options regarding accountability) can be applied to the greatest extent possible. Moreover, with the goal of implementing home medical care, home palliative care is being implemented through patient-centered team medicine, collaboration in community medical care, and collaboration among multiple professions (Ref. 8).

(2) Uonuma City Medical Association, Niigata Prefecture

The activities of the city medical association in Uonuma City area in Niigata Prefecture are explained as the “Uonuma type” of collaborative practice. This medical district is the region with the smallest ratio of doctors and the largest ratio of the elderly in Niigata Prefecture, where the number of doctors is ranked 41th out of 47 prefectures in Japan. Under the leadership of Masaaki Niwayama, the former director of the city medical association in this region, a social network for health and social care has been formed. Members of the association have accepted young doctors for training in rural-based medicine. This initiative to reorganize three prefectural hospitals has been implemented through close cooperation between the city medical association and the prefectural government. General practitioners, members of the association, are providing various services in health care from prevention of life-style diseases, such as diabetes mellitus and hypertension, by operating fully-equipped regional sports clubs for ages ranging from young people to the elderly. The clinics in this region are engaged in activities “aiming to be total care clinics offering everything from prevention of long-term care without using long-term care insurance to bedside care” (Ref. 9). With the collaboration of the city government and through close communication with parents, vaccination for cervical cancer was implemented to all girls under 15 years of age fully supported by the city, which was the first implementation of its kind in the country. This was followed by the national government 11 months later. Niwayama has also participated in the planning of the foundation of Koidego Cultural Hall, a center for regional cultural activities, providing performance opportunities for young artists and singers.

This city medical association independently launched a disaster headquarters for care at the time of the 2006 Chuetsu Earthquake to protect the health of community residents (Ref. 10).

The Uonuma Community School for Health and Social Care, established in 2011, consists of multiprofessionals of the hospital and the medical association, and has considered the residents as a medical resource, providing them knowledge and skills to manage their own health.

4) Regional collaboration centered on social care corporations

The Total Care Center for the Aged “Kobushien” in Nagaoka City, Niigata Prefecture is operating many welfare facilities that are implementing cooperation among multiple professions, and forming a welfare facility network in the

region, led by Tsuyoshi Koyama, the director of the facility. The center has proposed and is implementing the idea of breaking up and moving the welfare facilities with a capacity of 100 or more residents that were previously located away from urban areas, turning them into small-scale facilities located in urban areas near families, where the residents will be able to have a close relationship with their family and the community residents. It has launched many small-scale, multi-functional business establishments, and moreover has realized a fixed-price, 24 hours a day, 365 days a year home services project. This is an example of not only cooperation among multiple professions but also of close collaboration with the city government and community residents (Ref. 11).

5) Collaboration among multiple professions centered on disease control

(1) Diabetes mellitus and metabolic syndrome

Diabetes, in particular type II diabetes, is very common in Japan and finding measures to solve this problem is one issue faced by this country. The Certified Diabetes Educator of Japan is a position founded in 2000 (Ref. 12). These educators possess wide-ranging specialized knowledge about diabetes and recuperation education, understand the lives of the patients, and assist the patients so that they can carry out appropriate self-supervision. As of 2010, approximately 16,000 educators are engaged in activities. Approximately half of these are nurses, one-quarter are registered dietitians, and the remaining one-quarter are pharmacists, medical technologists, physical therapists or other professionals. Doctors, public health nurses, and registered dietitians are responsible for specific health guidance to combat metabolic syndrome.

(2) Prevention of falls and locomotive syndrome

The Bone and Joint Decade, 2000-2010, world-wide campaign for prevention of bone and joint diseases including the spine has been carrying out by collaboration of doctors, physiotherapists, and nurses. It is continuing for the second term, 2010-2020 (Ref. 13). In 2004 the Society of Fall Prevention Medicine was established, and it is promoting these fall prevention activities. Japan Locomotive Syndrome Research Society, established in 2008, is working on the prevention and appropriate treatment of locomotive syndrome (LMS), such as osteoarthritis, rheumatoid arthritis, problems due to spinal canal stenosis, and fragility fractures due to osteoporosis, of the elderly and educating the public about both prevention and treatment.

(3) Senile dementia

Coping with senile dementia is an issue that requires collaboration among multiple professions. The Japanese Society for Dementia Care established the Qualified Dementia Carer system in 2005 in order to offer high-quality care to the elderly with senile dementia. Approximately 60% of the 23,000 qualified dementia carers possess qualifications as certified care workers, other nursing care managers, home helpers, or nurses (Ref. 14).

(4) Abuse of children and the elderly

Many cases of child abuse have been increasingly reported in Japan, so abuse prevention efforts are being made through multiprofessional collaboration among professionals in welfare, education, government, medicine, police forces, and other areas. Moreover, the authority exerted by child guidance centers is getting stronger year by year. One of the major activities of the regional comprehensive support center is prevention of human right abuses, which includes efforts to prevent abuse of the elderly. There are several academic societies for the prevention of abuse, such as the Japanese Society for Prevention of Child Abuse and Neglect (Ref. 15), and the Japan Academy for the Prevention of Elder Abuse (Ref. 16). There are more regional organizations and networks for prevention of abuse in the various prefectures of Japan. For example, in Kanagawa Prefecture, the various administrative authorities, including the Board of Education, Community Affairs Bureau, Public Health and Welfare Bureau, and the Prefectural Police Department have worked together to form a network and teams are created to respond to and support various cases of abuse.

6) Collaboration among multiple professions to deal with disasters

(1) The Disaster Medical Assistance Teams (DMATs) are "mobile medical teams that can be deployed during the acute phase of a disaster, and are comprised of 2 doctors, 2 nurses, and 1 administrative coordinator (multiple professions including administrative staff, medical technician, pharmacist, radiology technician, and others) who have received specialized training." In the aftermath of the Great Hanshin Awaji Earthquake that occurred on January 17, 1995, the Ministry of Health, Labour and Welfare launched the disaster medical assistance team, Japan DMAT, in April 2005. They are established in disaster base hospitals and critical care centers and engage in "medical activities in disasters that are in the hyper-acute phase." Currently, 801 teams are registered as of the end of 2010 (Ref. 17).

(2) The Japan Medical Association Teams (JMATs) are the disaster medical teams of the Japan Medical Association. They were proposed in March 2010 and subsequently established. JMAT teams engage in "activities in the acute phase and subacute phase." They have been established in each prefecture and each city medical association. 1,384 teams were registered as of July 2011 (Ref. 18).

(3) The Wide-Area Social Care Support Network for Disaster, Thunderbird, is an organization created by medical, health and social care professionals and residents that supports welfare in times of disaster. It was proposed and represented by Tsuyoshi Koyama, a social worker. It established a "Support Center" as a base for providing long-term care, and also efforts to prevent the need for long-term care, as well as health promotion for the elderly who were victims of the Chuetsu Earthquake in Niigata Prefecture, and also offered "psychological care" by clinical psychotherapists and "a full range of consultations" by social workers. With this as the catalyst, subsequently it became a nationwide incorporated NPO. It was active in relief efforts for the Great East Japan Earthquake (Ref. 19).

(4) The Primary Care for All Team (PCAT) was established by the Japan Primary Care Association to respond to the Great East Japan Earthquake which occurred on March 11, 2011. Since March 13 it has been involved in activities aimed at supporting the disaster victims in the subacute phase and the chronic phase of the disaster, with the participation of not only doctors but also many other professionals involved in primary care including dental practitioners, pharmacists, nurses, public health nurses, midwives, nutritionists, physical therapists, occupational therapists, clinical psychotherapists, and others (Ref. 20).

3. Interprofessional education in universities

In regional hospitals collaboration among professionals onsite has been implemented approximately for the last 50 years, but interprofessional education (IPE) has only been implemented in universities since little more than ten years ago. During that period the IPE developed in the United Kingdom had a large impact on Japan. In 1996 (Ref. 21) and 1998-1999, IPE was presented in various literature. Since the first IPE workshop was held by Saitama Prefectural University in November 2005, many lecturers have been invited to Japan from the Centre for the Advancement of Interprofessional Education (CAIPE) and universities in the United Kingdom and at the same time people from universities in Japan have visited the United Kingdom and Canada and exchange agreements with universities in both countries have been concluded.

1) IPE in professional education

(1) IPE in medical education

As a result of the aging of Japanese society, there has been a strong focus on the importance of team medicine. According to a fiscal year 2010 survey, approximately half of the medical faculties and medical schools are implementing IPE in their medical education. The questionnaire response rate was 68.8% (55/80). IPE implementation was 49.1% (27/55), the target year was the single academic year 2008, the names of the class subjects in the first year were: bioethics, introductory experiential practice, introduction to medicine, overview of medical science, care colloquium (team work practice), mind education, local communities and health practice, IPE, and community medical care joint seminars, as 22 compulsory and four elective subjects (Ref. 22).

(2) IPE in nursing education

Systemized and specialized nursing education was initiated in Japan in 1948. Subsequently a multitude of revisions have been made, and the reports of the Investigative Commission on Nursing Studies Education issued in 2002 and 2004 clearly stated the necessity of the team approach from the perspective of satisfying the needs of users. The reports called for the expansion of the social role of the nursing profession beyond hospitals, development of care structures in order to enhance users, development of the collaboration and cooperation

abilities of the nursing profession and the healthcare and welfare profession, and development of their ability to develop nursing within organizations providing health care (Ref. 23). Those needs were incorporated as part of the curriculum in the nursing education of newly-established universities.

(3) IPE in education for physical therapists

The work of physical therapists deals with the musculoskeletal organs. They use physical therapy, or in other words exercise therapy, physiotherapy and other therapies, to rehabilitate the patient. It is important to obtain information through case conferences about the patient's capacity for activity in daily life, in particular moving from a supine to a standing position, moving from one place to another, and walking upright, and measures for preventing falls and other accidents. Therefore, multiprofessional collaboration activities in medical workplaces are important, and this kind of "IPE" is extremely necessary for not only clinical education but also for education in universities as well. However, there are still only a few universities that include IPE in their standard curriculum for education for physical therapists (Ref. 24).

(4) IPE in education for occupational therapists

The work of occupational therapists covers a wide range of areas including physical disabilities, psychological disabilities, developmental disabilities, old age disabilities, and community-based occupational therapy. Cooperation with other professionals is important in each of these areas, and it is expected that in the future occupational therapy activities will expand beyond hospitals and facilities to local communities as well (Ref. 25). There are still only a few universities that include IPE that is important for education for occupational therapists in their standard curriculum.

(5) IPE in education for certified dieticians

The Dieticians Act was established a long time ago in 1947, but the national examinations for Certified Dieticians (CDs) only began in 1987, due to the onsite need for nutritionists possessing a higher level of knowledge and skills. In hospitals, the ideal approach to dealing with diabetes mellitus is for CDs to provide health guidance in outpatient departments in cooperation with many other professionals. The CDs are playing a core role in measures to combat bedsores in the Nutrition Support Teams as well. Furthermore, in front-line education there are expectations of the role to be played by nutrition teachers, in particular team teaching with school nurses and general teachers. Moreover, collaborative practice is also essential for CDs active in regional areas such as municipalities. For this reason IPE is emphasized in nutrition education methodology and public nutrition (Ref. 26).

(6) IPE in education for pharmacists.

Among pharmaceutical universities or pharmaceutical science faculties within

universities that are training pharmacists, the percentage of universities implementing IPE was 47.2% (17/36) in a fiscal year 2010 survey (with a response rate of 71.6%: 53/74 universities). Of these, IPE was compulsory at 12 universities and elective at five universities. Eleven of the universities implemented IPE in the first year and nine of them implemented IPE in the second year. The academic departments they most often cooperated with were other faculties on the same campus, a response given by 12 of the universities.

(7) IPE in education for certified social workers

In today's Japan, cooperation among multiple professions is considered to be necessary in situations where diverse home welfare services can be used (Ref. 27). The entities providing those services are comprised of the government, social welfare councils, social welfare corporations, healthcare corporations, incorporated NPOs, and private sector business establishments. The content of the services is diversifying to include home help, day services, day care, short stays, assistance with bathing provided by visiting nurses, home-visit nursing, home-visit rehabilitation, and house calls by doctors, and now patients can choose to use the services at home, in facilities that they visit for treatment, in facilities in which they are temporarily residing, and in other places. There are still only a few universities implementing IPE as part of the curriculum. However, in social work practice it is possible to know the state of cooperation with staff in other aid agencies, primarily doctors and public health nurses in the region, and with commissioned welfare volunteers and ordinary volunteers.

(8) IPE in other professions

In addition to the professions discussed above, the importance of IPE particularly when trying to create collaborative practice to handle the issue of the aging society is gradually being recognized in the other professions listed in Table 3-1 as well, but still we cannot say that all of the professions have developed IPE to the same degree. However, in collaborative onsite practice dental hygienists in particular have many needs with respect to oral care for the elderly. Furthermore, particular specialized professions are often required for service users with special conditions. Regarding this point, the potential for credit transfers is discussed in Chapter 6.

2) IPE taken up by each academic society

There are many academic societies in the medicine and welfare fields. The outcomes of IPE and cooperation and collaboration by onsite professionals are presented in their annual meetings. Composition of professions of each society or association is shown in table 3-1.

Table 3-1. Academic Societies

Society, Association/URL	Foundation	Number	Professions
Japan Society for Medical Education http://jsme.umin.ac.jp	1969	2340	MD, RN, PT, OT, etc.
Japan Association for Interprofessional Education http://jaipe.jp	2008	371	MD, RN, PHN, CW, SW, PSW, CD, PH, etc
Japan Primary Care Association http://primary-care.or.jp	2010	6559	MD, PH, DDS, RN, etc
Japanese Association of Rehabilitation Medicine http://jarm.or.jp	1963	9798	MD, PT, RN, etc
Japan Academy for Comprehensive Rehabilitation http://reha-renkei.org	1999	520	MD, RN, PHN, SW, PSW, CW, CD, PH, etc
Japan Society for Respiration Care and Rehabilitation http://jsrcr.jp	1999	1925	MD, RN, PN, PT, CET, MLT, CD, PH, etc
Japanese Society of Dysphagia Rehabilitation http://jsdr.or.jp	1994	*8400	ST, DDS, RN, MD, CD, etc
Japanese Society for Dementia Care http://chjhoucare.org/	2000	19000	CW, RN, MD, etc
Japanese Society for Clinical Pathway http://jscp.jp	1999	1400	MD, RN, etc
Japan Academy of Home Care http://jahhc.com	1997	874	CW, RN, MD, etc
Japanese Society of Metabolism and Clinical Nutrition http://eiyou.gr	1998	*7000	MD, CD

Abbr: MD:Medical Doctor, DDS:Dentist, RN:Nurse, PHN:Public Health Nurse, CW:Care Worker, SW:Social Worker, PT:Physiotherapist, OT:Occupational therapist, ST:Speech therapist, CD:Certified dietitian, PH: Pharmacist

HFP:Health Fitness Programmer, MLT:Medical Laboratory Technician, CET:Clinical Engineering Technologist RT:Radiological Technologist, etc: Others * = Approximate number

4. Foundation of the Japan Association for Interprofessional Education and its activities

1) Background to the foundation of the association and its mission

The Japan Association for Interprofessional Education (JAIPE) was established in 2008 as a forum for exchanges between university faculties and professionals in active practice (Ref. 28). Faculties will present the outcomes of IPE that has been incorporated in the curricula of the professional training of universities, etc., and active practitioners, at the same time, will present the outcomes of their interprofessional collaboration in health and social care, following a team approach among multiple professions.

The content of IPE in educational institutions must be improved and enhanced by constantly reflecting the results produced by implementation of onsite inter-professional work in those institutions. As a result, seamless services and care can be provided in health and social care. Furthermore, the unending life-long education of professionals and IPE among professionals is both essential for enhancing and maintaining these services and care. (Figure 3-2)

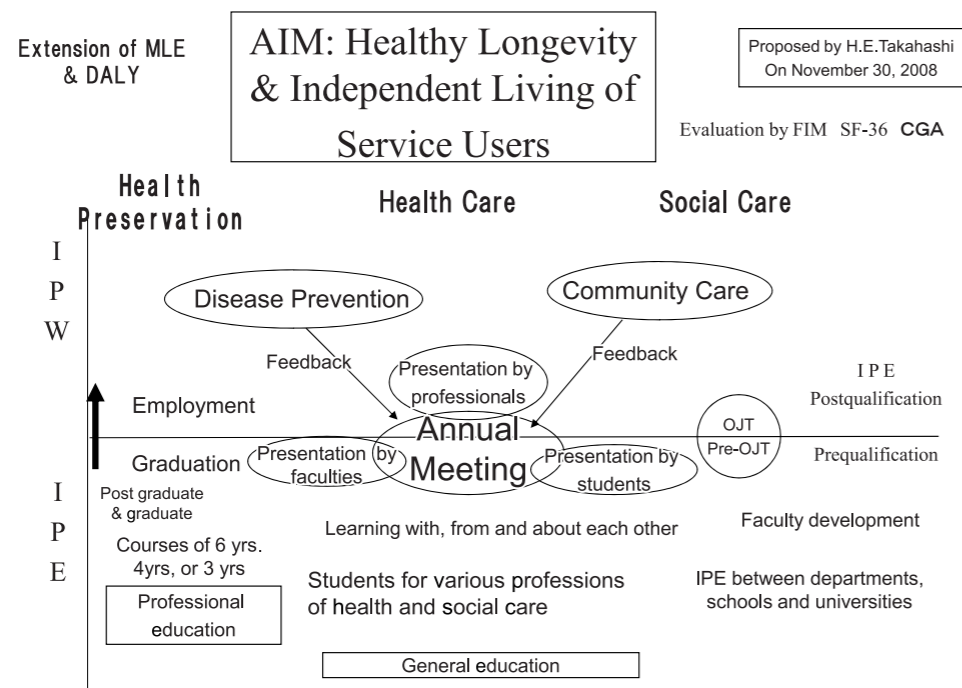


Figure 3-2. Relationship between University-led and Service-led IPE aimed for service-users by JAIPE

2) JAIPE Annual Meeting

The first annual meeting of JAIPE was held in November 2008 at Saitama Prefectural University. At this meeting, the organizers hoped to confirm the spread of education practices and academic investigations based on the definition of IPE, and to make the congress the starting point for the creative development of IPE as professional education that enables multiprofessional cooperation and collaboration for the benefit of users and patients in Japan. Therefore, "Cooperation for whom, and for what?" was chosen as the main theme of the congress. The participants had the mission of aiming to share the fact that the starting point for IPE was ensuring that practices based on cooperation and collaboration among multiple professions were for the benefit of the users and patients. Based on this mission, the aim was to realize healthy long life, independent life, and a society of harmonious coexistence from the perspective of higher education. Through education it is expected that "new abilities" with added value can be imparted to the students.

The second annual meeting was held in October 2009 at Chiba University, and the third was held in August 2010 hosted by Sapporo Medical University. The fourth was held in November 2011 at Kanagawa University of Human Services. The fifth meeting will be held in Kobe, together with All Together Better Health VI in October 2012.

5. Network and Consortium for Interprofessional Education

1) The Japan Interprofessional Working and Education Network (JIPWEN) is a network of 11 universities, established in 2009, promoting development of IPE, reviewing it critically and seeking to enhance it through dialogue and collaboration at the global level (Ref. 29).

2) The Consortium for Interprofessional Strategy-21 (CIPES-21) consists of five universities and other related universities, established in 2009. CIPES-21 has developed various modules of IPE for development of the core-curriculum in order to standardize IPE in professional education in the medical, health and social care fields, using information and communication technology (ICT).

6. Conclusion

In this chapter, the author has discussed the background to the development of onsite collaboration that has been implemented by health and social care professionals for the last sixty years in Japan. The background to the development of IPE that is being implemented by universities and other professional training schools for the last fifteen years has also been described. Whether the working site is in the field of health care or social care, the condition for creating an efficient health and social care network, and for developing good collaboration among multiprofessionals is "people." This means that the advocators should utilize their outstanding leadership skills to form teams, and progress by sharing the philosophy together with the team members. This requires an approach centered on the users of service and care, such as patients, the disabled, the elderly, or the users' family, enabling them to become a member of the team and share common objectives. There are many issues that are better resolved as a team rather than through professionals from a single occupation. It is important to create a team and handle issues with the human and social resources that are available at that time and in that place. It may be advisable to form a team of different professions for a separate issue.

We are now in an era when IPE can be implemented across academic disciplines between different universities by using ICT. Cooperation and collaboration are extremely important for our modern super-aging society and rapidly aging society. Therefore, IPE which enables the participants to master the ability to work in a team through cooperative learning is essential for students aiming to be professionals and for professionals in active practice.

In Japan, the super-aged society, one of the aims of both faculties in higher education and professionals in active practice onsite in the health and social care fields is to extend healthy life expectancy of the service-users, prolonging their period of independent living and enhancing QOL, through interprofessional collaborative practice. A professional in any field could act as a leader of a team for

solving an issue in his/her own field. It is important to make the first step, form a team, and work together to find ways of improving the situation for the service user. An old adage states that "two heads are better than one," and a team may start from two people, then more.

References

1. Takahashi HE: Interprofessional education needs to correspond with the necessity of interprofessional work in health-care and welfare in Japan. *Niigata J Health Welfare*. 7(1): 1-8, 2007
2. Saku General Hospital website: <<http://www.sakuhp.or.jp/>>
3. Seamless Care Research Society for Femoral Neck Fracture. Regional Collaborative Critical Pathway for Femoral Neck Fracture. Editorial Supervision by K. Nomura. Medical Review, Publisher, Osaka. 2008
4. Japanese Association of Rehabilitation Medicine (Editorial Supervision) Critical Pathway for Stroke Rehabilitation. ---Points of Basics and Implementation---. Igakushoin, Tokyo. 2007
5. Kumamoto Prefecture Promotion Society of Community Rehabilitation, website: <<http://www.kumamotoken-riha.jp>>
6. Jichi Medical University, website: <<http://www.jichi.ac.jp>>
7. Katayama H: Community Medical Collaboration and Home Health Care as a patient-centered system. *Chiryō*.87: 1693-1700, 2005
8. Onomichi City Medical Association, website: <<http://www.onomichi-med.or.jp>>
9. Kamimura N: Care prevention without the long-term insurance ---Care prevention by an activity of Comprehensive Community Sports Club---. 26th Annual Meeting of Japan Primary Care Association, 2006, PC06-8.
10. Ojiya, Uonuma, and Kawaguchi Cities Medical Association: Report of Activity of Ojiya, Uonuma, and Kawaguchi Cities Medical Association at Chuetsu Earthquake, Niigata Prefecture. 2006
11. Total Care Center for the aged "Kobushien", website: <<http://www.kobushien.com/>>
12. Japanese Certification Board for Diabetes Educator, Website: <<http://www.cdej.gr.jp/>>
13. Bone and Joint Decade Japan, Website:<<http://www.bjd-jp.org/>>
14. Japanese Society for Dementia Care, Website: <<http://www.chihoucare.org/>>
15. Japanese Society for Prevention of Child Abuse and Neglect, Website: <<http://www.jaspcan.org/>>
16. Japan Academy for the Prevention of Elder Abuse, Website: <<http://www.japea.jp/>>
17. Disaster Medical Assistance Team, DMAT, Website: <<http://www.dmat.jp/>>
18. Japan Medical Association Team, JMAT, Website: <<http://www.med.or.jp/etc/eq201103/jmat.html>>
19. Wide Area Social Care Support Network for Disaster, Thunderbird, Website: <<http://www.thunderbird-net.jp/>>
20. Primary Care for All Team, PMAT, Website: <<http://www.pcat.or.jp/>>
21. Ikegawa K: Present status and the content of interprofessional education in the United Kingdom. *Quality Nursing*, 2(3): 216-220, 1996
22. Takahashi HE: Significance and prospect of the foundation of the Japan Association for Interprofessional Education. *Medical Education*. 41: suppl. 31, 2010
23. Japan Academy of Nursing Administration and Policies, Website: <<http://www.procomu.jp/janap2010/janap2010nomura>>
24. Isozaki K, Hosoda M: Professional education of physiotherapists and interprofessional education. *Quality Nursing* 10(11): 1031-1036, 2004
25. Ohshima N: Significance and a role of intrerprofessional education in professional education of occupational therapists. *Quality Nursing* 10(11): 1037-1042, 2004

26. Japanese Society of Metabolism and Clinical Nutrition, Website: <<http://www.eiyou.gr.jp/>>
27. Arai T: Significance and a role of intrerprofessional education in professional education of social workers. *Quality Nursing* 10(11): 1024-1030, 2004
28. Takahashi HE, Sato S: Establishment of Japan Association for Interprofessional Education and perspectives. *J Interprofessional Care*, 23(6): 611-12, 2009
29. Watanabe H, Koizumi M (Eds):Advanced Initiatives in Interprofessional Education in Japan. Japan Interprofessional Working and Education Network. Springer, 2010