Comprehensive Community Care System in Mistugi Town, Onomichi City

– Operation Zero Bedridden (Long-Term Care Needs Prevention) and Health, Medical, Long-Term Care, Welfare Collaborations –

Mitsugi General Hospital

April 2012

Summary

Introduction

From a town full of the bedridden to a town with only a few bedridden

The township of Mitsugi is situated in southeastern Hiroshima Prefecture, a farming community measuring some 16 km from east to west and 12 km from north to south. There used to be seven villages, before their amalgamation and formation of the Town of Mitsugi in its founding year of 1955. In March 2005, the township then was merged into the City of Onomichi and became Mitsugi-cho (Mitsugi Town) of Onomichi City. A basic survey on the state of aged persons living at home, conducted in August 2006, found the town's total population size to be 7,934, of which 2,340 were aged persons 65 years or older. The ratio of the aged population to total population was 29.5%, as if to lead the country in showing the image what the country would become in 25 years' time. Population aging is the issue that Mitsugi "cannot wait" to act on. The progressive population aging is accompanied by annual increases of aged persons needing long-term care and especially the bedridden elderly. Mitsugi began its efforts to establish a comprehensive community care system with a hospital at its nucleus back in 1974. Since then Mitsugi has advanced home-based care services and engaged in "Operation Zero Bedridden," as well as declaring itself a "Welfare Town," in efforts to build a positive town full of vitality, where everyone celebrates longevity together. However, in the decade from 1965 to 1974 the Township of Mitsugi was a town full of bedridden elderly. So why has the number of the bedridden in Mitsugi been reduced? The chapters that follow describe the details of Mitsugi's "Operation Zero Bedridden" and illustrate the current state of the health, medical care, long-term care, and welfare service network.

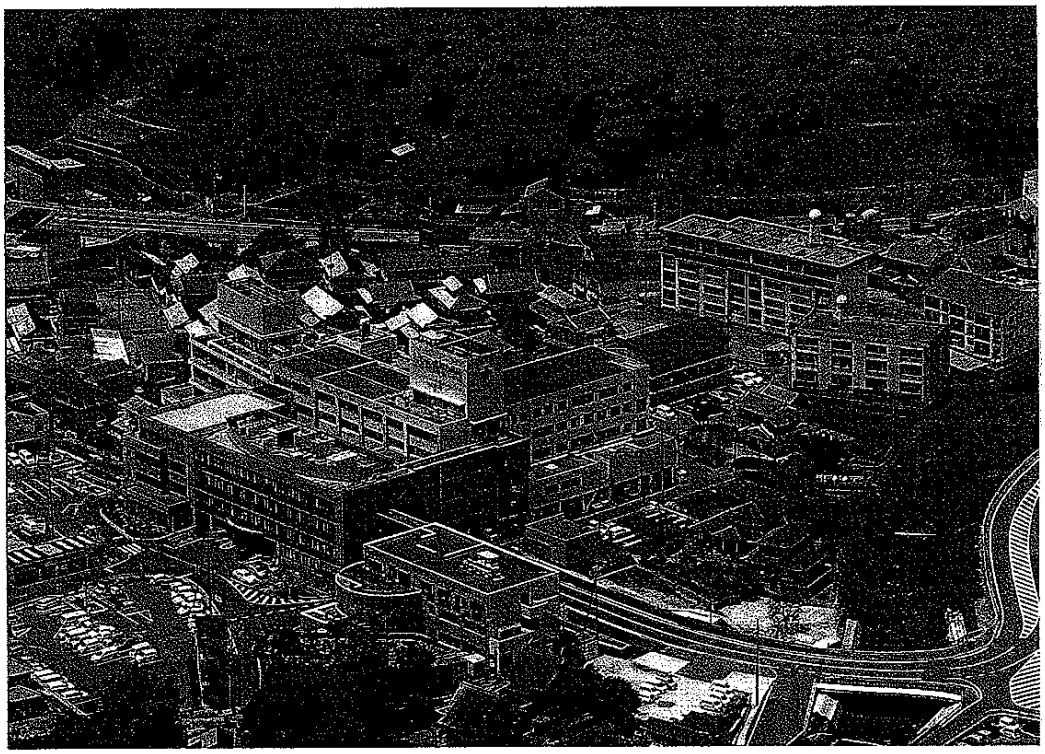
Chapter 1 History of Establishment of a Comprehensive Community Care System with a Hospital at the Nucleus

(1) An overview of history

Aiming to support independent living of the elderly and persons with disability, there have been unified efforts in the Township of Mitsugi, now Mitsugi-cho, in the past three decades by the publicly funded Mitsugi General Hospital (Photo 1), a designated National Health Insurance clinic/hospital (hereinafter referred to as NHICH), and the town administration to prepare the necessary bases for delivering health, medical, and welfare services and to establish a comprehensive community care system. The aim of the comprehensive community medical and other care services goes beyond clinical care and treatment, and is directed at letting community citizens live with a sense of security, through comprehensive efforts ranging from health promotion (health) to prevention of bedridden state (prevention of long-term care needs).

Establishment of the comprehensive community care system started in response to the situation in Mitsugi Town during the decade from 1965 to 1974, that there were many who had been "made bedridden." The factors that "made" them bedridden included, i) lack of abilities to provide long-term care, ii) inappropriate long-term care, iii) premature termination of medical and rehabilitation services (hereinafter referred to as "rehab"), iv) reclusive lifestyle, v) inadequate living environment. In order to remove those factors and prevent the patients from becoming bedridden, the hospital started providing home visit nursing care

service in 1974, and home visit rehab service in 1981. In addition, a health management center (the current Health & Welfare Center) opened as an annex of the hospital in 1984, coupling the medical services with health and welfare services, traditionally the local government's responsibility, and carried out organizational reform for collaboration and integration of health, medical, and welfare services. Since 1989 Mitsugi has prepared facilities and bases, the "hardware" side of the services, in accordance with the "Gold Plan," such as opening of health facilities for the elderly. Service enhancements on the "software" side were also strived for, including care officers meetings and home-based care network meetings, introduction of care planning and care management approach, preparation for 'round the clock service delivery including early morning care and night patrol, the welfare bank system, and a better organization for the citizens to participate as volunteers. In 1997 the health management center, already over capacity, was shifted into a new building and reborn as the Health & Welfare Center. This was followed by moving of the home visit nursing care station and social welfare council in the Health & Welfare Center. Establishment of the comprehensive community care system could make a smooth start by taking advantage of the infrastructure preparation projects for introduction of the Long-Term Care Insurance System in 2000, in both the hardware and software aspects.



(Photo 1) View overlooking entire hospital

Also in 2000, administration of the then Prefectural Special Nursing Home for the Elderly, Fureai-no-Sato (herein after referred to as "SNH") and the Rehab Center for the Elderly was transferred from the prefectural government to the Town of Mitsugi. These were integrated into the existing facilities such as the Health Facility for the Elderly (hereinafter referred to as "EHF"), and reborn as the Mitsugi Comprehensive Health and Welfare Facilities (hereinafter referred to as "CHW Facilities") (later merged with the hospital services and becoming a hospital affiliated institution). In 2002 one group home unit (for 9 persons) was newly built as a part of the CHW Facilities. Two more units (for 18 persons) were added in 2005, along with two SNH unit based care units (for 20 persons). In 2008 five EHF unit based care units (for 50 persons) were newly open following building addition and renovation. Meanwhile, at the

hospital, the rehabilitation ward for recovery stage patients opened in 2001 and the palliative care ward opened in 2002. In addition, the Office of Collaboration for Comprehensive Community Medical and Other Care Services opened, for smoother collaborations with the community. Moreover, those services were recognized for their functions as outposts to promote community-based rehab services and designated by the Hiroshima Prefectural Government as a prefectural rehab support center and community-based rehabilitation regional support center (for the Onomichi/Mihara Region area). In 2004 “NHI Iki-iki Center” opened adjacent to the Health & Welfare Center as the base for a long-term care needs prevention program. The year 2005 saw the merger with the City of Onomichi and the hospital’s name changed to Onomichi Public Mitsugi General Hospital. However, in 2003 the hospital was deemed to be governed by the Local Public Enterprise Act, which means that the hospital service provider is contracted by the City Mayor to manage the operations of the hospital as well as the CHW Facilities, and has the authority to make personnel and budgeting decisions. (Table 1)

Table 1 History of Mitsugi-cho comprehensive community care system

1974	Home visit nursing service starts
1981	Hiroshima Prefectural “Fureai-no-Sato” opens (operation contract); home visit rehab starts
1984	A health management center, affiliated with the hospital, opens
1989	Health facility for the elderly “Mitsugi-no-Sono” opens
1990	Home-based long-term care support center opens in “Mitsugi-no-Sono”
1992	Home visit nursing care station for the elderly opens
1993	Care house opens
1994	Senile dementia center opens; night patrol starts; meal services in full operation
1994	Early stage care starts
1997	The health management center renamed Mistugi Health & Welfare Center
1998	Day service business starts (Type D)
2000	Mitsugi Comprehensive Health and Welfare Facilities start operation (Administration of Pref. SNH Fureai-no-Sato and the rehab center transferred from prefecture to town)
2001	Recovery stage rehab ward opens (20 beds), designated a community rehab wide-area support center
2002	Group home newly built (9 persons); palliative care ward (5 beds) opens
	Office of Collaboration for Comprehensive Community Medical and Other Care Services opens, designated a Hiroshima prefectural rehab support center
2003	Local Public Enterprise Act becomes fully applied
2004	“NHI Iki-iki Center” opens (muscular training, dietary consultation, oral care)
2005	Group home extended (18 persons), SNH unit-based care 2 units open for 20 persons Merger with Onomichi City; the hospital renamed Onomichi Public Mitsugi General Hospital
2006	Palliative Care Department expanded (6 beds)
2006	IT system introduced as electronic receipt system introduced; Comprehensive Community Support Center is established
2006	Long-Term Care Needs Prevention Center is established

2007	Ward restructuring; a community higher brain function support center is established
2008	Long-term care health facility for the elderly partially becomes unit based (50 out of the 150 full beds)
2012	Recovery stage rehab ward increased (to 30 beds); improvement as Hiroshima Prefecture Rehabilitation Support Center

Currently, with the Mitsugi General Hospital at the nucleus, and, in collaboration with CHW Facilities and Health & Welfare Center, the new comprehensive community care system is being operated under the Long-Term Care Insurance System.

The reminder of this chapter illustrates the detailed history of establishment of the comprehensive community care system in three phases, punctuated by two major events; namely, the opening of the Health Management Center in 1984 and the start of the Long-Term Care Insurance System in 2000.

(2) Until opening of the Health Management Center: “Home delivery of care” and promotion of Operation Zero Bedridden (long-term care needs prevention)

Many bedridden people in Japan are “made-bedridden” due to inadequacy of care. Mitsugi in 1965 – 1980 was no exception. There were always some 50 to 60 bedridden elderly in town. The ratio of the bedridden to the whole aged population was far above the national mean. An elderly citizen who used to manage walking down into the yard would somehow become bedridden in a few months. A stroke patient, who had been hospitalized and, in some cases, had his/her life saved by brain surgery, and who had undergone rehab and was discharged after becoming able to walk with a cane, would become bedridden within 6 to 12 months and brought back to the hospital with large bedsores. We had seen many such cases at the hospital, probably because we treated their diseases without many thoughts about what happened after discharge. We only saw patients but failed to see the “people.”

We investigated the causes of their becoming bedridden. The first in the list was the lack of ability to care, as young working couples had to leave their elderly home without anyone to provide care during the day. The second reason was inadequacies in care. For example, making them wear diapers without much consideration would result in "diaper-induced incontinence," and eventually the patient would become bedridden. Advice such as, “Your blood pressure is over 200. Do not move. Remain in bed resting.” would make the elderly “kept in bed,” and eventually “bedridden.” The third factor making a patient bedridden was the delay in starting rehab and/or discharge causing a disruption of rehab program and nursing care, which had been provided at the hospital. The patient had had rehab sessions every day while in the hospital, but did nothing after being discharged to home. That was due to the lack of conditions for rehab at home.

Mitsugi used to have so many “made-bedridden,” which challenged us to come up with ideas as to how to prevent it. One of the tactics we employed was to take such services as nursing and rehab into the home. This is a kind of "home delivery" of nursing and rehab services, as well as the first step towards "socialization of medical care." At first those services were started as an extension of nursing care. It was the turning point in care delivery from “waiting” to “reaching out.” This turning point arrived in the second half of 1974.

However, our “home delivery of medical care” was not free of problems in its first few years. Initially, the outpatient clinic nurses took turns in visiting patients at home. Although they were enthusiastic, the program did not go as smoothly as it should have. Interpersonal relations were the key to the success of the program. Home care without a good relationship would not succeed. Also playing a part was the mindset often seen in rural communities, the aversion to people’s home lives being looked into by others. Challenged by these obstacles, we first abandoned the idea that the staff members should take turns, and assigned one staff member for each patient. This helped us somewhat overcome the psychological barrier. On reflection, those first few years were the most difficult time in our “home delivery of care” initiative.

In 1979, we created dedicated home visit nursing positions, to be filled by public health nurses employed by the hospital, in an endeavor to build a positive relationship with our patients and families. At present Mitsugi has 16 full time public health nurses, including those who work at Mitsugi General Hospital. We have them first work as hospital staff nurses for a few years to gain sufficient clinical nursing skills and expertise before assigning them to home visit care duties as public health nurses.

In addition to such home delivery of nursing care, we later started home delivery of rehab services. Soon the synergy of the two services started to create some promising outcomes (Photo 2). Once the care officers meeting (care conference) and home-based care network meeting make the decisions on home nursing service and other matters, the assigned public health nurses (and/or registered nurse) visits the patient in the hospital room to learn about his/her condition and establish a relationship with him/her and his/her family. If home rehab is recommended, a physiotherapist (PT) and/or an occupational therapist (OT) visit the patient’s house to study the conditions and make necessary alterations to make home rehab possible, such as installing handrails along the hallway and alterations to the toilet and bathroom. After discharge from the hospital, the nurse or public health nurse, the PT, and the OT accompany the patient to home, to start home care. House alterations and utilization of aid devices are covered by the long-term care insurance scheme.

(Photo 2) Home visit nursing & rehab services

Right after we started home visit nursing service, we hit a barrier, the barrier that surrounded the welfare system. Elderly citizens recovering at home and their families were challenged by many issues and problems. These included applications for the physical disability certificate and disability allowances, for lease of wheel chair, special bed, and other devices, for receiving home helper service, and so forth. In the decade from 1975, those were under the responsibility of the Town Council's Citizen Services Department. Even the Hospital Director did not have the authority to send a home helper to a patient. Delivery of nursing and rehab services only half met the needs of the citizens. Our thinking was, why not clear the barrier to welfare and have care and welfare services mate?

The Town Mayor at the time was one of those that understood the issues the best and supported the concept of comprehensive community care services. We then sought the understanding of the Town Council. Utilizing all the opportunities such as "round table discussions for health promotion currently named Health and Excitement 21(Kenko Wakuwaku 21)," we also sought understanding of the citizens. Thanks to the active role the Mayor took on to advocate our concept, we were able to gain the consensus of the town authorities, the Council, and the citizens, one and a half years later, to make organizational reform to link health, medical, and welfare services. Such an administrative system reform definitely required a firm determination by the Mayor and the understanding and cooperation of the Council as well as the citizens. Taking advantage of the 5th total refurbishment and expansion of the hospital building in 1983, the health management center was built as an annex on the hospital grounds. At the same time such functions as the welfare-related teams at the Town Council's Citizen Services Department, home helpers belonging to the Social Welfare Council, and the public health nurses working for health-related teams of the Health Department also moved in to the center. Later in 1998 the National Health Insurance-related teams also joined. The Hospital Director also served as the Center Director. It was an important milestone of the integration of hospital-provided medical care and the local government Welfare Department, which further allowed the collaboration and integration of health, medical, and welfare services.

(3) Until introduction of the Long-Term Care Insurance System

Collaboration and integration of health, medical, and welfare services and enhancement of home visit nursing, long-term care, and rehab services

Organizational reform has allowed speedy resolution of the aforementioned issues with welfare access. A social worker visits a family to arrange for rental of necessary equipment and devices. The Hospital Director can now sign off on immediate dispatch of a home helper. As previously described, it also become possible for a team consisting of a nurse or public health nurse and a home helper to accompany a patient home. While the patient is still in the hospital, a public health nurse can visit him/her in the hospital room for thorough understanding of the case, and for developing a good relationship. Furthermore, applications for the physical disability certificate and disability allowance can also be submitted. Equipment such as a wheelchair is leased at discharge. And, if necessary, home helper service for after discharge is arranged in advance. Those challenges to welfare access are resolved while the patient is still in the hospital. Following discharge, the aforementioned home nursing and rehab services are provided concurrently. When these are all possible, our patients and their families all feel secure when leaving the hospital.

Public health nurses working for the Town Council and the hospital-based public health nurses are now integrated, and the channel to health, medical, and welfare services is now unified. The citizens like this system. Even some of them, who initially had some doubts, now greatly appreciate the system's benefits. Now, in the 26th year since the start, the citizens of Mitsugi-cho take these things for granted.

Collaboration of health, medical, and welfare services will need organizational reform as described here. A liaison council alone will only be half effective. Such an approach to unify the channel to health, medical, and welfare services, or setting up of a general reception counter, is essential in the future super-aged society. It is pleasing to see many other local governments willing to take an initiative for this kind of organizational reform. Please note that the Health Management Center was moved to a new building built adjacent to the hospital in February, 1997. The center has since been operating under a new name, Health & Welfare Center, partly playing a role of a National Health Insurance General Care Center.

In a case of a household consisting of only an elderly couple, where the wife giving care to her husband often falls ill herself and needs a home helper, a public health nurse accompanies the home helper (certified care worker) in the visit to their home. Such teamwork between health & medical services and welfare staff members in home visits is a good example of functional collaboration between health, medical, and welfare services. Such an approach to coordinate care services will become more important than ever in the coming super-aged society.

In Mitsugi we hold a weekly care officer meeting (a care conference attended by 10 – 30+ health, medical, and welfare service staff members), to determine what types of services are needed and how care teams are assembled. Care plans are then developed, along with a weekly program. These meetings, started in 1992, were hosted by the Home-Based Long-Term Care Support Center following introduction of Long-Term Care Insurance until the local government merger, and, since then have been hosted by the Community Nursing Department or the Comprehensive Community Support Center. Cases covered by the Long-Term Care Insurance are reported by their respective care managers, while those "ineligible" or not covered by the Long-Term Care Insurance are reported by the assigned public health

nurse. This is how care management should be implemented. Thus, Mitsugi has managed to reduce the number of bedridden elderly to about one-third the previous large number. (Figure 1)

Tables 2 and 3 show the number of cases, in each year of the most recent five years, that received home visits for nursing care services. Stroke patients accounted for the greatest number of cases, making up about a quarter of the whole. Note that previously home visits for nursing care were funded under a healthcare insurance scheme. Since the introduction of Long-Term Care Insurance in FY2000, many of those cases were transferred under the Long-Term Insurance cover (service provided by the home visit nursing stations). This resulted in reduction, in and after 2000, of the cases of hospital-provided home visit nursing (under healthcare insurance) previously run by the hospital. A total of 468 clients received 2,980 visits for home-based rehab in FY2011. Twenty-five visits were done by a team of public health nurse accompanying the PT and/or OT. One-hundred-and-twenty-one home alterations were made (including one case where an alteration was done by the staff only; such cases have been dramatically reduced since implementation of the Long-Term Care Insurance). (Table-4)

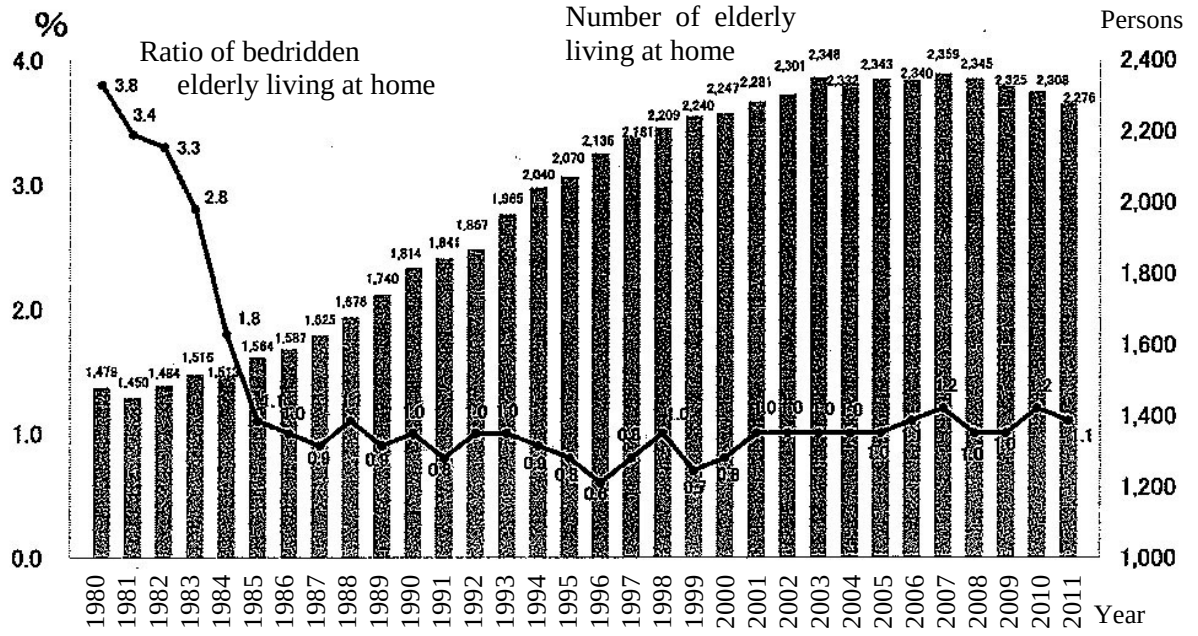


Figure 1 Mitsugi elderly living home and bedridden at home: changes

Table 2 Home visit nursing care station “Mitsugi” status of actions

	FY2007		FY2008		FY2009		FY2010		FY2011	
	Actual number	Number of visits	Actual number	Number of visits	Actual number	Number of visits	Actual number	Number of visits	Actual number	Number of visits
Healthcare insurance	54 (8)	2,442	61 (11)	3,331	53 (4)	3,076	51 (5)	3,006	55 (5)	2,160
Long-term care insurance	119	7,070	146	6,176	150	5,977	145	6,578	149	6,888
Total	173	9,512	207	9,507	203	9,053	191	9,564	199	9,048

* ( ) indicates duplicates in actual numbers visited under healthcare and long-term care insurances

Table 3 Home visit nursing care services provided in each year

(Home visit nursing care services other than station-based services)

	FY2007	FY2008	FY2009	FY2010	FY2011
Cerebrovascular disorder	630	598	577	725	739
Orthopedic disorder	413	447	427	494	408
Cardiac disorder	61	321	309	558	537
Cancer	130	181	118	231	226
Diabetes mellitus	130	193	220	348	216
Others	1,134	1,144	1,304	1,743	1,609
Total	2,498	2,884	2,955	4,099	3,735

Table 4 Number of cases of home visit rehab services

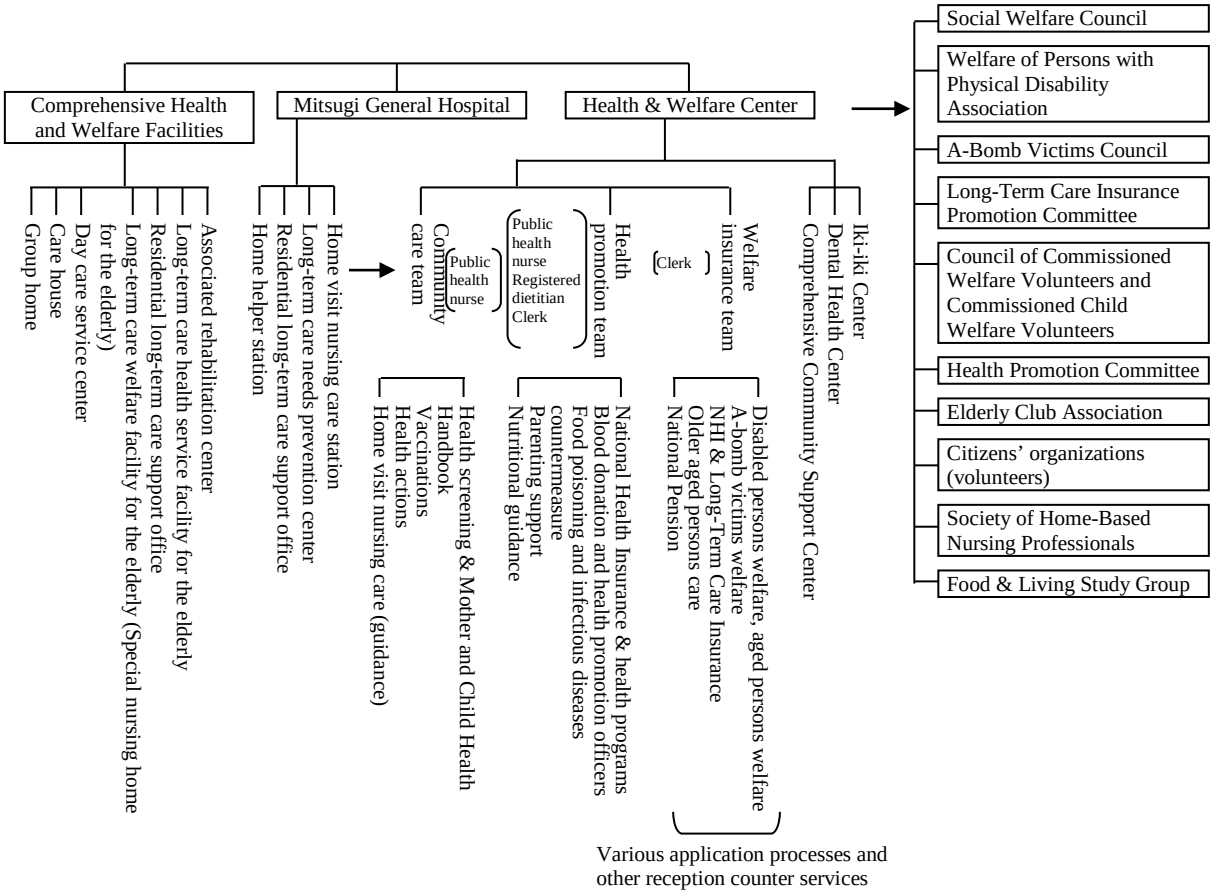
(Visits by PT, OT, and/or ST)

	Actual number	Actual number of events (visits)	Visits accompanied by public health nurse or nurse (total number)	Housing alteration (actual number)	
FY2007	450	2,968	29	2 161	163
FY2008	384	2,962	27	3 109	112
FY2009	426	2,979	27	2 142	144
FY2010	453	3,054	34	2 124	126
FY2011	468	2,980	25	1 120	121

* Housing alteration Top row: done by staff
Bottom row: done by a contractor after guidance

(4) Since introduction of the Long-Term Care Insurance System

As the Long-Term Care Insurance System was being introduced in FY2000, the respective local governments formulated their own health and welfare plans for the elderly in addition to the long-term care insurance business plans. The plans were reviewed and the second plans were developed in FY2003. Our "Operation Zero Bedridden" is the star of long-term care needs prevention initiatives, according to the Long-Term Care Insurance System. Prevention is the best strategy to make society bedridden-free. In addition, an office for implementation of Long-Term Care Insurance was set up alongside in FY1999 as a part of the organizational reform; namely, the Health and Welfare Department, implementing health and welfare related actions, and the Long-Term Care & National Health Insurance Department. Following the merger with the City of Onomichi in March 2005, our center became Mitsugi Health & Welfare Center. Its organization is shown in Figure 2.



* Through close collaborations by respective professionals, health, medical and welfare services are delivered smoothly

Figure 2 Mitsugi Health & Welfare Center Organization

Progressing aging changes society. Home-based care services have also undergone considerable changes in more than ten years. Home visits for nursing care services for the elderly are now an established system, and the Long-Term Care Insurance System brought in more changes. Future home-based care services shall not be limited to nursing and rehab. It will be important to have multidisciplinary staff involved in the delivery of collaborative care, including, of course, a home helper, as well as a registered dietitian (for nutritional guidance),

a pharmacist (for medication monitoring & guidance), a dental hygienist (for oral hygiene advice), and other professionals. Furthermore, Mitsugi has provided night care, night patrol, and early morning care services in the last ten or so years. Night care is overnight stay of the elderly at a residential EHF, which has provided a powerful support for the families. The current system of the long-term care service remuneration mechanism deems this night care to be an extension of the day care service (ambulatory day service rehab). The night patrol and early morning care services are provided by a team of nursing and welfare staff paired up to make rounds at homes of elderly clients who are living alone or are strongly dependent on medical care, including those on ventilators or TPN through CV line. The system has long been available in Scandinavian countries. Although round-the-clock care has not been uncommon since the introduction of Long-Term Care Insurance, when reviewing a home-based care taking into consideration such matters as the care-mix, care plan development, and other indicators of home-based care, it is essential that the team of nursing and long-term care professionals pays a visit together. Further, a third party evaluation is also indispensable to ensure the quality of care. These are things that the client would take for granted.

Chapter 2 What is a comprehensive community care system?

The concept of comprehensive community medical and other care services was first defined twenty years ago by Yamaguchi, then a hospital business administrator. It has been partially amended to the current definition, as stated below.

"(The comprehensive community medical and care services are) to practice comprehensive healthcare in the community in a sustainable fashion with consideration to societal factors, aiming to improve QoL of the community citizens. Comprehensive community medical and care services are not limited to medical treatment (for cure), but are all-inclusive of health promotion services (actions for health), home-based care services, rehabilitation, welfare, and long-term care services. They are holistic medical and other care services, provided through coordination and collaboration of institution-based care and home-based care services, as well as the participation by community citizens, whose vision includes community supported living and normalization. "Chiiki (community)" here does not only mean a mere geographical area, but refers to the community."

In other words, the comprehensive community care system is a system of coordination and collaboration by health, medical, long-term care, and welfare services in terms of both the hardware and software aspects. It is also a system of coordination between and collaboration by the institution-based care (medical, long term, and/welfare care) and home-based care services. The types of coordination and collaboration between institution-based and home-based care services include those between the palliative care ward and home palliative care services, those between recovery & rehabilitation ward and community (or home) based rehab services, and those between long-term care insurance provider institution (such as a long-term care health facility for the elderly) based and home-based care services. Such coordination and collaboration are required to evolve from "dots" to "lines," and from "lines" to "surfaces" of community coordination and collaboration. For that goal, not only the officials and professionals, but also the local government and community citizens need to become a part of the network, as well as the framework for community-supported comprehensive care delivery.

To summarize the comprehensive community care system, its hardware aspects are the three base institutions of the hospital, the CHW Facilities, and the Health & Welfare Center. The

software aspects are, firstly, the health actions movement for primary prevention as promoted in “Healthy Japan 21” and “Health Up 21”; namely, prevention of lifestyle diseases through improving citizen’s lifestyles. Secondary, Operation Zero Bedridden (to prevent users from becoming bedridden), emulating Mitsugi’s success, now implemented nationwide to prevent long-term care needs. These primary prevention and long-term care needs prevention actions have been implemented nationwide as a part of the Health Frontier Strategies since FY2006. Thirdly, the home-based care services. Fourthly, coordination between and collaboration by health, medical, long-term care, and welfare services. The fifth aspect is collaboration between institution based and home-based care services. The sixth aspect is participation by citizens of the community, including volunteer actions. The comprehensive community care system requires not only the officials and professionals (at an institution or organization), but also the community citizens, who live there, to become a part of the network. It is indeed a comprehensive care system by the entire community.

The Town of Mitsugi/Mitsugi-cho and Mitsugi General Hospital have responded to the community’s needs, and, at the same time, prepared each of these hardware aspects and developed each of the software aspects, one by one, for better coordination and collaboration. Those efforts can be said to be the “dots” to “lines” coordination and collaboration efforts. Moreover, in addition to the local government’s official services, we facilitate the “lines” to “surfaces” community coordination and collaboration efforts by community citizen participation, unofficial networking, with the aim to improve the quality of community life for concern-free, safe community living. Figures 3 & 4 illustrate the current comprehensive community care system with Mitsugi General Hospital at its nucleus. This is the collaborative integrated system of health, medical, and welfare services we have developed since 1974, over a period of some 30+ years. This system of coordination and collaboration was not a complete system from the beginning. It has been developed according to the needs of the community, the demands of the time, and national policies and measures. As the result, Mitsugi’s system is being operated in this form at the moment, with potentials for future changes. When developing an idea for such a system, we believe that the key is not the outcomes, but the process as to how the system has evolved in the particular community.

An ideal comprehensive community care system is, by nature, completely self-sufficient. The conditions for this include the community having a system to deliver health, medical, rehab, long-term care, and welfare services (both in hardware and software aspects) and a system of coordination and collaboration, as well as the presence of a capability to provide necessary services in response to the situation. An urban community will have many medical services and long-term care institutions, and therefore it is possible to divide, assign, and coordinate different roles (functions) to medical services. Coordination between medical services and long-term care institutions is also possible. However, a hill country rural (farming) community such as Mitsugi has a limited range of medical services and a limited number of long-term care institutions; i.e., a lack of collaboration partners. Consequently, collaboration has to be done with the hospital, CHW Facilities, Health & Welfare Center, and service providers as a part of hospital business (including home visit nursing care station and helper station), in a self-sufficient form. However, since the launch of Long-Term Care Insurance in 2000, the number of long-term care insurance service providers in the area has increased, enabling collaboration between institution-based care and home-based care (own home or in residential care facility) services. We still aim for a community self-sufficient system, by trying to use the community family physician’s services and home-based care services when possible. Also, as stated before, we have networked the community, including citizens’ participation, from dots to lines, then from lines to surfaces, and built a collaborative system

for health, medical, long-term care, and welfare services that can meet the needs of the community citizens for holistic care. Incidentally, as will be described later, the Comprehensive Community Support Center, newly created in FY2006, also plays an important position in the comprehensive community care system.

In an attempt to review an approach to building a comprehensive community care system, as in here, Mitsugi's case study would represent the farming community (hill country rural community). This model may be applied to a population size of up to some tens of thousands. However, for a larger community, we will need to investigate an urban or even a major city model. Another model may exist; that of the apartment complex community, in which population aging may advance rapidly in a short time period. In a nutshell, varying community characteristics require different approaches to system development. System building needs to be tailored to the community type and population size.

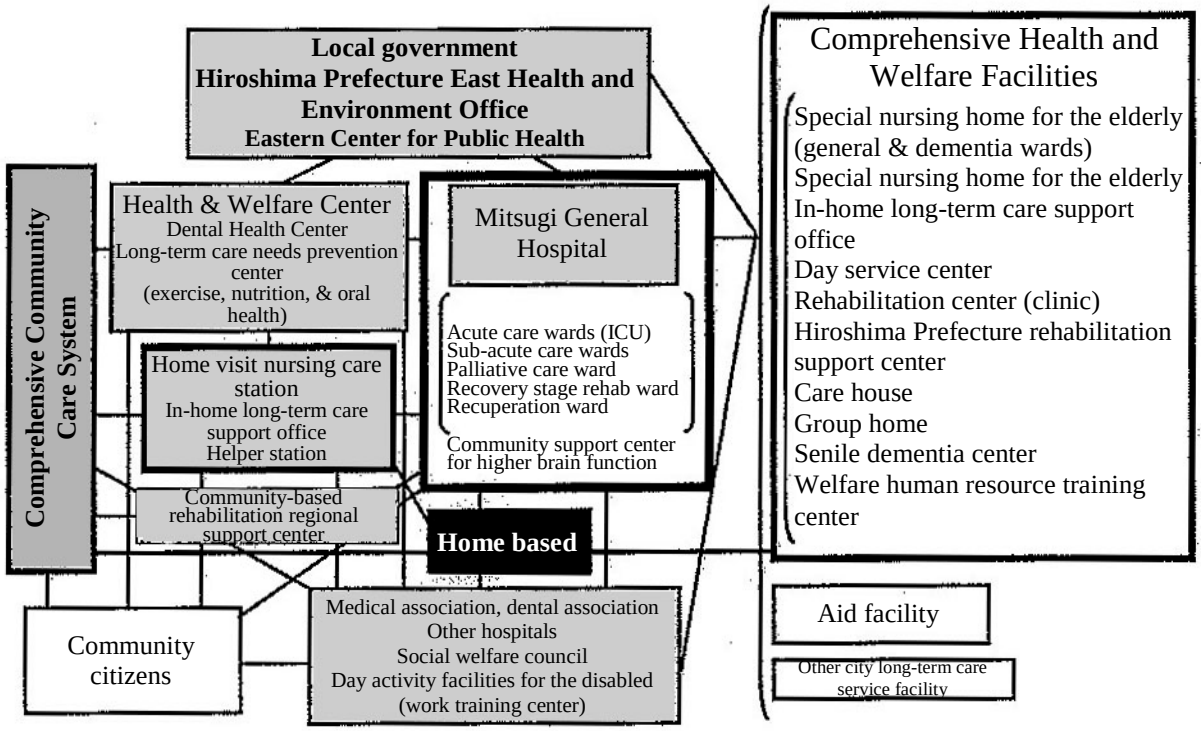


Figure 3 Comprehensive Community Care System whose core is Mitsugi General Hospital (System of Collaboration and Integration of Health, Medical, Long-Term Care, and Welfare Services)

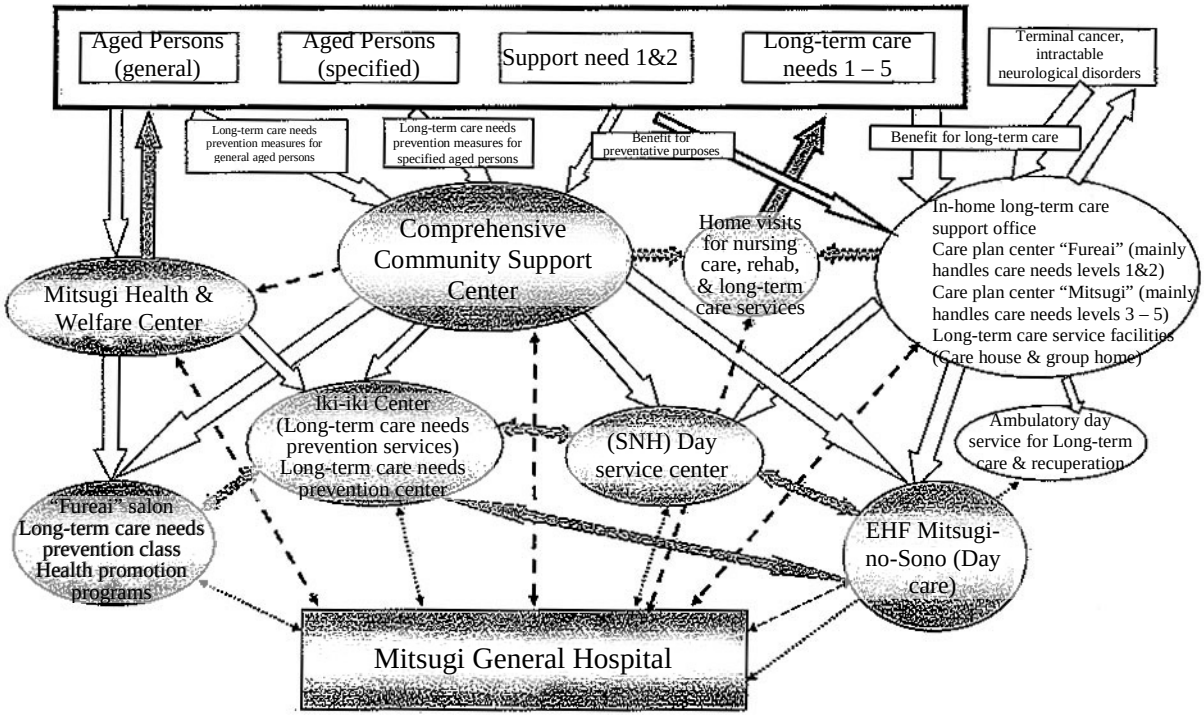


Figure 4 Mitsugi General Hospital Comprehensive Care as Service Entity

Chapter 3 An Overview of Mitsugi General Hospital and Comprehensive Health and Welfare Facilities

(1) Mitsugi General Hospital

Mitsugi General Hospital is an NHICH. Since starting home visits for nursing care services in 1974, in efforts to meet the community's needs, the hospital forms the nucleus in the effort to prepare the hardware and software aspects of service delivery and put comprehensive community medical and care services into practice. The hospital currently offers care in 22 clinical specialties with a 10:1 nursing staff ratio, and is designated a secondary emergency care facility.

The hospital's philosophies are "Practice comprehensive community care; Building a comprehensive community care system; and Create a citizen-centered hospital." These are also the philosophy as an NHICH. The hospital was founded in 1956 as an NHICH, funded by the Town of Mitsugi, with 22 beds for three clinical specialties. Introduction of advanced care technologies, community citizens' needs, nation's healthcare policies, and needs for stable financial operation of the hospital required construction work for building extension and refurbishment. The hospital reached the current capacity of 240 beds in 1997. The hospital's area of care extends beyond Mitsugi, to surrounding cities and towns (including the cities of Mihara and Fuchu, and the town of Sera), providing secondary care services to some 70,000 citizens in the area, from advanced care, to emergency care, and to home-based and/or terminal care. The town merged into Onomichi City in March 2005, along with the Town of Mukoh-jima. Operation of the hospital has been fully under the provisions of the Local Public Enterprise Act since 2004. Therefore, the only change was that the nominal person to open the facility changed from the Town Mayor of Mitsugi to the Mayor of Onomichi City. As hospital operations, including budgeting and personnel, had already been transferred under the

authority of the hospital business manager, the hospital continued advancement of comprehensive community medical and care services after the merger.

To put comprehensive community medical and other care into practice is a difficult challenge to a single hospital. In order to collaborate with the local government's health and welfare departments, the hospital underwent an organizational reform in 1984, when Mitsugi was still under town administration, for creating a health and welfare center and building and improving the CHW Facilities. Although the hospital currently has 240 beds, those are not just general beds for acute stage care. The hospital itself has the functions to provide comprehensive community medical and other care. As it serves the rural township of Mitsugi, with few other medical services and facilities nearby, the hospital needs to be able to provide service for any stage from the acute stage to the recovery stage to the maintenance stage. Consequently, the hospital has 30 beds in the recovery and rehab ward, 6 beds in the palliative care ward, and 18 beds for recuperation, to address the needs of the community citizens, in accordance with the national healthcare policy. The national policy to restructure recuperation beds in April 2007 saw abolishment of 25 long-term care & recuperation beds, reduction of medical care recuperation beds to 18, and conversion of 30 recuperation beds to recovery and rehabilitation ward beds. Ten of the general beds were converted to sub-acute state beds, resulting in a total of 176 beds for the acute stage. The total number of staff is 644, including temporary contract staff.

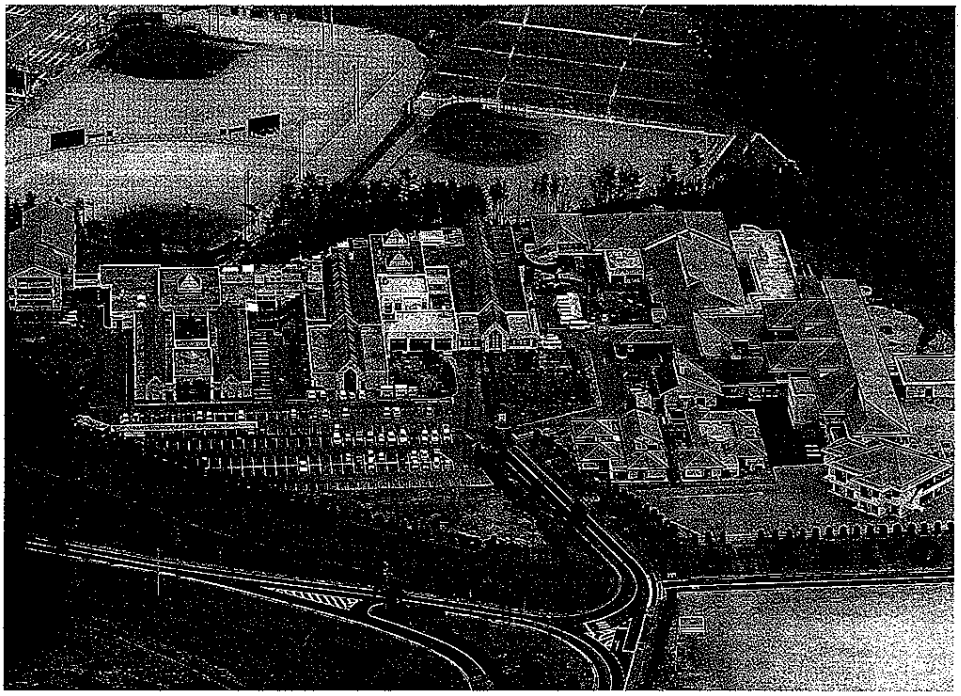
The hospital has the following characteristics: 1, it is a core general hospital (designated a secondary emergency care hospital) providing advanced-level care; 2, it also has a recovery stage rehabilitation ward and palliative care ward; 3, with a comprehensive community medical and other care built with the hospital and the Health & Welfare Center, it also is a local government department at its core, and, with the office of coordination and collaboration for comprehensive community medical and other care set up within the hospital; 4, provides home-based care and is engaged in Operation Zero Bedridden, and, carries out integrated collaboration of health, medical and welfare services; 5, it is a designated clinical teaching hospital and certified by various academic societies; 6, its hospital function is accredited by the Japan Council for Quality Health Care (cleared hospital accreditation audit by Japan Council for Quality Health Care in FY2002 and FY2007), and has an accredited palliative care ward and a "human dock" health assessment service; and, 7, is an accredited institution under the comprehensive community medical and other care accreditation system jointly established by the Japan National Health Insurance Clinics and Hospitals Association (hereinafter referred to as NHICHA) and the National Council of Local Government Hospitals (NCLGH).

(2) Comprehensive Health and Welfare Facilities

A range of facilities that support the comprehensive community care system

A few-minutes' drive from the hospital will lead us to "Fureai-no-Sato," where the Comprehensive Health and Welfare Facilities (hereinafter referred to as CHW Facilities) also a part of the hospital, are located (Photo 3). The CHW Facilities opened in 2000, the year Long-Term Care Insurance was introduced, following transfer, to Mitsugi administration, of management of the then prefectural special nursing home for the elderly and the rehab center for the elderly. Those transferred services and a group of facilities operated by Mitsugi General Hospital as a part of hospital facilities, including the long-term care and health facility for the elderly, were together reborn as the CHW Facilities. This was followed by opening of group homes, a special nursing home for the elderly, and a unit care facility as a

long-term care health facility for the elderly. Currently 317 clients live and receive care at the CHW Facilities. Including 40 clients receiving outpatient rehab and 20 receiving outpatient long-term care, all together 377 clients receive care there, proving that the CHW Facilities meet users' needs for support in home-based living. The CHW Facilities consist of a long-term care and health facility for the elderly, a special nursing home for the elderly, a rehabilitation center (for maintenance phase), "care house," "group home," a home-based long-term care support service provider office, and others. It is literally a complex of comprehensive facilities for health, medical, long-term care, and welfare services. All the staff members are employed by the hospital. The profits generated enter the hospital accounting system.



(Photo 3) A view overlooking entire CHW Facilities

1) Long-Term Care and Health Facility for the Elderly, "Mitsugi-no-Sono"

"Mitsugi-no-Sono," the Long-Term Care and Health Facility for the Elderly, is located adjacent to the rehabilitation center, providing 150 residential care beds (100 general beds and 50 designated dementia care beds) as well as day care service for up to 40 clients. It is a health facility for the elderly with an annexed clinic, whose aim is to provide high quality care and rehab services to improve clients' ADL (Activities of Daily Living) functions for eventual return to their own homes. The Facility also provides outpatient rehab service and short stay respite care program in support of home-based care. In addition, it provides similar home visit nursing, home visits for long-term care service, and home visit rehab service to those in the hospital after discharge so that clients and their families can receive home-based care without anxiety.

As stated before, after the 2008 building extension and refurbishment work, 50 out of the 150 beds became housed in the housing units (including 30 beds in the new addition), with the intention to provide better individualized care through the per unit care approach to meet the clients' diverse needs, aiming to improve the clients' QoL.

In the year from April 2011, a total of 1,144 elderly clients were admitted to the facility, including 25.5% from the hospital and 73% from home. Their mean age was 85.1 years old, with a mean duration of stay being 110.5 days (excluding those on a short stay program). In the year from April 2011, 1,148 clients left the facility, including 473 who returned their own homes, for a return-to-home rate of 41.2%. Day care service users are 192, many of whom are also users of integrated home-based care such as home visit nursing and rehab service, and home visits for long-term care service.

In summary, this EHF operates in collaboration with home-based care services. Together with the hospital and Health & Welfare Center, it forms a part of the home-based care service support system, as well as the comprehensive community car system, or the system of coordination and collaboration by health, medical, long-term care, and welfare services. This facility had previously had an associated home-based long-term care support center, Mitsugi-no-Sono (community oriented). It was abolished after the 2006 amendment of Long-Term Care Insurance and creation of the comprehensive community support center. Since then inquiry and advice services are provided at the In-home long-term care support office, EHF, and various facilities that continue to maintain the function.

2) Long-Term Care and Welfare Facility for the Elderly (Special Nursing Home for the Elderly), "Fureai"

Special Nursing Home for the Elderly (SNH), "Fureai," is served by full-time physicians and rehab staff, with the goal of preventing patients from becoming bedridden through active rehabilitation during the maintenance stage, for eventual return to home. This facility has 20 beds for unit-based care system (newly built in March 2005), aiming for better quality care.

3) Care House "Satsuki"

Care House "Satsuki" (accommodates up to 30 clients) is literally a housing unit with care, set up to make available 24/7 the care services to the level of long-term care and health facility for the elderly. Inspired by the Scandinavian concept of "Group homes" (group houses), this is an example of the "new housing" advocated in the national policy. The Car House is not designated as a "specified facility," where a complete range of long-term care services are provided internally. Night-time safety monitoring and emergency responses are handled by the adjacent EHF. Home visit nursing care, outpatient rehab, and such services can be used as external services. The House is operated in a way to allow provision of the diverse health, medical, long-term care, and welfare services through the comprehensive community care system as external services.

4) Group Home "Kaede"

Mitsugi opened a group home facility in 2001 for the elderly with dementia, adjacent to the Special Nursing Home for the Elderly. The facility employed a unit-based care approach, housing every client in a single room. One more unit was built in March 2005. Those two units heralded introduction of the unit-based care approach across the CHW Facilities. Then, as described below, building extension and refurbishment saw two units with 20 beds built for SNH in March 2005. Also in 2008, five more units with 50 beds were added to the EHF.

At Group Home, every client has a single room and receives individualized care provided by staff members in a communal living situation. In some cases, clients' behavioral issues were resolved after moving in this facility. Such group home and care house facilities are classified as residential (home-based) services. However, these assisted living housing systems are

neither home-based or institution-based service, but something that bridges those two. This is what the system research committee of MHLW called a "new residential arrangement," recognized as "Home based but not one's own home," similar to other small scale multi-service facilities (such as day service, respite apartments, home visit services) next to the group home.

5) The Rehabilitation Center at CHW Facilities

The Rehabilitation Center is a facility of Mitsugi General Hospital Comprehensive Health and Welfare Facilities, newly built and opened in April 2000 with a 19-bed floor. The Rehabilitation Center serves hospital inpatients and outpatients, as well as providing specialized rehab programs for elderly clients in EHF and SNH (Rehab for living). The rehab staff members at respective residential facilities use the facilities of the Rehabilitation Center to provide respective residential rehab programs. April, 2012 marks 12 years since the Center's opening, during which it has served more than 1000 inpatients. The care remuneration revisions in April 2006 introduced specific rehab programs for respective disease types. Motor Organ Disorder Rehab (I), Cerebrovascular Disorder Rehab (II), and Respiratory Rehab (II) are the standards met by the facility. The center also collaborates with the adjacent acute care hospital through the community liaison clinical pathway for the patient with the fracture of neck of femur.

6) Day Service Center

Mitsugi's ambulatory care services started with the introduction of Mini Day Care service and rehabilitation program (at the Health & Welfare Center) in 1984, and improved by additions of EHF Day Care service in 1989 and the Day Service Program (full capacity 15 clients, at the Health & Welfare Center) in 1998. The Day Service Program was transferred to the Health & Welfare Center as the Long-Term Care Insurance System started in 2000, and, has been operated under the title Day Service (ambulatory long-term care, with full capacity of 20 clients) as a part of the services annexed to the SNH, which had just been transferred from prefectural management. The target clients would have a relatively good command of ADLs, and thus would not be eligible to receive the EHF Day Care service (Ambulatory Rehab), despite having some needs for support. They are offered a range of recreational and rehabilitation programs, as well as a range of classes, as preventative measures against becoming recluse and/or bedridden. In addition, since the time of the 2006 revision to Long-Term Care Insurance System, following the services at Long-Term Care Needs Prevention Center and EHF Day Care service, the Support Needs Level 1 & 2 clients are offered exercise, oral function improvement, and nutritional improvement programs, intended as services to prevent them from developing needs for long-term care.

(3) An overview of hospital operation

The aforementioned hospital philosophy is adhered to in hospital's day to day operation, striving to achieve "desirable hospital functions" as much as possible. The hospital partakes in the roles of secondary emergency care service and a core regional hospital providing advanced care, as well as providing medical services to the community, meeting their needs. As a local government enterprise hospital and NHICH, we are required to practice efficient operational management. One of the efforts to meet this requirement is introduction of information technologies such as an electronic ordering system and an electronic Receipt management system. In addition, we have tackled the introduction of an electronic medical record filing system (commonly known as Electronic *Carte*) since April 2006. The unified

Electronic *Carte* system for both the hospital and CHW Facilities is almost complete. In terms of financial operation, after a period of running losses from 1968 to 1975, the book turned black in 1976 following optimizing of bed numbers. Since then we have maintained healthy financial operation without loss until FY2011. Our hospital business account encompasses respective healthcare insurance programs as well as the Long-Term Care Insurance. Three-quarters of medical service income revenues come from healthcare insurance, while a quarter is from the long-term care insurance. The total annual gross profit was approx. ¥ 6 billion, having almost doubled in the last 15 years. During the time of Mitsugi Town Council operation, there was no special funding from the local governments' general accounts. The hospital was run with Local Allocation Tax distributed by the National government and other National Health Insurance special adjustment funding allocations, in addition to hospital business incomes. Our extension and refurbishment work for the hospital and CHW Facilities was funded by the hospital business incomes, which built today's "hardware" aspects of our work.

(4) Recovery stage rehabilitation ward and home-based rehabilitation service

1) Recovery stage rehabilitation ward

In May 2001 (In June for starting claims for care remuneration) our hospital became the first hospital in the Bingo District (Eastern Hiroshima Prefecture) to open a recovery stage rehabilitation ward, with 20 beds converted from general beds. Our hospital is committed to provide acute rehab services for stroke patients, etc., who have been transported in an ambulance and admitted to our hospital, a secondary emergency care provider. Also in the role of a specialized rehab service provider, we accept referrals of recovery period rehab patients from neighboring acute care hospitals. Thus, we provide a range of rehab services from acute stage rehab to home-based rehab for the maintenance stage patients and terminal stage rehab.

Patients coming to the recovery stage rehabilitation ward may be hospital inpatients moved from another area (hospital self-contained) making about 40%, and patients from another hospital referred for our rehab services (community self-contained) making up about 60%. One therapist is assigned to about 10 patients, a ratio that allows focused rehab service, put into practice in our active ward ADL rehab framework. Five times a week, a multidisciplinary ADL conference is held, attended by nurses, physicians, rehab staff, and a medical social worker (MSW), to discuss whether their patients are sufficiently utilizing the skills learned in rehab rooms in ADLs when returning to their respective wards. Each inpatient's case is discussed at least once a month in this conference. If a patient has numerous issues, his/her case is repeatedly reviewed at a weekly rehab conference, attended by the physician in charge of rehab, the patient's attending physician, rehab staff, nurses, MSW, a pharmacist, and a public health nurse, as well as at the rehab physician's ward rounds, to monitor his/her progress towards his/her targets for the recovery stage rehab ward team. Our eventual goal is to facilitate the patient returning to his/her own life at home. We start our pre-discharge visit early to check the state of house actively and other preparation to build up the image of patient's home living, and have such data incorporated into ward-based rehab drills. Also for continuing rehab after discharge, we actively become involved in the patient's care management and collaborate with the community care manager, for a soft landing into the rehab for life back home, including proactive discharge guidance and post discharge follow-on visits.

An advantage of the recovery stage rehab ward is the 150-day hospitalization period allowance for stroke patients, meaning that a necessary duration of in-hospital care can be secured without concern for the mean hospitalization days, even in cases of severely paralyzed patients or patients with higher brain function disorder. While, advantages of being a general hospital are that the mean hospitalization days in general beds can be reduced, a patient can be moved to a general ward when he/she needs a surgical procedure for a complication, and when a patient is referred from another hospital, he/she can be accepted to a general ward as a temporary measure even if the recovery stage rehab ward is full.

The bed restructuring in April 2007 let us increase beds in our recovery stage rehab ward by converting recuperation beds in addition to the then-existing 20 beds originally converted from general ward beds, to a total of 30 beds. The staffing increase in FY2011 prepared us for 365 day rehab service delivery. This move has enabled us to offer rehab service every day according to patients' needs even on weekends and holidays, in an effort to support earlier discharge to home in a better condition. In addition, another expansion is planned next fiscal year to increase the number of recovery period rehab ward beds to 60.

Our issues include the reduction of duration before admission to this ward from three to two months, following the 2006 revision of the care remuneration claim system. Duration of hospitalization became categorized per disease type, no longer the default 180-day period for all. In addition, the April 2007 revision introduced a gradually decreased schedule for rehab service fees, which would demand stronger coordination and collaboration by acute care service providers, the service providers for maintenance stage care, care managers, home-based service providers, and other parties. Also, the limitation of half-day outpatient hours over the designated physicians assigned to a recovery stage rehab ward can compromise our outpatient follow-up system. Furthermore, the lack of recovery stage rehab beds outside the ward, either within our hospital or within the region, means that we need to speed up bed turnover, so that more patients can use our services. This also means that if the ADLs attain the target level, the patients will need to use the annexed Rehab Center or EHF while waiting for Long-Term Care Insurance application, house alteration, and coordination of various home-based services.

2) Home-based rehab service station

Home-based rehab services may be any one of the following four services: home visit service, ambulatory service, short institutional stay service, and technology-aided service. Home visit rehab service is an important component of home visit services, alongside home visit nursing and home visit long-term care services. Home visit rehab service in an existing sense, in which the therapist visits the client's home for rehabilitation exercises, alone does not fulfill the original intent. What is required of future home visit rehab service will be the perspective as a starting point of home-based care services; namely, to prevent or improve the state of bedridden, to link the current state to ambulatory services (outpatient clinic service and ambulatory rehab service) if possible, and to build the stepping stones towards the client's social participation. In other words, home-based rehab is a tool to prevent a client from becoming a recluse and help extend his/her social involvement and living territory so that his/her QoL (Quality of Life) will improve. Another aspect is the role of psychological and physical support for the client and his/her family, as being a home-based rehab care service in which more humanity is required. Home-based rehab is the support in daily living itself and a service that places value on daily living. The involved staff members should be aware of this.

The purpose of home visit rehab service is to rebuild the client's life that was destroyed by a disorder of functions, caused by aging or a disease. In other words, "Rebuilding of life." Fundamentally, the therapist in home-based service provides support not only to the client, but also for the entire family. The issues troubling the client and his/her family are called "barriers to living." Analyzing and assessing "barriers to living" is the first step in home visit rehab. "Barriers to living" have physical, psychological, and environmental aspects, each of which requires a certain approach. Many clients receiving home visit rehab service have a sense of failure from not completely recovering while receiving hospital rehab care. Rehab exercises formed a part of daily routines in the hospital and/or institution. When clients return home and lose the routine, they miss their previous role in it. As a result they are often unable to find purpose of living and become "recluses." When approaching a client's psychological aspect, the therapist needs such attitude for engagement as listening to his/her stories, getting him/her to go out, find a role, meet people, and have fun with them. Approaching the client's physical aspect, which can also be termed "rehabilitation exercises," starts with understanding and assessing remaining physical functions and the disorder, with the goals to prevent disuse syndrome and establish basic fitness. Sort "things he/she can do" from "things he/she cannot do." Get the client to increase "things he/she can do" and get him/her to repeat them in his/her everyday life. If necessary, prescribe ROM (joint range of movement) exercises, exercising retention of sitting up posture, muscular strengthening drills, and basic movement drills (such as getting up & down, transfer in/out of transport or wheelchair, etc.) and introduce ADL instructions and exercises. Approaches to the environmental aspect include improving or preparing the physical environment, and improving or preparing the human environment (collaboration with other home-based care support staff). Approach related to physical environment is one of the important roles of home visit rehab, providing support in living utilizing the Long-Term Care Insurance System (house alteration, welfare equipment rental or purchase).

(5) Community-based rehabilitation implementation program

The Japanese government has implemented ongoing programs since FY2000 for preparing and improving a system to support community-based rehabilitation. Since FY2006 respective prefectural governments have run their own programs, deployed with a focus on "Prevention of long-term care needs." Here in this region, our hospital has inherited the program from Hiroshima's "Long-Term Care Needs Prevention Municipal Support Committee," and has been designated the regional support center for the community-based rehabilitation services in the Onomichi – Mihara Region area (9 centers cover 7 regions). We have also been one of the Hiroshima Prefecture government's designated rehabilitation support centers.

After the "Model Project" (trial) in FY1998 – FY2000, our hospital has been contracted since FY2001 to provide a rehab-related consultation, inquiry, & guidance service for the region under the name of Regional Support Center for Community Rehab, and has run on-site teaching and training programs. In addition, we took on the role of a prefectural rehab support center in FY2002, and, in cooperation with the Regional Support Center for Community Rehab, have been engaged in such actions as resource survey, formulation of a guideline for coordination and collaboration, and cooperation with other Regional Support Centers for Community Rehab. However, in reality, our efforts for prefecture-wide actions have yet to reach a satisfactory level. Under the Community-Based Rehab Evaluation Implementation Program started in FY2004 following the coordination and collaboration guideline, utilizing respective Public Health Centers as the liaison council secretariat for respective regions, support was provided for municipal agencies in handling of difficult cases, designated

cooperating hospitals and institutions (29 premises) that support respective Regional Support Centers. Although the fiscal year 2004 saw slight progress in the actions, the actions seen in FY2005 were limited to standalone activities by respective Regional Support Centers for Community Rehab.

Incidentally the "National Liaison Council for Community Based Rehab Support Programs" has identified the efforts for "Prevention of long-term care needs" as one of the program foci. Meanwhile, the "Community Based Rehab Implementation Committee" under the Japan Association of Rehabilitation Hospitals and Institutions also set community implementation of "Prevention of long-term care needs" as one of their FY2006 action targets, as a tentative move to seek collaboration with "Regional Support Centers for Community Rehab."

By FY2006 our hospital was already designated the regional support center for Onomichi and Mihara region, and engaged in rehab support in relation to "Prevention of long-term care needs." Various difficulties have been identified at this stage in "Comprehensive Community Support Center" and other agencies' program implementations. Accordingly, our hospital, as a prefectural rehab support center, believes it is essential to establish the pillars of actions in support for local governments running "long-term care needs prevention programs," in cooperation with respective Regional Support Centers and cooperating hospitals and institutions, and to provide support for the "Comprehensive Community Support Center," especially for its role as the foundation of community building as a base of "comprehensive community care."

In addition, the Hiroshima Prefectural Government started the Higher Brain Function Disorder Support Framework Preparation Project in FY2007 and designated the prefectural rehab center as the hub hospital and four institutions, including our hospital, as community support centers.

Furthermore, in orchestration with the aforementioned actions, we intend to act, in conjunction with "Hiroshima Prefecture Comprehensive Community Care Implementation Center," which is opened in FY2012, for restructuring of the community rehab support framework within the prefecture, as well as to make a renewed commitment in promotion of comprehensive community care and community rehab.

(6) Palliative care ward and home-based palliative care

The hospital opened a palliative care ward in April 2002 with 5 beds, and expanded the capacity to 6 beds in April 2007. Although its scale is small, the ward allows a large per-bed area and accommodates every bed in an individual room to let family stay overnight at bedside. Although the scale is small, multiple professionals, including physicians, nurses, dentists, dental technicians, therapists, pharmacists, registered dietitians, clinical psychologists, social workers, home visit nurses and other home-based care staff, as well as volunteers, fulfill their respective roles, collaborate with each other for the patients and their families, and provide support. The annual number of inpatients admitted to the ward increases every year, and the ratio or referrals from outside the hospital is relatively high at approx. 50%. As a palliative care base, the expectations from community citizens as well as the medical services in the surrounding area also seem to be on an increase (Table 5). Responses are also given to requests from general wards. The palliative care support team works in partnership with the patient's attending physician and general ward staff to provide palliative care.

Table 5 Status of Palliative Care Ward Operation

(April 2008 – March 2011)

	FY2008	FY2009	FY2010	FY2011
Admission number Actual patient number	104 89 (M53 F36)	78 64 (M32 F32)	81 66 (M30 F36)	103 65 (M39 F26)
Mean age	71.2	75.3	71.5	74.2
Bed occupation rate (%)	88.7	82.8	84.5	85.2
Mean days of stay	20.5	25.3	21.8	20.5
Number of patients died	76	58	58	48
Rate of discharge to home	24.0	29.7	28.0	53.4

A study of awareness of hospice and palliative care services found that, although about 85% of respondents wish to spend their final hours at home, currently only about 15% of deaths occur at home, while about 85% die in a hospital (or other institution). Meanwhile, the palliative care ward of our hospital would listen to a patient or family's wish to return home if expressed, and endeavor to arrange recuperation at home by working together with the home-based palliative care service, a part of our comprehensive community care system, provided certain requirements, such as stable conditions, are met. For example, a staff member at the home visit nursing station of our hospital starts working and takes actions in partnership with the ward staff while the patient is still in the hospital, so that services are delivered seamlessly after discharge. The palliative care ward resident physicians also visit homes to deliver care and provide the same palliative care as the patient and his/her family received during hospital stay. In addition, the palliative care outpatient clinic opens once a week and functions as an inquiry reception desk for hospital admission and miscellaneous advice, and also plays the role of home-based recuperation support, such as controlling conditions of outpatients. Furthermore, as a part of services supporting home-based palliative care, the patients can also use the day hospice service, the ambulatory ward based day service.

On average, about as much as 25% of our palliative care ward inpatients return home, although there are some year to year fluctuations. We intend to collaborate with the home-based palliative care service, deliver a variety of services, and advance our efforts to support the patients return to their own homes to recuperate as much as possible.

(7) Nutrition Support Team (NST) and home-based NST

Our hospital has a Nutritional Care and Management Committee, with the following subcommittees under it: NST subcommittee, Bed sore subcommittee, Oral care subcommittee, and Dysphagia subcommittee. It goes without saying that each subcommittee functions in cooperation with others, but the Chief of Surgery is also in charge of the NST and Bed sore subcommittees, which is especially helpful in speedy nutritional interventions in terms of bed sore prevention and treatment. NST members include dental technicians and speech therapists of respective subcommittees. Also, each case of intervention is done through case-centered multidisciplinary collaboration by all professionals, in an effort to prevent the problems often seen in multiple subcommittees acting in parallel in the same area.

Our NST started in June 2002, as an initiative by the then Chief of Surgery. We have since been accredited by the Japan Society for Parental and Enteral Nutrition in August 2006, and our accreditation has since been renewed. The principal purpose of the service at the time of launch was multidisciplinary nutritional management of the cases of patients who had

developed bed sores, which were more conspicuous than they are now. Currently the team members consist of two physicians (Chief of Surgery and one surgeon), 36 nurses (leaders and ward staff nurses), two pharmacists, 10 registered dieticians, three dental technicians, four speech hearing language therapists, and one clinical laboratory technician. Among them, one of the pharmacists is a commissioner of Japan Society for Parental and Enteral Nutrition, and two nurse leaders, three registered dieticians, and the clinical laboratory technician are NST specialists accredited by the Society. The team's functions include review and handling of cases, of course, as well as consultation, public education within the hospital and in the community, teaching and training, presentation at academic society conferences, and, furthermore, participation in national level research projects.

Our inpatients' nutritional picture includes 64.1% with serum albumin level of 3.1g/dL or lower, 23.8% on enteral nutrition, 20% have PEG, and 4.6% are on TPN via central venous line, indicating that the nutritional situation within the hospital continues to show needs for better quality and quantity of the services. However, when the attending physician is entrusted with making a decision on NST intervention, from our experience, often the cases in which a support is most needed are not picked up. In order to prevent this, we recommend including an Albumin level monitoring chart for all inpatients to take in ward rounds, to be referenced when reviewing a need for new intervention.

Actual interventions and rounds made in FY2010 for patients whose mean age was 82.4 years old include a total number of 440 cases covered in ward rounds, with new intervention started on 166 cases, and intervention ended in 188 cases. The reasons for ending intervention was: patient returned to home, 27%; patient improved, 23%; patient transferred to the annexed CHW Facilities, 20%; transferred to another hospital, 2%; transferred to another long-term care institution, 11%; and patient's death or went into a grave condition, 17%. As seen above, in many cases the patient was discharged without sufficiently improving, suggestion of a more innovative approach to ensure continuation of management is required. One tool prepared for that purpose is the NST discharge summary document form, to be attached to the care information document. Another action is the NST manager's weekly clinical visit to the annexed CWH Facilities and case reviews, conducted for the cases whose care is continuation of hospital care, in the same format. The total cases managed in this way in FY2010 was 104 cases in Long-Term Care Health Facility for the Elderly, 44 cases in Special Nursing Home for the Elderly, and eight cases at the Rehab Center. As stated elsewhere, home-based NST has been in action since April 2008. As a result, prior to discharge of a patient whose case had NST intervention, the home visit nurse (to be assigned to the case) is expected to take a part in the conference or ward rounds.

Home-based nutrition support team (NST)

Under the concept of our comprehensive community care system, we have endeavored to have the philosophy and approach of the nutritional support service developed by the in-hospital NST permeate into all divisions of medical, health, long-term care, and welfare services. In short, we intend to employ nutrition as a means to progress one step further in our efforts for medical and long-term care collaboration. The details of actions actually taken include, related to the issues with meals and diet, of course, improvement of eating and swallowing functions, which receive equal emphasis. Furthermore, while striving for strengthening roles of respective departments, including home-based services, we have amended our operations of collaboration to become able to achieve speed in responding to changes of patients' and citizens' recuperation and living environments, respectively. Our efforts in this area included a move away from hospital-centered hierarchical management to

stronger home-based care support and management for the purpose of preventing hospitalization and readmission, as well as reducing burden of long-term care costs, and even further to efforts to prevent malnutrition due to a societal and/or economical reason and an extension of our activity range from within the hospital to outside, if only little by little. The launch of home-based NST is situated within said trend.

The history of NST in our hospital started in June 2002. Following the endeavor by the physicians, pharmacists, registered dietitians, and nurses, who played the central role, the birth of NST was heralded. The primary purpose of establishment then was the control of bed sores, which was a more prominent issue than it is now. Soon also in the annexed long-term care facilities (now CWH Facilities), NST started their actions under collaboration of multidisciplinary professionals. The hospital and CWH Facilities exchange nutritional management data using common forms. The hospital NST manager makes rounds at CWH Facilities to monitor the cases previously under NST, and becomes involved in their nutritional support in general. In addition, as previously described, by an initiative of hospital NST principle members, in April 2008, the home-based NST was established based at the annexed home visit nursing station. As the author of this document, who is also the person responsible, has become involved in all aspects of nutritional support services at the hospital, facilities, and home-based long-term care, continuation of management is, naturally and of course, ensured, as well as coherency of specific teaching contents and direction of activities.

The following paragraph presents the details of home-based NST actions. As stated before, they started in April of last year. The focus of our actions is the monthly conference, held at 5 pm on the first or second Monday of the month in the Health and Welfare Center conference suite, where the existing home-based service staff conference is also attended by the hospital and facility staff members. The home-based service staff includes public health nurses, nurses at the home visit nursing care station, home helpers, staff members of Onomichi North Community Comprehensive Support Center, and care managers. The attendants from the hospital are the Chief of Surgery, one pharmacist, several registered dietitians, and one nurse, one speech hearing language therapist, and one dental hygienist. The cases subject to case review are the cases referred by the hospital NST and the cases whose nutritional circumstances concern the home-based service staff involved. Each session discusses 10 to 15 cases. The assigned home-based service staff reports general details of the client's living, which are then assessed, and a management plan is developed. The primary diseases suffered by the clients discussed there include dementia, disuse syndrome, cerebrovascular diseases, liver diseases, terminal malignant tumors, hypoxia, and amyotrophic lateral sclerosis. Almost nine out of ten clients suffers Dysphagia. We have developed and improved recording forms for care monitoring and management planning, which are now used effectively. These forms are simplified with respect to home-based service staff's input, to lessen recorders' workload. The physicians are impressed by the light footwork of the home-based care service staff, often finding greatly stimulating to listen to their deep insight into the complex psyches of silent living persons (who are our clients/patients). Although yet to participate in a team visit, the author does take part in home visit care if necessary, occasionally accompanying an intern or resident physician for teaching purpose. Another action we took was running of a medium-scale workshop. We have held it twice so far, after having called for participation from the institutions involved in medical, health, and/or long-term care services in the surrounding area, as a part of efforts to extend the geographical range of collaboration. We seek recognition by the private practices in the area, of our capacity to accept the patients with disphagia and/or aspiration pneumonia, as well as the inquiry reception for nutritional consultation. Being aware of the projected increase of single-person and/or aged households, we are currently

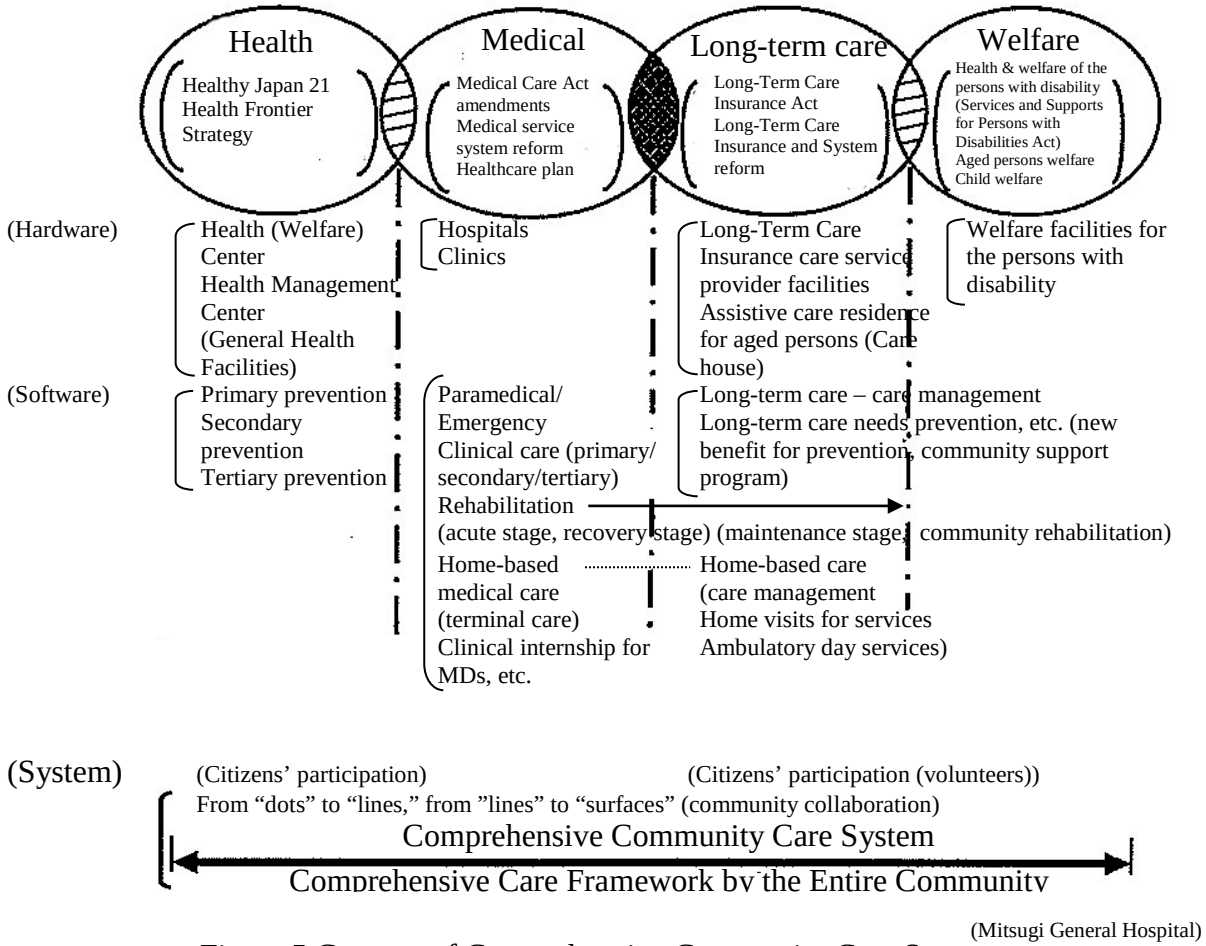
communicating with the commissioned welfare volunteers and the Comprehensive Community Support Center in the area, local governments and councils, and the social welfare council, and are working to build a framework to ensure security of meals and persons who prepare meals, as well as issue and nutritional support.

Reflecting on our home-based NST's actions so far in general, first of all, the home-based care service staff gave overall positive feedback, pleased with an increase of channels of inquiry and consultation, not limited to nutritional matters. The hospital NST members gave feedback, such as, the process of management planning in hospital raised their awareness about the patients' lives at home after discharge, and this kind of collaboration is especially important when handling a case of a patient who repeats the cycle of living home – hospitalization. Also, we often hear words of gratitude from our patients and families when visiting them at home. On the other hand, we should be aware of their contribution for the entire community. Some of our medical and nursing staff members are not sufficiently aware of post-discharge collaboration. NSTs also lack organizational efforts to raise awareness about collaboration. Or, not enough general hospital employees attend in-hospital workshops, etc. These are some of the criticisms and self-criticisms heard from employees. We have created one place for staff members from the hospital, home-based services, and institutions to meet together, share the vision of supporting living, and review nutrition, care, and long-term care in a single case. This is a considerable asset to us. The human resources nurtured and the know-how discovered there are certainly precious resources to develop our comprehensive community care.

Chapter 4 Positive Outcomes of the Comprehensive Community Care System and Challenges It Faces

As has been stated above, in Mistugi the hospital and local governments have been jointly committed to building the EHF, SNH, home visit nursing care station, care house, group homes, and like facilities. The citizens joined in their efforts to build the comprehensive community care system (network), in an attempt for collaboration and integration of health, medical, and welfare services, including home-based care services. This system is visually presented in the schematic charts in Figures 3, 4, 5, and 6. The hardware components of the system are the hospital and the CHW Facilities that provide health, medical, and welfare services. The software components include Operation Zero Bedridden, home-based care services, health promotion actions, and citizens' participation.

Building the comprehensive community care system widened the scope of health, medical, and welfare services from "dots" to "lines," enabling the citizens to receive necessary service(s) when necessary, and as much as necessary, from health promotion while well to terminal care.



(Mitsugi General Hospital)

Figure 5 Concept of Comprehensive Community Care System

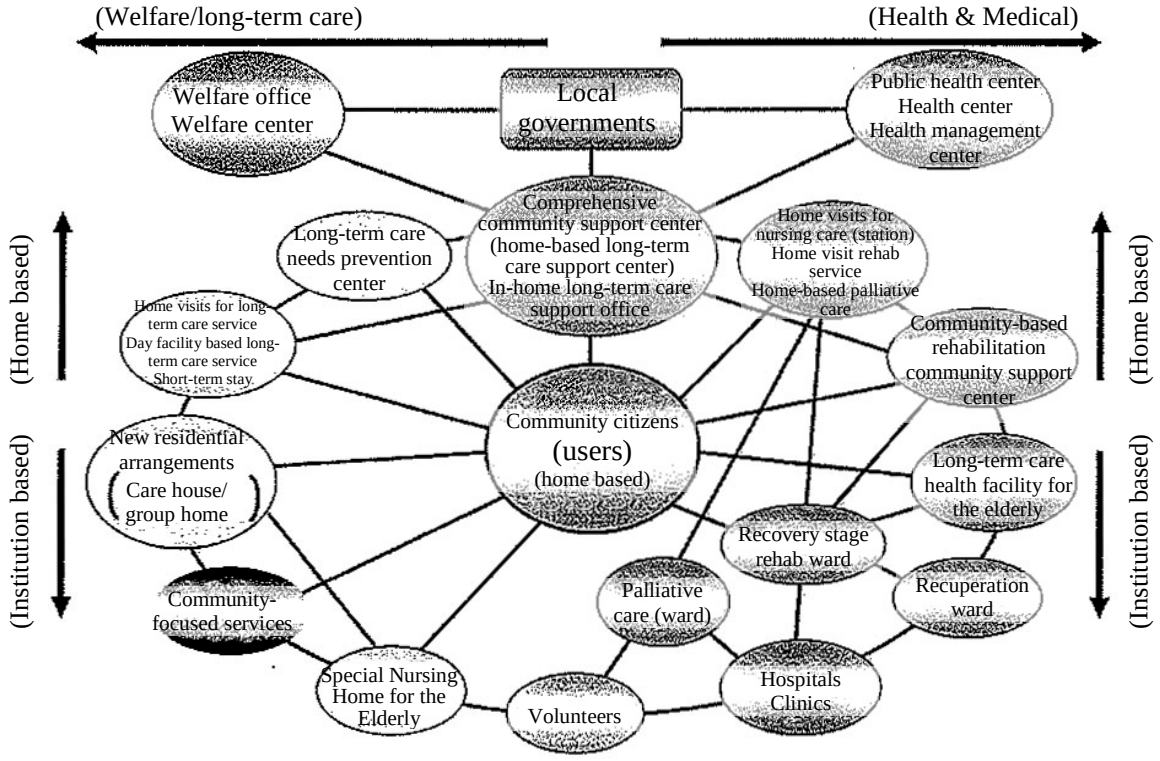


Figure 6 Comprehensive Community Care Concept

(1) Positive outcomes of the Comprehensive Community Care System

The most prominent of the positive outcomes of the comprehensive community care system achieved is the reduction in number of the bedridden (persons with severe long-term care needs). The number of the bedridden was sizable in the decade from 1965, but gradually declined as the comprehensive community care was being implemented. This is not because the bedridden persons had become better and able to walk again (although there are some cases in which the people who had become bedridden from disuse syndrome received appropriate rehab and care services, improved their command of ADLs, and became able to walk.) The biggest reason was that it became possible to prevent the would-be bedridden from ending up actual bedridden; in other words, successful prevention of long-term care needs. However, it took about 10 years to confirm the effect in actual data (reduced to about one-third in 10 years).

The second prominent outcome was that the collaboration and integration of health, medical, and welfare services made it possible to have a channel of general inquiries established for all services to deliver a variety of care services in a comprehensive and integrated fashion. Previously a citizen who wished to receive several services had to visit each inquiry reception counter for the vertically aligned health, medical, and welfare services and lodge an application for each type of service. After establishment of the comprehensive community care system, a citizen can make an inquiry at any one of the reception counters, which will be followed up and coordinated internally. From our citizens' point of view, it became possible to get connected to health, medical, and welfare services at one reception counter.

Thirdly, a 'round the clock, 365 days a year care delivery framework was made possible. Also advanced level, so-called high-tech care, previously only available for hospital inpatients, became available for patients receiving home-based medical care (such as ventilator and TPN infusion via central line).

Home-based medical care may be one of the three following types. In the first type, nursing care and long-term care both play important roles alongside medical care. The second type refers to the cases in which the latest advanced medical care is delivered to a patient at his/her own home, while the third type refers to terminal care. The first type is home-based medical care for an elderly patient with chronic disease(s), and requires appropriate long-term care to be provided alongside medical and nursing care. Introduction of the Long-Term Care Insurance System has made it easier to provide home-based medical care for this type of patient. The purpose of this type is both treating the patient's disease and supporting his/her living, requiring a multidisciplinary team care approach and a framework of cooperation. In addition to the physician's scheduled home visits for clinical care, home visits are made for nursing care and rehab service, as well as home visits by a pharmacist and/or dietician for teaching and home visits by a dentist or dental hygienist. The second type involves the kinds of medical treatment that have become possible with advancement of Medicine and improvement and/or development of clinical devices, previously only available at a hospital or clinic, also termed high-tech care. Those include continuous ambulatory peritoneal dialysis (CAPD), home oxygen therapy (HOT), total parental nutrition administered via central venous line (TPN via CV line) at home, elemental diets administered as enteral nutrition at home, and clinical management and guidance for patients staying home with malignant tumor. The third type of care is a part of palliative care for patients staying home with untreatable

cancer or intractable disease. Recently, more people wish to spend the terminal stage at home with family. In Mistugi all of those three types of care can be provided.

Nowadays it is not uncommon for various Long-Term Care Insurance services such as home visit for nursing care or long-term care service to run 'round the clock, 365 days a year. However, previously it was difficult receive a home visit service during the night or in early hours. If a family member, who was also the care giver, needed a nighttime service, the service providers had a limited range of work hours, and therefore the family could not receive services when they needed them if they want the client to return home. A considerable number of service users thought that use of institution-based case was unavoidable. Night patrol (a nurse and welfare worker provide home visit service during the evening) and early morning care services are initiatives to ensure that necessary service is provided when necessary, according to the family's situation surrounding long-term care.

The fourth prominent positive outcome of the system was its effect in slowing growth of healthcare costs. Healthcare costs for aged care in Mistugi were above average in Hiroshima Prefecture until about 1985. The status has since been reversed, maintaining a lower level than the prefectural mean. The fifth was the system's economic effects. Opening and establishment of CWH Facilities and other facilities, as well as service offices, means that they need to employ staff. More employment has contributed to revitalizing the town and stopped the trend of population decline due to residents leaving. The sixth prominent outcome of the comprehensive community care system was that it enabled building of a community where the elderly and people with disability can live with a sense of security, which then improved the citizens' QoL. This could be said to be the largest of the positive outcomes.

Following the aforementioned, some other effects are becoming visible; namely, reduction of long-term hospitalization and the number of severely ill patients, and reduction of NHI healthcare costs. Among those discussed, I believe that the most important outcomes are the economic effects of the System, as well as health, medical, and welfare services, and their considerable roles in vitalizing the town. In other words, these have stopped decline of our population. This trend manifests, for example, the increase in people migrating from other prefectures, cities, towns, or villages, because of our better welfare and long-term care services.

(2) Challenges Facing the Comprehensive Community Care System

Our comprehensive community care system has faced or faces the following challenges and issues.

First of all, the question as to whether or not it is possible to secure workforce and finance sources. Fortunately Mitsugi has been successful in securing services of public health nurses, registered nurses, PT, OT, speech hearing and language therapists (ST), music therapists (MT), long-term care welfare workers, and home helpers. (As of April 2012, we have 16 public health nurses, and 72 therapists including PT, OT, ST, and MT.) With regard to finance sources, in addition to the general accounts, the hospital shares the burden of providing "personnel" and "money" for service delivery. Without security of those resources, our System would be unable to run. The second challenge was organizational reform at the local government/council administration level. Needless to say, our future society with longer overall longevity will need collaboration of health, medical, and welfare services. Now the time has already moved from the time of collaboration to the time of integration. The third

challenge was the collaboration by institutional-based care and home-based care services. Home-based care alone or institution-based care alone will not do. For the clients who receive mainly home-based services, we will still need to use institution-based services effectively, such as short, medium, and long-term stay options according to the family's care giving capabilities and the user's needs. Availability of institution-based care services is the primary condition for receiving home-based care services without constraints. The fourth was local government/ council leaders understanding and morale. The fifth was the needs for base premises. Mitsugi has prepared and improved our bases according to the Gold Plan, the New Gold Plan', and the Gold Plan 21. Those bases include Mitsugi General Hospital, Health and Welfare Center, Rehabilitation Center, EHF, SNH, Home visit nursing care station, Care house, and Group home. Twenty beds in the SNH were converted to unit-based care beds in March, 2005, and one unit of Group Home (for 9 clients) was added to make the capacity two units for 18 clients. Furthermore, another 50 beds in EHF were converted to unit-based care beds in 2008. We plan to convert more beds in our facilities to unit-based care beds. The future challenges for Mistugi in this area include construction of a small-scale multipurpose facility adjacent to the Group home as a new addition to the CWH Facilities, converting more beds in SNH and EHF to unit care beds, and making the EHF a satellite facility. We intend to endeavor towards realization of these goals.

The sixth challenge is mutual understanding between and collaboration by those involved in health, medical, and welfare services. I understand that medical care is included in the background of the term, "health and welfare," which appears in the Gold Plan and such documents. For the bedridden elderly, true welfare service should be grounded upon medical service. The goals of "Healthy Japan 21" should be the same. Now is the time when true collaboration by those involved in health, medical and welfare services becomes truly needed. The seventh challenge is whether or not to get citizens' participation. Also needed is to change citizens' awareness. That is why the importance of welfare in education is called for.

The eighth challenge is coordination between the hardware aspect and software aspect of the System in the community. Networking needs to take advantage of the hardware. The last challenge is the relation with the Long-Term Care Insurance System. Mitsugi was building its own comprehensive community care system, when the Long-Term Care Insurance System was introduced, which made a smooth introduction possible. The April 2006 Long-Term Care Insurance System review indicated a conversion to a prevention-focused system. A new benefit for prevention to implement long-term care needs prevention was introduced and community support programs were created. A new comprehensive community care system will need to be built under the revised system.

When considering the fundamental goals of the Long-Term Care Insurance system and its content, many common points with our comprehensive community care system are identified, such as home-based long-term care; comprehensive, integrated, and efficient service delivery (mixed care services); emphasis on prevention and rehab (Operation Zero Bedridden, prevention of long-term care needs); citizens' participation (participation by community citizens); and so forth. Where Long-Term Care Insurance aims to reach is the same as the philosophy of our comprehensive community care system. Mistugi General Hospital has been at the nucleus of the past 30 years' efforts to establish our own comprehensive community care system in Mitsugi, which is now almost complete. However, the philosophy of the System has always been user-centered. Introduction of the Long-Term Care Insurance System caused no confusion at Mistugi, and our citizens were able to enter the system without any apprehension. We intend to further improve our system for the future.

Chapter 5　Mitsugi Health and Welfare Center

(1)　Health promotion and the Operation Zero Bedridden

In 2003 the “Aged care study team,”, a consulting group for the Director of Health and Welfare Bureau for the Elderly in MHLW, advocated establishment of a comprehensive community care system. In response, concerned persons in local government administration, those engaged in health and medical care services, and those engaged in Welfare services, as well as citizens willing to take part, were involved in a nationwide move for networking. In order to maintain and improve one’s level of health, the awareness to, “protect and build my own health myself” and put this into practice in daily life are important. For that reason, the initiative placed an emphasis on health promotion, using every opportunity for health education and a place to raise awareness about health and welfare. With many citizens taking part, it has raised their health awareness. In April 2004, “NHI Iki-iki Center” opened in Mitsugi, providing three corners, for exercise (muscular training, etc.), nutrition (meals self-check, etc.) and oral care (bite strength measurement, etc.). The services delivered by the center to our citizens are not covered by Long-Term Care Insurance, and play another role in health promotion and long-term care needs prevention in our citizens.

As a part of the 2006 healthcare reform, the specified health screening examination program and specified health guidance services became official schemes, and came into operation in FY2008. For smooth implementation of those services since 2008, an NHI Health-Up program was implemented during a 6-month period from September 2007.

Having committed to the NHI Health-Up program and implemented the specified health screening examination program between 2008 and 2009 (fiscal years), it was found that some of the clients who were recommended to seek further medical care were yet to have their receipts processed through the system three months later, while others had their blood pressure, blood glucose, and lipid levels within the range of “further medical care recommended,” despite claiming to be “taking medication.” Specified home visit health guidance services by public health nurses and registered dietitians have followed up such cases.

In another action taken during the period between October 2008 and March 2011as one of ten NHICH nationwide, we streamlined the specified health guidance services for those undergoing treatment by categorizing clients into “general group” and “focus group.” Twenty clients from each group receive services provided by a team of physicians, registered dieticians, public health nurses, and other professionals, aiming at integration of treatment and prevention. In addition, Mitsugi Iki-iki Center (health promotion facility) has the goal of extending healthy longevity and takes actions around the pillars of “primary prevention” and “long-term care needs prevention.” Since its opening, more users have taken advantage of the facility every year.

(2)　Health Promotion Panel: Health Waku-waku 21

As a part of initiatives to raise citizens’ awareness about health and promotion of their health, a health promotion panel was started in 1984. Its purpose was to provide health education not only for the elderly but also for the youth. The panel has been held in the evenings, hosted by

public health nurses and health and welfare service officers, with attendance by hospital staff (physicians, dentists, pharmacists, therapists, dieticians, dental hygienists, social welfare workers, and others), altogether 24 times a year (twice monthly on average).

Mitsugi-cho has seven community halls, each of which has a designated area, and about 50 neighborhood meeting house units. We used to run a mini talk session with a theme every year at each of the seven community hall areas (large venues) to raise awareness on disease prevention and health related knowledge, and answered various questions and requests for guidance from the community citizens. The remaining 17 times were held at neighborhood meeting houses (small venues), having the community citizens sitting around facilitators who took their questions. There we talked about hypertension, diabetes mellitus, and other lifestyle diseases, reported on health screening attendance rate for the area, and explained the importance of receiving health screening. Some hands-on learning opportunities were provided, such as miso soup salt content measurement by a dietician and a tasting session. This large venue + small venue approach was continued for about 15 years and had some positive outcomes concerning dissemination of health related knowledge. However, as "Healthy Japan 21" advocated, the focus has shifted to how to put the health related knowledge into practice. We thus changed our approach and decided to run all sessions at neighborhood meeting houses (small venues), introducing a group system for sharing voices in groups of five or six so that every participant has an opportunity to speak up. The name was also changed to "Health Waku-waku 21," to reflect health promotion actions in the 21st century. For the eleven scopes of "Healthy Mitsugi 21," each neighborhood gathering house decides on the theme according to requests of community members such as their health promotion committee member, and liaises with our staff in advance about the running of the actual session.

(3) Importance of primary prevention (Prevention of lifestyle diseases) – Healthy Mitsugi 21

The Japanese government is advocating National Health Promotion Movement in the 21st Century, (Healthy Japan 21). Mitsugi followed and developed "Healthy Mitsugi 21" toward 2011. "Healthy Mitsugi 21" aims to eliminate the "made bedridden," and set 98 goals in 11 scopes of actions for "primary prevention" of lifestyle diseases, as well as for "prevention of long-term care needs" and "infectious disease control," in our efforts to establish and strongly advance our comprehensive community care system. In health promotion, what is important is the efforts to establish desirable habits and routines during childhood, and, complete remaking of the awareness of health each community citizen, for having his/her change his/her own behaviors. Our proactive efforts to advance this initiative include setting of numerical targets to measure attainment of goals within the eleven scopes, so that concrete actions can be planned and implemented. Currently the Japanese government advocates primary prevention and prevention of long-term care needs as a part of the Health Frontier Strategy.

(4) Home-based care network meeting and care officers meeting

The first-level bases for the services delivered by home visits are the hospital and Health & Welfare Center. The Health Facility for the Elderly, "Mitsugi-no-Sono," and the home visit nursing care station provide the second and third level bases, respectively. Cases referred to the home visit nursing care station used to be mainly the cases referred to from a private practitioner or the cases in which the body of care needed was long-term care. Since introduction of Long-Term Care Insurance, the station has also accepted the cases with

relatively high medical care dependency. The home visit nursing care station now has three therapists, enabling delivery of rehab service by home visits from there.

In running of our comprehensive community care system, collaboration efforts by our hospital and institution staff and the community-based staff, and collaboration efforts between the community-based staff members are both important. For the purpose of facilitating the former, we run a monthly home-based care network meeting (including the continuous nursing care review committee). The cases discussed are all cases in which a patient was discharged from the hospital or a client left an institution to return home in the previous month or a patient or client is due to return home but has some issue(s). Their services are coordinated at the meeting so that the patient or client can received continuous and coherent care in his/her moves from hospital or institution to home. The latter cases are also handled at the weekly care officers meeting, attended by every staff member involved in and every organization concerned with home-based services including rehab professionals. This meeting was previously deemed as a practitioner level meeting under the then Aged Services Coordination Team Conference. Since introduction of Long-Term Care Insurance, the meeting is now deemed as a practitioner level meeting belonging to the Health Promotion Council, on which a multidisciplinary team of health, medical, and welfare services comprehensively assess "barriers to living." A multidisciplinary team approach is required in supporting clients' living. Comprehensive assessments and sharing direction are important. Cases of clients covered under Long-Term Care Insurance are reported to the meeting by their respective care managers, while other clients' cases are reported by town public health nurses. This meeting also plays a role as a place for new staff training as well as a place for case-based development of new services. In addition, following the introduction of Long-Term Care Insurance, the meeting has also played a role of a community care meeting of the Home-Based Long-Term Care Support Center (hub) in support of the care managers in the community. After the merger with Onomichi, those two meetings have continued to be run by Health and Welfare Center, to meet our community citizens' every needs related to the Long-Term Care Insurance Act, the Services and Supports for Persons with Disabilities Act and so forth, as well as in partnership with the Comprehensive Community Support Center.

(5) Welfare bank system and volunteers' actions

Mitsugi launched its own welfare bank system in December 1990 as a mechanism for community citizens' participation. This was a mechanism in which healthy citizens looked after the elderly with care needs such as being bedridden, and received care in return when falling ill. Their contributions were converted into points; i.e., one point for one hour, and were saved as time (of care) saved. In FY2005, the system had 2,609 assisting members, who accompanied public health nurses, nurses, home helpers, long-term care welfare workers, and other professionals in a visit for home-based care and/or service. The members took part in not only home-based care and services, but also institution-based welfare services (at EHF), area welfare services such as visiting a certain area to take part in a rehabilitation exercise program, etc., meal catering service, and other services.

Previously Mitsugi had the tonari-gumi (neighborhood group), a system of mutual help actions such as neighbors jointly organizing a funeral when a member was in bereavement. Our Welfare bank was built on this foundation and is able to enlist community citizens' participation without much resistance. Germany had the zivildienst system that allowed citizens to work for a welfare facility instead of serving in the military under conscription. The Japanese government previously discussed the volunteer issues at the Central Social

Welfare Council (Community Welfare Expert Committee), which called for options. When considering a system of coordination and collaboration by health, medical, and welfare services, or, in other words, networking for a comprehensive community care system, such a framework for community citizens to take part will be essential.

Following the merger with the City of Onomichi, our Welfare bank system faced difficulty continuing as an initiative of the former Mitsugi Town's, and had to cease operation. However, the volunteer spirit nurtured through the tradition of our Welfare bank system was inherited by our current hospice volunteers, facility volunteers, hospital volunteers, and various others engaged in volunteer activities. Notable among those are our hospice volunteers. There are about 50 registered volunteers, whose rules and registration process have been determined by the committee, which also runs training workshops and volunteer meetings. The activities include tea service, preparation and participation in seasonal events, looking after ornamental plants, flowers, and garden beds, sewing, and assistance with patients' ADL. Our hospital volunteers tackle tasks such as guiding of outpatients and improving the hospital environment.

In the view of society aging and declining number of children per family, community-based welfare is not just a concern for the local government officials and professionals, but work that needs to be tackled by the whole town. Community citizens' participation is the major key. This is why the Mitsugi precinct of Onomichi City has various healthcare and/or welfare volunteer groups, engaged in wide-ranging activities from parenting support to aged welfare actions, in the community, as well as at the hospital and other facilities. On February 25, 2008, those organizations, 30 in all, launched "Mitsugi Precinct Healthcare Welfare Volunteer Liaison Council." Incidentally, its secretariat duties are entrusted to Mitsugi General Hospital and the Mitsugi branch office of the Social Welfare Council.

In addition, a meal catering service and fureai saloon social circle have been active since before the merger, facilitated by the precinct social welfare council.

(6) Local government mergers

The town of Mitsugi merged into the City of Onomichi in March 2005, along with the town of Mikoh-jima. Then, in January 2006, Innoshima City and Setoda-cho were merged into Onomichi, heralding the birth of a new city with some 150,000 citizens. Our Health and Welfare Center became an institution of local government administration (branch), although our Health, Medical and Welfare collaboration was unaffected and has continued. In short, the mergers caused no change in Mitsugi's comprehensive community care system. Prior to the merger with Onomichi City, the Mitsugi Town Council (March, 2003) voted in favor of "continuing to maintain the comprehensive community care system after the merger" as well as issuing of "New Welfare Town Declaration." The mayor of Onomichi also understands the special natures and significance of the services provided by the current Mitsugi General Hospital, and has spoken about the need for its continuing existence on many occasions. The city – town merger did not make the current comprehensive community care system disappear. We intend to continue our efforts for building a town in which the community citizens think living here has been a good thing, even after the merger.

Chapter 6 Long-Term Care Insurance System and Comprehensive Community Care System

(1) Status after implementation of the Long-Term Care Insurance System

The Long-Term Care Insurance System was implemented in April, 2000. The fundamental goals of Long-Term Care Insurance, according to the report by the Commission on Elderly Health, are i) Societal support in long-term care of aged persons, ii) Aged persons making choices for themselves, iii) Emphasis on home-based long-term care, iv) Improved prevention and rehabilitation, v) Comprehensive, unified, and efficient service delivery, vi) Citizens' participation and utilization of private sector vitality, vii) Supports grounded on societal solidarity, and viii) Stable and efficient service/project operation and considerations to local character. These fundamental goals are the same as the philosophies of Comprehensive Community Medical and Other Care Services. The details are exactly the same as the hard & software aspects in our comprehensive community care system. Among the listed goals, Emphasis on home-based long-term care equals Mitsugi's home-based care (home visit nursing and long-term care services, home visit rehab service, and others); and improved prevention and rehabilitation equals Mitsugi's Operation Zero Bedridden. This goal concerning prevention, which is termed "Prevention of long-term care needs" in Long-Term Care Insurance, is exactly the same as our Operation Zero Bedridden, through home visit rehab service, housing alteration, effective use of devices (welfare aids), and such means. The April 2006 revision of the Long-Term Care Insurance System attempted "to switch the system into prevention focused," newly created a prevention benefit and started community support projects, aiming to advance in prevention of long-term care needs. The goal concerning comprehensive, unified, and efficient service delivery equals Mitsugi's mixed care delivery through collaboration and integration of Heath, Medical, and Welfare services. Citizens' participation and utilization of private sector vitality equals Mitsugi's community citizens' participation and focus on the regular (family) physicians.

In order for society as a whole to support long-term care of aged persons, society is required to have a user (community citizen)-centered viewpoint, to actively challenge Long-Term Care Insurance by coupling long-term care and medical care services, to deliver care services that meet the community's needs, and to put into practice health, medical, or welfare service that sees "people" (not "diseases" or "patients"). Naturally, nothing changed in Mitsugi before and after introduction of the Long-Term Care Insurance System, except for a few matters, such that now a client needs to receive a long-term care needs assessment and receives services only within the range of benefit upper limits according to his/her long-term care needs, and some changes in "cash flow."

The following section describes the situations in Mitsugi and the challenges we face.

1) Situations surrounding long-term care needs assessment

Prior to introduction of the Long-Term Care Insurance System, as of March 31, 2000, the total population of Mitsugi was 8,310 persons, including 2,353 aged persons 65 years old or older (aged population ratio of 28.3%), 399 of which had applied for assessment. In contrast, as of March 31, 2001, after the system was in full operation, the total population was 8,204 persons, including 2,401 aged persons (aged population ratio of 29.3%). Table 6 shows the status of those assessed to have long-term care needs. As seen in the table, those with the long-term care need grade 1 make up a quarter of the total number, followed by those with

support needs and then those with the long-term care grade 2. Among those, 42 persons were assessed independent as of March, 2000, and 52 persons as of March 2001. Those clients also receive our services in the interest of preventing their developing long-term care needs, as well as to support their living. Note that although we do not have the data to show the status of assessment for the Mitsugi-cho precinct only, Figure 7 shows the status of assessment for all of Onomichi City as of September 2011.

2) Status of institution-based services

Mitsugi's long-term care welfare facility for the elderly (Special Nursing Home for the Elderly) has a 100-bed capacity, providing clients a care staff ratio of 3:1 (1.67:1 in unit-based care), serviced by one physician, one rehab staff member, and one registered dietician. As of April 1, 2011, there are 97 residents, including 13 clients under the old provisions. The pattern of long-term care needs grade distribution is: zero person with support needs, one person with long-term care need grade 1, four persons with long-term care need grade 2, 20 persons with long-term care need grade 3, 25 persons with long-term care need grade 4, and 47 persons with long-term care need grade 5. The mean long-term care need grade is 4.16.

Out of the 150 beds at the long-term care welfare facility for the elderly, 50 beds are in the dementia ward. The mean long-term care need grade as of April 1, 2011 is 3.66 in the general ward and 3.61 in the dementia ward. Mean grade between the two wards is 3.64. The ratio of clients with long-term care need grade 5 is the highest at 34.2%, followed by those with long-term care need grades 4 and 3, respectively. When comparing before and after the introduction of the system, the number of residents before the introduction was 141.2 persons (daily mean resident number in FY1999), while after the introduction it was 145.4 persons (daily mean resident number in FY2011), showing a slight increase after the system introduction. The philosophy, roles, and functions of the EHF did not change with the system introduction. In terms of the services provided at the facility, the fundamental framework of service delivery was also unchanged with the system introduction.

Table 6 Status of Long-Term Care Insurance Eligibility Assessment in Mitsugi

(Persons)

	March 2000	March 2001	March 2002	March 2003	March 2004	February 2005
Total population	8,310	8,234	8,185	8,175	8,163	8,109
Population of aged 65 or older	2,353	2,401	2,419	2,462	2,457	2,456
Ratio of aged population	28.3%	29.3%	29.6%	30.1%	30.1%	30.3%

		Ineligible	Support needs	Long-term care needs 1	Long-term care needs 2	Long-term care needs 3	Long-term care needs 4	Long-term care needs 5	Total
March 2000	Persons	42	96	100	67	42	47	47	399
	%		24.1	25.1	16.8	10.5	11.8	11.8	
March 2001	Persons	52	102	111	71	52	34	56	426
	%		23.9	26.1	16.7	12.2	8.0	13.1	
March 2002	Persons	53	103	113	84	48	39	59	446
	%		23.1	25.3	18.8	10.8	8.8	13.2	
March 2003	Persons	47	94	124	93	60	49	62	482
	%		19.5	25.7	19.3	12.4	10.2	12.9	
March 2004	Persons	37	72	170	76	59	62	61	500
	%		14.4	34.0	15.2	11.8	12.4	12.2	
March 2005	Persons	36	90	183	60	56	60	60	509
	%		17.7	35.9	11.8	11.0	11.8	11.8	

* Class 2 insured included (16 in March 2000, 14 in March 2001, 13 in March 2002, 16 in March 2003, 14 in March 2004, and 14 in February 2005)

City of Onomichi (As of September 2011)

Population 146,661; Aged population 44,469 (30.3%)

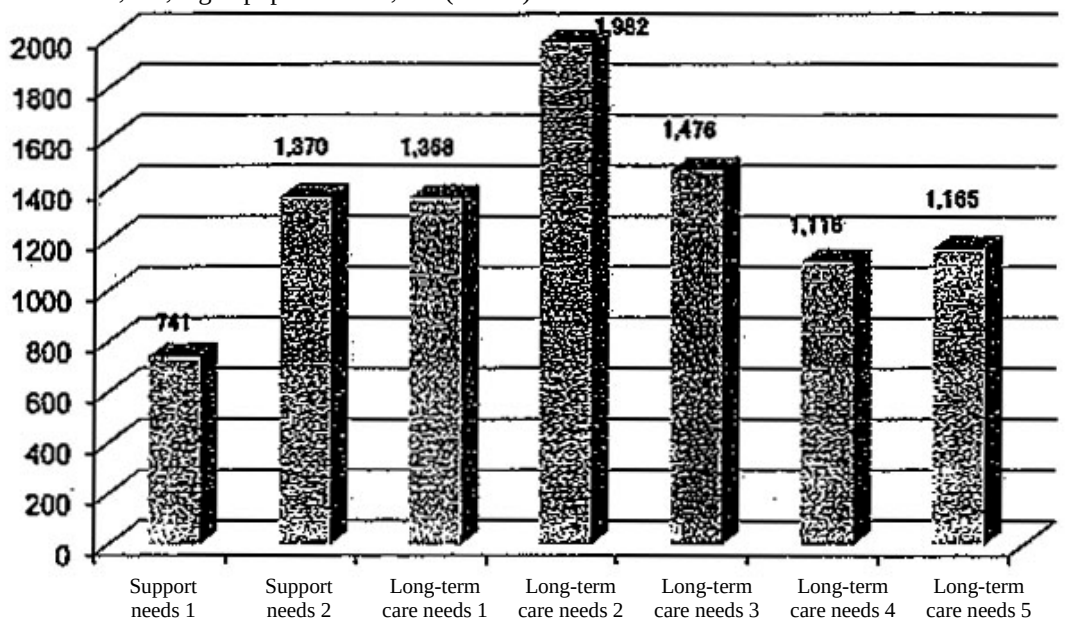


Figure 7 Status of Long-Term Care Insurance Eligibility Assessment in Onomichi

3) Status of home-based services

Our home-based services have three pillars, home visit or ambulatory services, short stay services, and technological aid services. The short stay (respite care) services used to be

somewhat hard to use due to a system-related reason, which contributed its use cases being halved in Mitsugi at one stage. Since January 2002, the home visit or ambulatory services and short stay services have been unified. No marked issues have been observed to date. Home-based care services and short stay services should continue to be skillfully coordinated. With regard to home visit nursing care and home visit long-term care services, before the system introduction we had a concern that some may decline to receive services because of the fees. Once the system was in place, we did not see such cases often. The service deliveries have been smooth and have seen an overall increase in use. Table 7 shows the status.

Table 7 Status of Home Visit Services (Mitsugi)

	FY2006		FY2007		FY2008		FY2009		FY2010		FY2011	
	Actual number	Number of visits	Actual number	Number of visits	Actual number	Number of visits	Actual number	Number of visits	Actual number	Number of visits	Actual number	Number of visits
Home visits for nursing care (Station)	185	9,021	173	9,512	207	9,507	199	9,052	196	9,584	199	9,048
Home visits for long-term care (home help)	135	11,656	112	10,691	103	9,863	111	8,476	101	8,911	109	8,605

4) Handling of "ineligible persons"

When the system was introduced, 42 applicants in Mitsugi were deemed "ineligible." As of March, 2004 and March, 2005, 37 and 36 persons, respectively, were deemed "ineligible." Mitsugi's existing Operation Zero Bedridden had delivered a range of services to relatively active healthy people in an effort to prevent them from becoming recluse. Therefore, those deemed "ineligible" have still been offered those existing services.

Relatively healthy and active elderly people, who receive rehab exercise program (type A), and the elderly with minor disability have joined to form the "Satsuki-kai" group. The people who were deemed "ineligible" were asked to join "Satsuki-kai" and attend the weekly rehab sessions held at the Health and Welfare Center. They are also suggested to participate in the "fureai saloon" activity (rehab exercise program type B), held at respective community halls, and in "ikigai (livable) day service program" run at the Day Service Center in the CWH Facilities. In addition, they can use the meal catering service and outing support service run by volunteers.

The revision of the Long-Term Care Insurance System re-categorized the aged persons eligible for long-term care needs prevention programs, which deemed the rehab exercise programs (type A) under the Health and Medical Services Act for the Aged only available for those under 65 years old, but not covered under Long-Term Care Insurance. This move made running of the program difficult. In addition, the merger with Onomichi meant that "Ikigai day service program" lost the financial provision in City's budget. Consequently, the service is now run as a hospital program. The new long-term care needs prevention programs require some actions for specific elderly (high-risk approach) as well as other actions for general elderly population (population-based approach). In response we launched our "Long-term care need prevention center (long-term care need prevention ambulatory program office)" in

October 2006 within the “Iki-iki Center.” From this center, we intend to provide ambulatory services for those with support needs 1 and 2, in order to prevent them developing long-term care needs. We also are under a contract for long-term care need prevention programs for the specified groups of the elderly, to provide unified long-term care needs prevention services to a range of client groups from those with support needs to the general elderly population. I wonder whether we should get the general elderly population to voluntarily join in our volunteer actions. We need to build up a community-wide framework to adopt the Long-Term Care Insurance System through such approaches.

5) Launch of Long-Term Care Insurance Implementation Committee

Mitsugi saw the launch of our Long-Term Care Insurance Implementation Committee in March, 2001. The purposes of the committee include providing lateral support in addition to Long-Term Care Insurance, as well as to take up community citizens’ feedback. For that purpose, the committee has a long-term care inquiry and guidance officer subcommittee. Historically the majority of long-term care givers have been female. That is why half of the committee members are female, who also act as inquiry and guidance officers, who listen to the voices of community citizens and conduct assessments of the frontline services. I believe such organizations will be needed under the future Long-Term Care Insurance System.

(2) Long-Term Care Insurance System Revision (Long-Term Care Insurance System Reform)

Six years after enactment of the Long-Term Care Insurance Act, in April, 2006 a revision to the Long-Term Care Insurance System was carried out. The following is a summary of the revision: i) Switch to prevention-focused system, ii) revision of institution benefit, iii) establishment of a new service system, iv) security and improvement of service quality, v) revision of how the burdens are carried and how the system is operated, vi) ranges of the insured and the beneficiaries, and vii) others. Following the switch to a system focused in prevention, a new benefit for prevention was created and community support projects were started, aiming to advance in prevention of long-term care needs. The revision of institution benefits, while paying some consideration to low income earners, already excluded the accommodation and food costs from insurance-covered items, as of October 2005. The provision for establishing a new service system advocated creation of community-focused services, creation of a comprehensive community support center, and improvement of in-home, home-based services. Mitsugi has already implemented everything advocated in the Long-Term Care Insurance System Revision, and our service deliveries are going smoothly.

Chapter 7 Prevention of long-term care needs and Comprehensive Community Support Center

(1) Progress of population aging and necessity of preventative actions

In response to the progressing population aging, prevention of long-term care needs is advocated. Disease prevention approach has also been changed from the secondary prevention approach (health screening based) to the primary prevention approach. Since enactment of the Health and Medical Services Act for the Aged in 1982, several acts concerning health and prevention, including the Community Health Act and the Health Promotion Act, have been

enacted and revised. The aged population ratio in Japan is about 20%, while it has reached 30% in Mitsugi, which is the image of what Japan will look like in 25 years time.

Because Mitsugi used to have a considerable large number of the "made bedridden,", we came up with the ideas of how to prevent this from escalating, and decided to implement home visit nursing and rehab services as one "tactic" for the purpose. Then, in addition, the hospital collaborated with the local government to create a seamless system of living support ranging from health promotion (Health) to clinical care, long-term care, and welfare services. Those were also "home delivery" of nursing care and rehab services and the first step in "socializing of healthcare." We developed "Healthy Mitsugi 21" in 2001, set 98 goals in eleven scopes, and are striving to attain those in the next ten years. We were also designated the Comprehensive Community Support Center for Northern Onomichi in April 2006, and have tackled the task of preventing long-term care needs.

Since the introduction of the Long-Term Care Insurance System in Japan, the number of aged persons with a minor disability identified as in need for support or long-term care needs grade 1 is increasing. Some of those people do not necessarily need a service under Long-Term Care Insurance. Previously cities and municipalities implemented the measures for health promotion (primary prevention) and prevention of long-term care needs in accordance with the Health and Medical Services Act for the Aged and the philosophy of National Health Insurance. Those needs have been rapidly rising since the introduction of Long-Term Care Insurance. However, I wonder if we need to go back to where we started, in our efforts towards implementation of the April, 2006 revision of the system. Mitsugi developed "Healthy Mitsugi 21" in 2001, with an intention of prolonging healthy longevity by adding long-term care needs prevention and infectious disease prevention measures to the primary prevention actions. We would like to take the approach farther towards successful running of "NHI Iki-iki Center."

(2) What is long-term care needs prevention?

Long-term care needs prevention consists of the measures taken in order to prevent relatively active and healthy elderly from falling into a state of needing long-term care, in addition to the primary prevention measures (prevention of lifestyle diseases). It also involves prevention of the made-bedridden, incontinence, bed sores, and dementia, as well as prevention of the disuse syndrome, so that the persons with minor long-term care needs can be prevented from falling into a more severe state. To achieve those goals, it is essential to use rehab services effectively. And, if successful, seamless delivery of rehab services through a timeline can be expected, from the acute stage to the recovery and maintenance stage. Consequently, each community needs to establish a framework for community-based rehab services, as well as collaboration between institution-based care and home-based care, preparation and improvement of recuperation (living) environment, and collaboration by health, medical, welfare, and living services. The Japanese Government stipulated the ten rules towards zero bedridden in 1990. Rehab and other care services for independence need to be put into practice, aiming for the normalization of clients' lives.

(3) Long-term care needs prevention and model project (trial: research project for the future)

The Ministry of Health, Labour and Welfare's Research Projects for the Future were conducted on ten tasks in the fiscal years 2003 – 2004 for the purpose of collecting evidence

that would provide the rationale of the Long-Term Care System revision. One of the tasks, prevention of long-term care needs, was the challenge that Mitsugi tackled in our model project (trial), by offering services to the elderly with minor long-term care needs, in exercise capacity improvement (muscular training), nutrition improvement (malnutrition prevention), and oral function improvement (oral care).

Through the three services, muscular training, malnutrition prevention, and oral care, the outcomes related to each of the three services indicated that each had an effect in preventing an elderly client with minor long-term care needs from developing more needs. The examination before offering the services found a less than desirable state of the eligible clients' oral state. Following oral care teaching, an improvement was observed in more than 80% of the clients. There were only a few clients that needed the malnutrition prevention service. Nutrition teaching was provided also to those with high HbAlc level and/or cholesterol level, resulting in better dietary habits. In muscular training, despite the mean age of 80 years old, the clients, who were almost all categorized as the older elderly, experienced effects in improved ambulation, flexibility, and balance. However, those indicators tended to decline following termination of the service. Consideration needs to be given to how the clients should be engaged after completing the service. A questionnaire survey to the participating clients found that the majority "enjoyed" the experience. Other feedback on the service included, "My body feels better," "I was able to have fun while exercising," and "I was able to meet friends." It seemed that, in addition to muscular training, having fun exercising with friends is the crucial point in continuing the service. The participating clients felt changes in their fitness level and movement within one to two months, as well as psychological changes such as feeling positive. We would like to see those changes add confidence in their everyday living, which in turn would improve their activity level, and prevent decline in their living functions. It will be important to support the elderly with minor long-term care needs through our long-term care needs prevention services and programs, so that they can regain confidence in daily living and spend everyday life actively.

(4) Comprehensive Community Support Center

Following the April 2006 revision of the Long-Term Care Insurance System, a new program started based at our Comprehensive Community Support Center (Figure 8). Onomichi City designated six comprehensive community support centers within the city. Our hospital was contracted to operate as the Comprehensive Community Support Center that covers Northern Onomichi (former Mitsugi Township and a part of Onomichi City). The home-based long-term care support center hub previously at the Health and Welfare Center was transferred to our Comprehensive Community Support Center. The community-based home-based long-term care support center at Mitsugi-no-Sono was to become a general inquiry center for the elderly for providing inquiry and guidance services. A comprehensive community support center is expected to function as a central institution that support comprehensive community care services, staffed with public health nurses and such professionals, social welfare workers, and a chief care manager (provisional title) for such services as i) general inquiry support and advocacy of clients' rights, ii) comprehensive and continuous care management support, and iii) care management with a focus on prevention of long-term care needs. Whether or not comprehensive community care in its true sense comes into reality in future Japan will depend on whether or not those comprehensive community support centers sufficiently function true to their original purpose of establishment. Saying this is not an overstatement. Mitsugi is the birthplace of comprehensive community care. We believe that we need to share the knowhow of our comprehensive community care we have accumulated in the past 30 years with

communities all over Japan. Comprehensive community support centers are not mere channels of inquiries and consultation. Their close collaboration with the active practitioners in home-based care services would be desirable, before providing long-term care needs prevention actions and living support services become possible. In the same sense, collaboration with home visit nursing care stations will also become necessary. Inquiries made by the elderly living at home would be received at the community's comprehensive community support center, then, if necessary, the attending physician of the case refers to a home visit nursing station, which then delivers nursing care services.

Onomichi has six comprehensive community support centers. (As stated before, operation of one of those, Northern Onomichi Comprehensive Community Support Center, is contracted to Mitsugi General Hospital.) Those were/are two centers under direct operation (including the Northern), one center under the medical association, one center under a social welfare council, and two centers under welfare foundations. The northern region includes the former Mitsugi Township and three other Onomichi northern suburban townships (Kinosho-cho, Misato-cho, and Harada-cho), and has a population size of 20,003 as of February 29, 2012, including 6,048 aged persons. In addition to the public health nurses, social welfare workers and chief long-term care support officers in full-time permanent employment, there are registered dieticians, dental hygienists, and rehab service workers working part time and/or on term contracts. At the end of March 2006, Onomichi Medical Association terminated their contract, and the Central Region center also came under direct operation in FY2007. Because of this, we were requested by the City Council Office to send a public health nurse and a social welfare worker from the hospital. The social welfare foundation Onomichi Satsuki-kai took over the contract for the Mukoh-jima Region in FY2009, which brought the total number of comprehensive community support centers within the City to 6. This move meant that the social welfare worker sent from our hospital was no longer needed. Then, in FY2010, the public health nurse was also no longer needed.

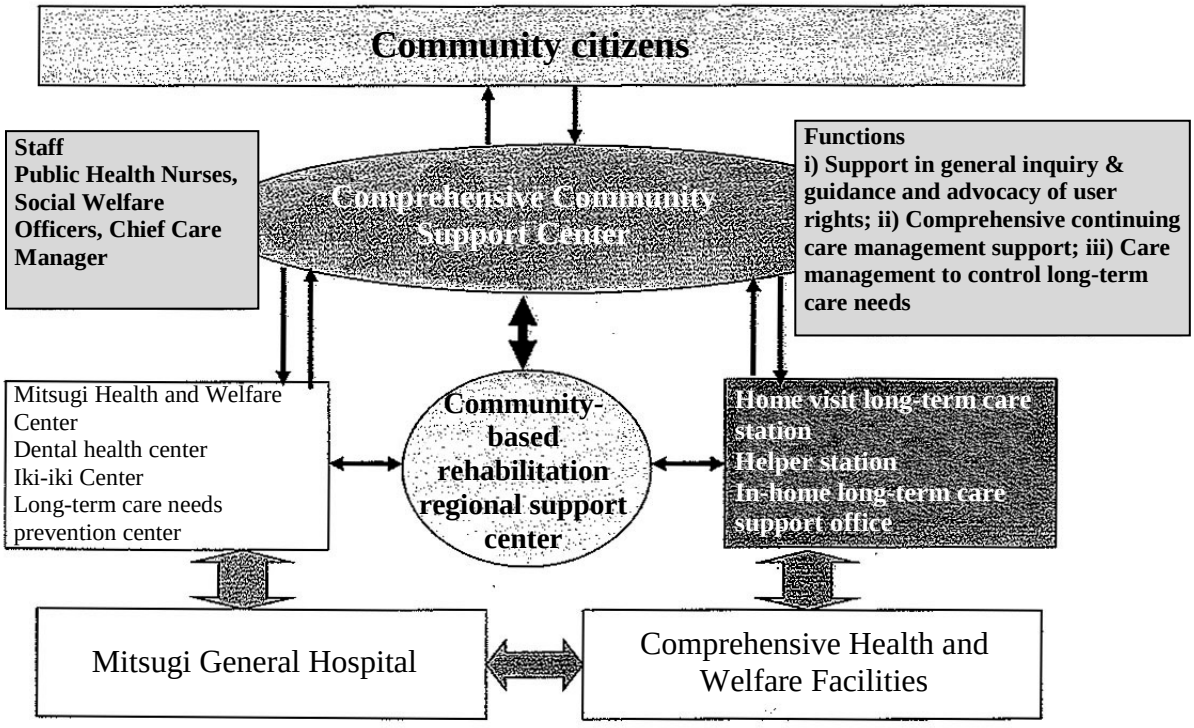


Figure 8 Comprehensive Community Support Center (Mitsugi-cho, Onomichi)

(5) Long-term care needs prevention programs in Mitsugi-cho, Onomichi City

A MHLW model project (trial), Research Project for the Future, was conducted in Mitsugi in the fiscal years 2003 – 2004, in which the clients were offered muscular training service (using four types of domestically manufactured machines), nutrition improvement services including prevention of malnutrition, and oral care services in a unified manner. In addition, an NHI health promotion facility, "Iki-iki Center," opened in April 2004 offering long-term care needs prevention programs to general community citizens. Iki-iki Center also provided muscular training service (Power Rehab) to improve muscular strength, flexibility, and balance ability, dietary self-check, and nutrition consultation and oral care.

One exercise-based long-term care needs prevention program offered at our care house was a fall prevention class (Iki-iki class), which was run as a Japan National Health Insurance Clinics and Hospitals Association (NHICHA) program in FY2004 and an own program at care house in FY2005.Furthermore, a fall prevention class for the members of the Elderly Club (Hatsuratsu-kai) was run as an NHICHA program in FY2003 and an own program of the Elderly Club in FY2004 – 2005. Meanwhile, exercise promotion facilitation leader training seminars have been run since FY2001 in an effort to train volunteers, who are then asked to take part in our long-term care needs prevention programs. Our targeted "recluse" elderly services include rehabilitation exercises (types A & B) and Ikigai Day Service program. We also run annual health checks for all aged persons 90 years old or older.

We ran a long-term care needs prevention health screening in FY2005. Those 19 clients in former Mitsugi Town identified in the screening were offered some of the long-term care needs prevention programs/services by Onomichi City, the merger partner. One of our existing community-based long-term care needs prevention programs was a health inquiry and guidance sessions run by public health nurses and registered dieticians at neighborhood meeting houses (long-term care needs prevention service starting with fitness assessment). This was run under the provision of the Health and Medical Services Act for the Aged. One of our health education services has been the "Health Waku-waku 21" (health promotion panel) held in evenings at neighborhood meeting houses, following a program prepared by our staff on a topic requested by the community, in an effort to facilitate and raise awareness of primary prevention and long-term care needs prevention.

Dental care related projects included the FY2003 study project on oral function rehab activities for better long-term care needs prevention, the FY2004 support framework improvement project on oral function improvement for better long-term care needs prevention, and the FY2005 oral function rehab advancement project to study the status of those with a disorder of oral dietary intake and improve their independence in daily living.

The Town of Mitsugi was merged into Onomichi City in March 2005 along with Town of Mukoh-jima. (Following another merger involving one other city and one other town in January 2006), Mitsugi has become a precinct of the new Onomichi City, born as results of mergers of two cities and three towns. Those mergers have been forcing us to revise our long-term care needs prevention programs. At this moment, our fundamental policy is to continue the actions we took in the former Mitsugi Town era, some of which are now implemented as a part of the hospital's services.

Identification of eligible clients (specified or targeted elderly persons) and maintenance of their list will follow the existing methodology. However, some streamlining will be necessary to align our list with Onomichi's system. In FY2005, when the basic health screening for aged persons was conducted as provided by the Health and Medical Services Act for the Aged, our public health nurses went to the venues and conducted a long-term care needs prevention health screening, consisting of health history taking and a three-item fitness assessment (grip, FR, and 5 m walking time). However, the majority of those identified were already deemed to be in need of long-term care. With regard to basic health screening, the former Mitsugi Town had General Mitsugi hospital conduct it. However, under the Onomichi City government, the task is contracted to local medical associations, and therefore introduction of our own criteria will be difficult. That is why we now use the Japanese government's basic checklist in identifying those eligible. Since October 2006, we have implemented our ambulatory long-term care needs prevention services for specified elderly at the long-term care needs prevention center annexed to "Iki-iki Center." As of April 2010, we had seven eligible clients on this program.

The new benefit for prevention became available at the existing day service and day care service centers in FY2006. In October 2006, the aforementioned long-term care needs prevention center (ambulatory long-term care needs prevention service office) opened for newly eligible clients. As of March 31, 2012, we had 21 eligible clients for this benefit.

In addition, we conducted a continuing assessment and analysis project, a model project (trial) under a national scheme between April 1, 2006 and March 31, 2012. The purpose of this project was assessment of the effects of long-term care needs prevention services and the states of service users' improvement and interviews involving clients' forgetfulness test and interview survey on his/her state of meals and nutrition, family composition, other basic checklist items, SF-8, status of social support, and so forth.

Furthermore, between April 2009 and March 2012, we were involved in the project to support investigation and analyses of the state of long-term care needs prevention, a model project (trial) under a national scheme to strengthen the system side of long-term care needs prevention programs. This was conducted by sending out and retrieving the "Basic Check List" for long-term care needs prevention to all the elderly 65 years old or older in the geographic area for which our Comprehensive Community Support Center was responsible. If we could not retrieve the form, we would follow it up with home visit or telephone inquiry, etc. The purpose of this action was to improve the clients' participation rate in the specified actions for the elderly.

(6) "Iki-iki Center" and future service direction

"Iki-iki Center" opened in April 2004 as a fee-charging NHI health promotion facility, for long-term care needs prevention in general community citizens. After the merger with Onomichi, the center's services have been provided as a part of Mitsugi General Hospital businesses. Within this center, an ambulatory long-term care needs prevention program for clients deemed to have support needs opened in October 2006, and has operated as the long-term care needs prevention center. As the center has secured services of experts in respective scopes, it can offer high-quality services. The center uses an exercise assessment chart from "A Practical Manual for Motor Function Improvement" developed by "Hiroshima Prefecture Long-Term Care Needs Prevention Training Consultation Center" as requested by the

prefectural government. For assessment of nutrition state and oral care, the center has developed its own assessment charts, based on the requirements presented by the Japanese government. These assessment charts are intended to be used for pre- and post-program evaluation purposes. The center has permanent full-time staff consisting of one social welfare officer, one long-term care welfare officer, and one registered nurse. In addition, one registered dietician and one dental hygienist are employed as part-time staff, while physical therapist(s) and occupational therapist(s) from the hospital are employed on a term contract basis. The outcomes of evaluation carried out by the center are reported monthly to the Comprehensive Community Support Center in writing.

"Iki-iki Center" is open for general use between 15:00 and 20:30 from Tuesday to Friday and between 13:00 and 20:30 on Saturday and Sunday. (Closed only on Mondays.) The number of users were: 7,915 in 2004, 10,706 in 2005, 11,240 in 2006, 11,189 in 2007, 13,203 in 2008, 13,450 in 2009, 11,928 in 2010, and 12,713 in 2011 (total user number in a fiscal year). Following the merger, the fees remained at ¥50/one visit or ¥500/year for NHI insured persons, ¥100/one visit or ¥3,000/year for Onomichi citizens, and at ¥300/one visit or ¥10,000/ year for those outside the city. However, the fees were revised in April 2008 to ¥200/one visit or ¥6,000/year for the citizens and ¥300/one visit or ¥10,000/year for those outside the city.

Between 10:00 and 14:00 on weekdays, the center operates to provide ambulatory long-term care needs prevention services. As of March 31, 2012, there are 41 clients using these services.

The center also provides the secondary prevention service "Sukoyaka-san Program" (on a contract from Onomichi City), between 10:00 and 12:00 on Mondays and Thursdays. As of March 31, 2012, there are 21 clients using these services.

In Mitsugi Town, Onomichi City, the clients can use those services as a person eligible for the prevention benefit, as persons eligible for the secondary prevention service, or as general community citizens. It is possible to run multiple services/programs, and to run on particular days of the week or time slots, within the same facility.

Chapter 8 New MD Clinical Training Scheme (Clinical internship)

The New MD Clinical Training Scheme has been in operation since April 2004. The philosophy of this clinical internship program is stated, "to nurture his/her character as a medical practitioner, and, regardless of his/her future specialty, to facilitate his/her acquisition of the basic abilities of clinical practice for primary care (such as attitude, skills, and knowledge) so that he/she can take appropriate actions to handle the diseases and pathology often encountered in everyday clinical practice, while being aware of the needs of society from medicine and medical care."

This scheme lists the scope of practice titled, "Community health and healthcare" (revised in 2011 as "Community care") as one of the compulsory areas of internship. This "Community health and healthcare" is exactly what our Comprehensive Community Medical and Other Care Services are about. We believe that our future medical practitioners must understand this and acquire the pertinent know-hows. That was the purpose of our hospital having been designated a clinical internship hospital, and started providing the service in FY2005. In cooperation with Hiroshima University, Kawasaki Medical University, and JA Onomichi

General Hospitals, we accepted 17 interns in 2005 & 2006, 9 in 2007, 15 in 2008, 14 in 2009, 15 in 2010, and 15 in 2011 (fiscal years). We offer one-month, two-month, and three-month courses, each of which follows an appropriate program developed by us.

The "community health and healthcare" program run at our hospital has the following objectives: the MD will i) understand the concept of Comprehensive Community Medical and Other Care Services and acquire the abilities to practice, ii) acquire the holistic approach, iii) learn the knowledge and skills so that he/she can appropriately manage everyday clinical care, iv) understand the role of a medical practitioner in institution-based and home-based care, v) understand the Long-Term Care Insurance System and the significance of collaboration by medical, welfare, and long-term care services, vi) experience practice of preventative medicine in the community and understand the role of a medical practitioner in it, vii) experience a rural practice and understand its role, and viii) understand activities and roles of a public health center/office.

Our hospital, CWH Facilities, and the Health and Welfare Center facilitate the internship program along with the supervising physicians and leadership. At the hospital, the interns are placed in the palliative care ward, the recovery stage rehab ward, and recuperation ward(s). At the Health and Welfare Center, they participate in health screening and Health Waku-waku 21. The interns in a two- or three-month course experience a week-long placement at public health center and one or two days of rural practice placement. One intern MD was trained for a management-oriented course in FY2007.

Our hospital and rehab center were accredited as comprehensive community medical and other care service facilities by NHICHA and the Japan Municipal Hospital Association. In addition to 15 hospital physicians, 50+ allied health professional staff members acquired accreditation as comprehensive community medical and other care service practitioners.

Conclusion

Future Vision

We have described Mitsugi's comprehensive community care system in this article; in particular, Operation Zero Bedridden (prevention of long-term care needs) and collaboration by health, medical, and welfare services (networking) were given focus. The completion of our group home and palliative care ward in FY2001 concluded our preparation on the hardware side of the system in Mitsugi. Following this milestone, refurbishment and extension work converted 20 beds in SNH and 50 beds in EHF into unit-based care facilities. We will continue this move towards unit-based care, for better individualized care service delivery including consideration towards a "satellite" approach to facilities.

Living long in a bedridden state cannot be described as "longevity with human dignity." Mitsugi has worked for some 30 plus years to improve quality of life in the community. Starting with preparation and improvement of home-based care service delivery to prevent the elderly from becoming bedridden, we have challenged a range of trials, such as establishment of our comprehensive community care system through collaboration by health, medical and welfare services. As a result, the number of bedridden elderly has declined and the elderly and their families can now feel secure in their recuperation. Our efforts for better QoL are gradually bearing fruits.

When viewing over the national situation, we believe that respective communities must hurry in establishing such comprehensive community care systems. Another matter of urgency is networking of local government administrators, those involved in health, medical, and welfare services, and citizens of the community. Existing inter-hospital/clinic collaboration was mere joining of “dots” for forming a “line.” We will need to develop this into the collaboration of “surface”, by getting local government and community citizens to join in. The Japanese government has also taken an action by developing “Healthy Japan 21” to advocate primary prevention and longer healthy longevity. These ideas are exactly the same as the concepts we have worked hard for in the last 30 plus years at Mitsugi. Mitsugi also developed “Healthy Mitsugi 21” in FY2001, with the intention of prolonging healthy longevity through primary prevention and long-term care needs prevention.

Mitsugi’s Health and Welfare Plan for Aged Persons and Long-Term Care Insurance Business Plan include actions for the 21st Century, such as preparation and improvement of facilities, home-based care (welfare services), and so forth. Especially, there is a focus on collaboration between institution-based care and home-based care. By getting all facilities to have a home-based care support function and enhancing community-wide care framework by getting the community citizens to take part, we endeavor to build a town where we feel secure about our post-retirement lives. These plans also aim for zero bedridden, by facilitating better collaboration between institution-based and home-based care services. Mitsugi’s home-based services and institution-based services are both operating smoothly as planned. Currently, the Japanese government’s fundamental goal is to prolong “healthy longevity,” and, to advance the Health Frontier Strategy through the two approaches: “Advancing the actions against lifestyle diseases” and “Prevention of long-term care needs.” Although Mitsugi became a part of Onomichi through the March 2005 merger, Mitsugi’s Health and Welfare Plan for Aged Persons and Long-Term Care Insurance Business Plan include actions for the 21st Century such as improvement of facilities and home-based care (welfare). By placing a focus on collaboration between institution-based care and home-based care, getting all facilities to have a home-based care support function, and enhancing community-wide care framework (network forming “surfaces”) by getting the community citizens to take part, we strive “to build a healthy welfare town,” where citizens feel secure about their post-retirement lives.

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