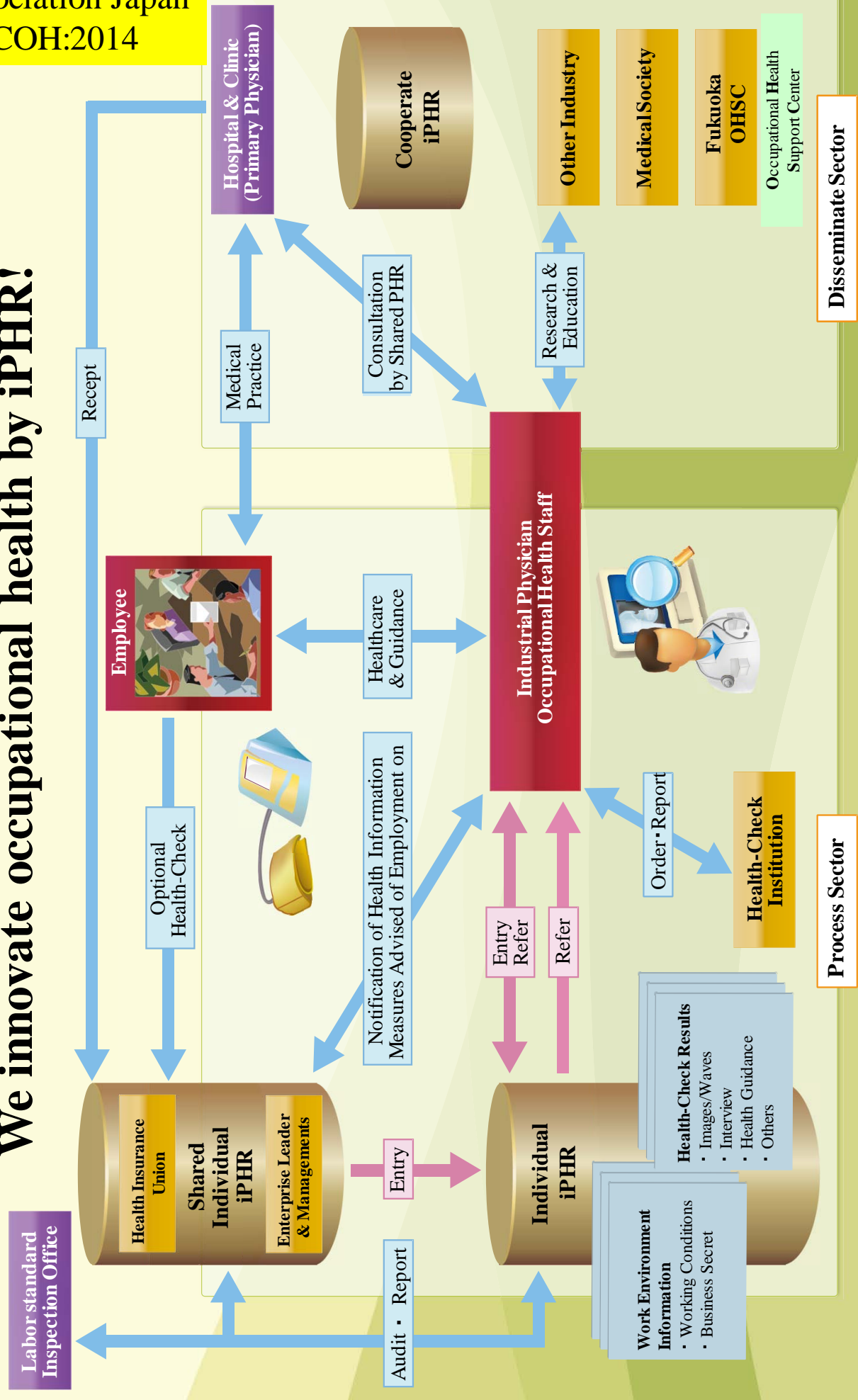


We innovate occupational health by iPHR!



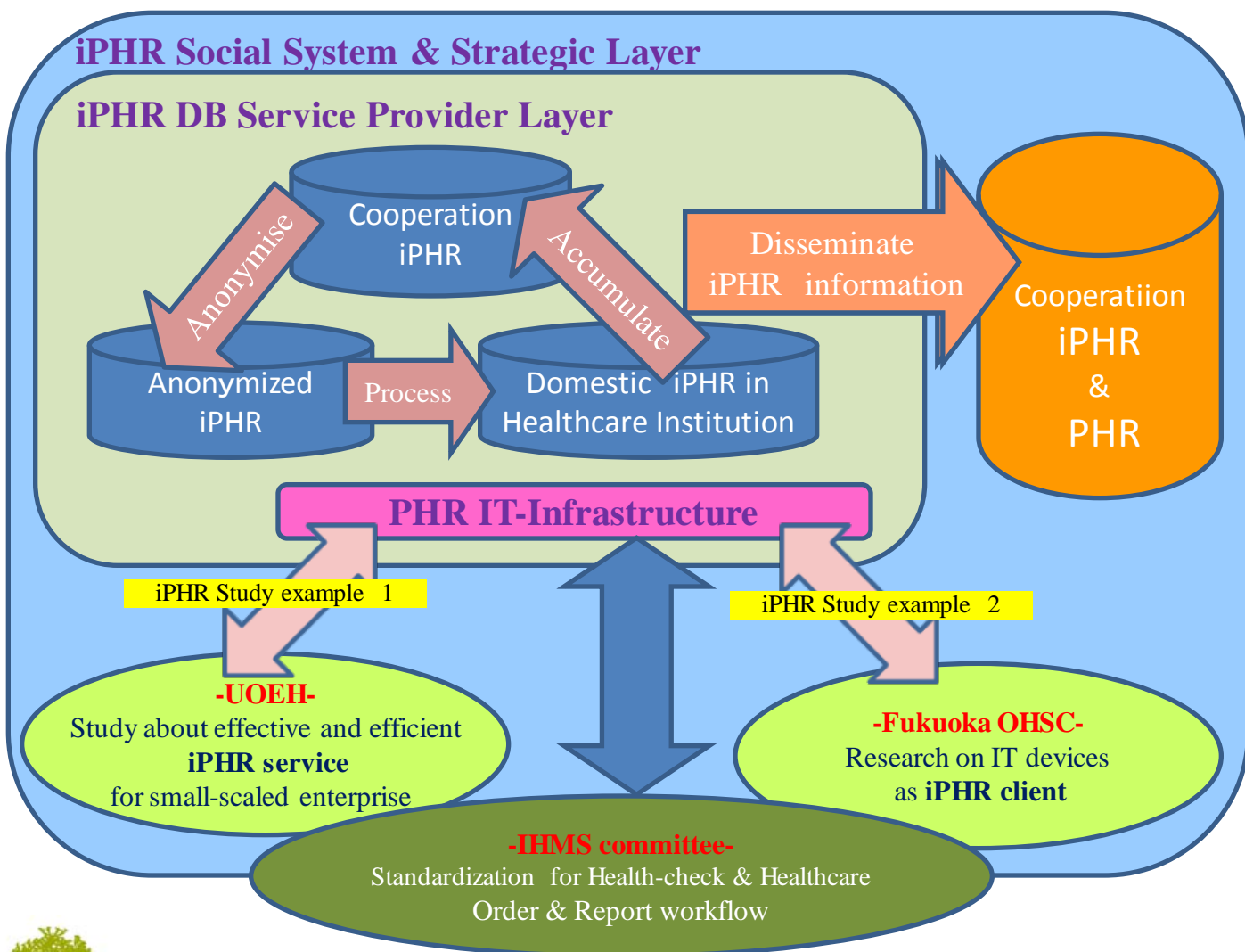
PHR association Japan(PHRJ)

Contribute to prevail infrastructure for industrial Personal Health Record(iPHR)

Contact us: E-mail:info@phrj.org

<http://www.phrj.org/>

1.Application to Occupational Health fields



UOEH : University of Occupational and Environment Health Japan
OHSC : Occupational Health Support Center

[Business purpose]

PHR Association Japan aim to process & disseminate PHR for healthcare and health promotion all over the world.

[Ongoing project]

Currently, we discuss technical & social mechanism to achieve iPHR. iPHR contained medical image & wave information is reviewing in IHMS committee with Japan IHE association(IHE-J).

[Comment]

1. Terms in **OECD privacy guideline 2013**.

"collect" means "get privacy information in various way"

"process" means "utilize privacy information in the institutions which collected privacy information"

"disseminate" means "provide privacy information widely for the other institutions"

2. **IHMS committee**: joined recently in PHR Association Japan(IHMS : Integrating Digital Health Management System)

3. **IHE Japan: Integrating the Healthcare Enterprise** for cooperation with medical care, sponsored by HIMSS and RSNA

2. iPHR Definition in occupational Health fields(Draft)

- 1) iPHR **collects** occupational health information from the very person, contained digital images and wave patterns by the health check organization, the occupational health scene, hospital and nursing care
- 2) PHR collecting organization can **process** PHR as individual PHR.
- 3) PHR managed different organizations and **disseminate** individual PHR by **getting the very person's agreement** can cooperates each PHR and finally lifetime PHR be produced.
- 4) PHR has the mechanism for generates **anonymised** DB to facilitate utilization for other member, or worldwide
- 5) The knowledge consist of **anonymised** DB, gotten in single occupational health scene, is utilized for the other occupational health scene which has similar business contents and work environment.
- 6) The ideal way of occupational Health in our country is specified in **the Industrial Safety and Health Act**.

Reference: **HIMSS Electronic Personal Health Record(PHR) Definition (Fact Sheet)**

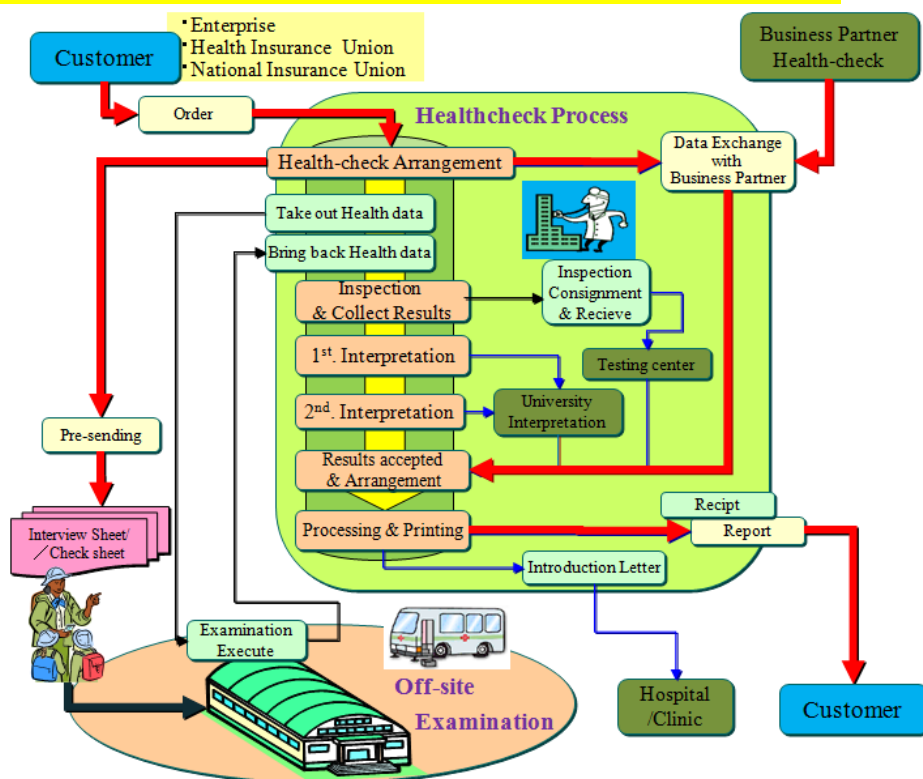
HIMSS defines an electronic Personal Health Record (ePHR) as follows:
An ePHR

1. Is a universally accessible, layperson comprehensible lifelong tool for managing health information, promoting health maintenance and assisting with chronic disease management via an interactive, common data set of electronic health information and e-health tools.
2. Should be owned, managed and shared by the individual or legal proxy.
3. Must be secure to protect the privacy and confidentiality of the health information it contains.
4. Is not a legal record unless so defined and, therefore, subject to various legal limitations.

Full text is in below

http://www.himss.org/files/HIMSSorg/content/files/ePHRdefinition_factsheet_prem.pdf

3. General Workflow of Off-site Health-check



[PHRJ Group Members]

a. Medical field member

Japan Medical Network Association NPO
<http://www.ehr.or.jp>

KYOTO INDUSTRIAL HEALTH ASSOCIATION
<http://www.kyotokojohokenkai.jp>

JUNPUKAI Health Maintenance Center
<http://www.center.junpukai.or.jp>

Medical Network Consortium

Development & provision of the patient medical record access system, with secure to the necessary scattered medical information recorded across the region.

INDUSTRIAL HEALTH ASSOCIATION

1. Business concerning national health insurance-based examination and treatment, various health check-up, detailed health examination, and health guidance.
2. Business concerning occupational safety and health consultation.

Health checkup Institute

1. Health checkup and guidance
2. Health Consultation

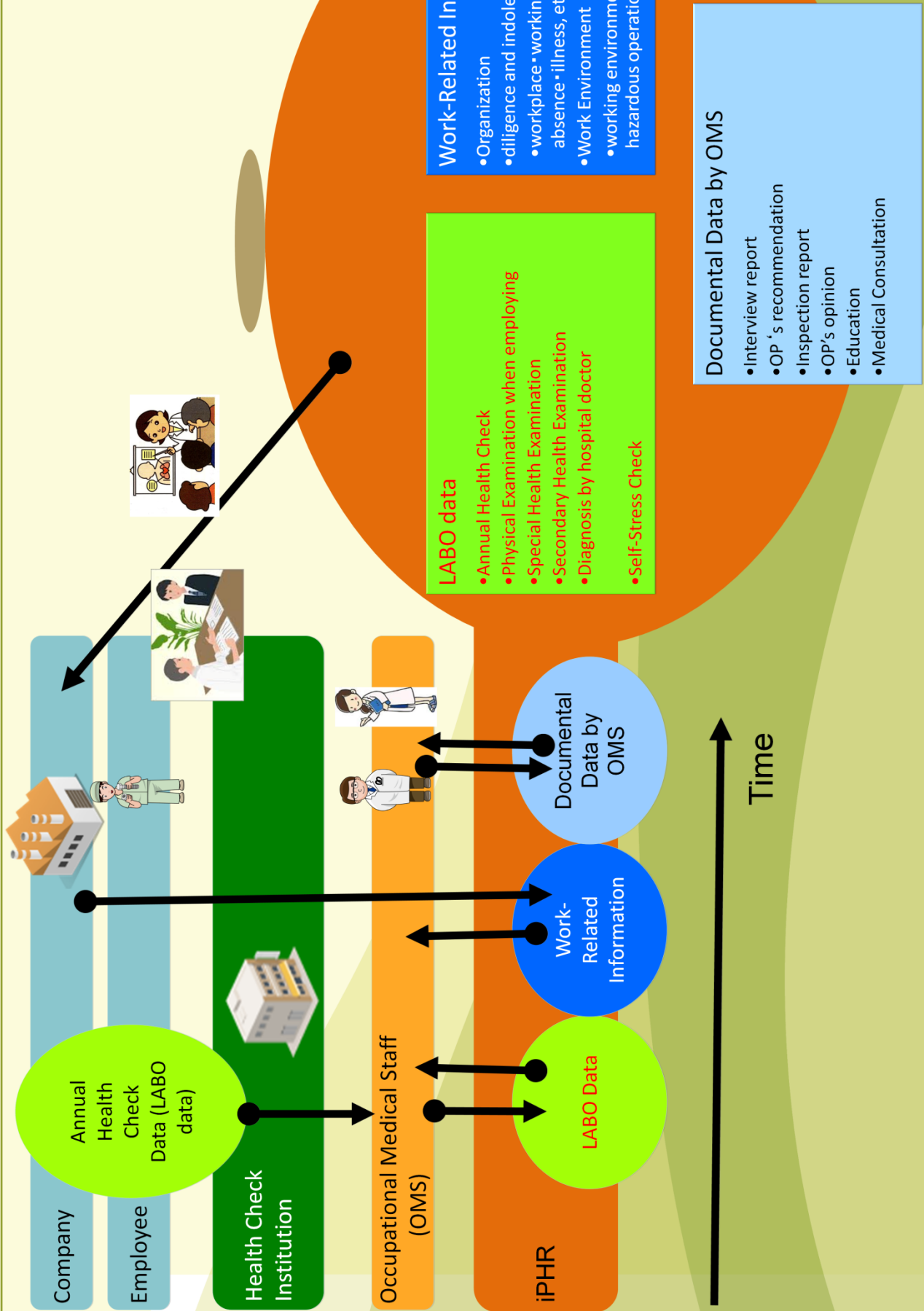
b. Business member

Array Corporation <https://www.array.co.jp/>
MPO Co., Ltd. <http://www.m-p-o.co.jp/>
KonicaMinolta, Inc. <http://www.konicaminolta.com/>
Liberworks Co., Ltd. <http://www.liberworks.co.jp/>
Fukuda Denshi Co., Ltd. <http://www.fukuda.co.jp/english/>

iPHR Study example 1

-UOEH-
Study about effective and efficient
iPHR service for small-
scaled enterprise

The flow and structure of iPHR



Introduction of the Fukuoka OHSC -its Role, Function, and Research with IT devices as an iPHR client -

Susumu Oda¹, Takefumi Ueno²

1: Fukuoka Occupational Health Support Center

2: Clinical Research Department, Hizen Psychiatric Center

In Japan, 47 prefectural occupational health promotion centers, 365 regional occupational health centers, and 47 support centers for mental health strategies were established in 1993, 1997, and 2008, respectively. The purpose of these centers was to provide support for workers, occupational health staff, and business owners by providing mostly workshops and by systematically responding to consultations with them. As of April 1, 2014, the three centers have been reconstructed as one Prefectural Occupational Health Support Center (OHSC). The role, function, and research conducted on IT devices as an iPHR client of the new Fukuoka OHSC will be discussed.

1. The role of Fukuoka OHSC

1) Over-the-counter health consultation & on-site consultation

Our professional staff members offer expertise in finding solutions for various problems concerning occupational health. Over-the-counter consultation, as well as consultation via telephone, facsimile or the Internet is available.

In addition, our staff members visit work sites to provide professional advice and introduce specific methods for more effective workplace patrol.

2) Information provision

Books and video materials in the field of occupational health are available for reading and viewing.

3) Training

Practical and professional training for occupational health is conducted.

4) Public Relations activities and awareness building

PR activities such as management seminars are conducted for employers in an effort to deepen their understanding of the significance of occupational health at work sites.

5) Research

Research is conducted to further promote occupational health activities. Research results are effectively reflected and utilized in occupational health activities such as various seminars and training programs.

2. Advantages of Fukuoka OHSC in providing services

As a university of occupational and environmental health was established in 1900,

- a sufficient number of specialists for occupational health are available,
- graduates from the university have been working as full-time and part-time occupational health physicians and physicians of medical examination institutions,
- more than ten graduates have opened their own offices as industrial health consultants. They are cooperating with our activities as lecturers and/or consultants in our center.

3. Research conducted on IT devices as an iPHR

(industrial health version of Personal Health Record) client

- 1) Reasons we are interested in iPHR (**Fig. 1**)
- 2) Activities of health promotion would be more effective by utilizing iPHR.
- 3) Future plans for a network (**Fig. 2**) among occupational health physicians, psychiatric physicians, and specialists for return to work in patients with mental disorders.
- 4) Consultations from distant areas have been tried using iPad and Facetime.
- 5) A trial of live broadcast and video recording to prepare a DVD has been conducted.
- 6) Participation in the research of integrating healthcare management systems by the Japan PHR association. (**Fig. 4**)

4. Present difficulties of OHSC

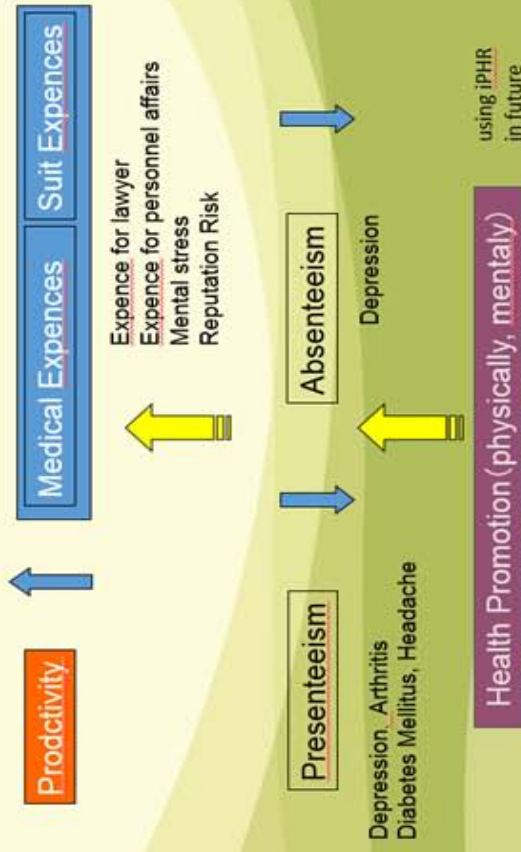
- 1) OHSC is run by high cost characteristics of government affiliated agencies.
- 2) The directors of OHSC work part time and full-time personnel are moved every 2~3 years.
- 3) Making our services well-known, esp. among small- and medium-sized enterprises, is difficult as the number of enterprises is more than 260,000 in Fukuoka Prefecture.
- 4) Annual budget and manpower of our center are both restricted, and door-to-door service and frequent support to one enterprise are limited.

5. Present challenges of OHSC

- 1) Collaboration with relevant organizations: Seminars and training programs were jointly hosted with the Prefectural Medical Association and/or Fukuoka Labour Bureau to conserve each group's budget. As implementation of medical examinations in the community and occupational field share the same problems, such as mental health impairment, services between these fields should be provided cooperatively.
- 2) To familiarize the services of our centers, the Internet, TV, newspapers, and periodicals are available. The Internet can be used successfully because of its wide user base, rapid improvements (easy updating of information, use of video, etc.), and reasonable cost. Moreover, the introduction of distance education and teleconferencing via the Internet can be a useful tool for occupational health physicians, especially those in rural areas, to receive the services provided by our centers.
- 3) The method of evaluation of our centers, such as qualitative indicators, should be considered to improve the quality of the services.
- 4) It is expected that iPHR can be referred to at any time, all over the world. Using an integrated Healthcare Management System in accordance with Integrated Healthcare Enterprises (IHE) and Information Security Management Systems (ISMS), individual health data will be accumulated as iPHR (**Fig.3**). Health data may be utilized for not only workers' health management but also research as big data to increase productivity, reduction of lawsuit risk, and medical expenses. (**Fig.1**)

The reasons why health promotion in occupational fields?

Fig 1



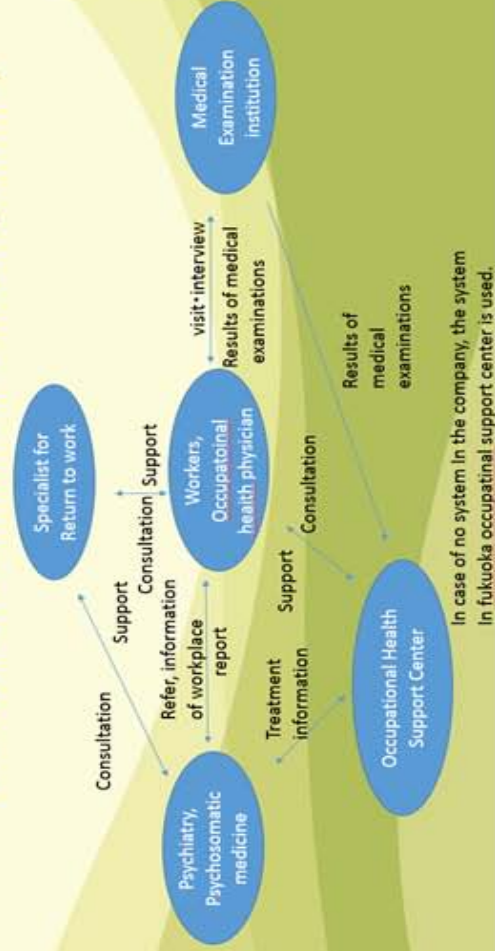
iPHR could be utilized effectively by workers as well as occupational health staff to keep and promote workers health

Fig 3



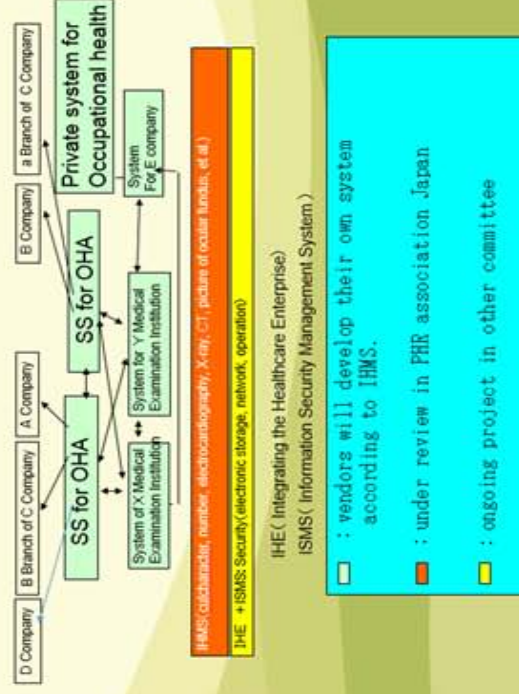
Network System among Occupational Health Physician, Psychiatric Physician and Specialist for Return to Work in the Workers with Mental Disorders(in future)

Fig 2



Support System for Occupational Health Activities(SS for OHA)

Fig 4



Contribute to prevail cooperate infrastructure for industrial personal health record (iPHR)

1. Research the field of occupational health workflow, data format and data contents, mainly by IHE techniques.
2. Recommend the technical mechanism for effective collect and process of not only judgement information about employment and disease, but also the objective information, like image, waveform and numerical information.
3. Exploit **iPHR** as integrated lifetime healthcare technical infrastructure, contained work environment information.
4. Establish social system, in concern to information security and privacy protection, for not only individual institution ' s iPHR to but cooperation .

[Business purpose & Ongoing project]

PHR Association Japan aim to process & disseminate PHR for world humanity health care and health promotion.

Currently, we consider technical & social mechanism to achieve iPHR with Japan IHE association, which contains medical image & wave information.

[Group Member]

1. Medical field member
 - Japan Medical Network Association NPO
 - Kyotokojohokenkai Co., Ltd.
 - JUNPUKAI Co., Ltd.
2. General business member
 - Array Corporation
 - MPO Co., Ltd.
 - Konica Minolta, Inc.
 - Liberworks Co., Ltd.
 - Fukuda Denshi Co., Ltd.