SUBJECT: Implementation of the Software Certification in compliance to National Health Data Reporting

I. RATIONALE

The Department of Health (DOH) is mandated to be the over-all technical authority on health that provides national policy direction and develop national plans, technical standards and guidelines on health. It is also a regulator of all health services and products, and provider of special or tertiary health care services and of technical assistance to other health providers especially to local government units. The implementation of Kalusugan Pangkalahatan or Universal Health Care is directed towards ensuring the achievement of the health system goals of better health outcomes, sustained health financing and responsive health system.

Accurate, reliable and timely information are needed to support the strategic thrusts on financial risk protection, improved access to quality hospitals and health care facilities, and attainment of health-related Millennium Development Goals. The DOH has continuously used policies, standards, regulations, good governance, service deliveries, health human resources, and health information as strategic instruments to achieve Kalusugan Pangkahalatan. To achieve standardization and optimization on the use of scarce resources, the DOH has developed several standard information systems, such as Integrated Hospital Operations and Management Information System (iHOMIS) for hospitals, Clinic Information System (ClinicSys) for rural health units/health centers and barangay health stations, and national systems like Online National Electronic Injury Surveillance System, Electronic Field Health Services Information System, among others. These information systems were developed by the Information Management Service of the DOH, the office with the mandate of formulating plans, policies, programs and standards for management information systems and information technology development, development and management of information systems, information technology infrastructure and services including corporate data and telecommunications services, health information resources, library services and document tracking and archiving services, and advises the Secretary of Health on matters pertaining to information management services. This is in cooperation with the policy and standard setting centers or DOH offices such as the National Epidemiology Center, National Center for Disease Prevention and Control and the National Center for Health Facilities Development.

The use of iHOMIS and ClinicSys has been making the service delivery functions of health facilities more efficient and proved that required national health data can be extracted and electronically submitted to the DOH, Philhealth and other stakeholders. Thus, these information systems serve as models of electronic extraction and submission of required national health data. These models can therefore serve as yardsticks to achieve interoperability where systems are capable of communicating and exchanging data/information with common or standard definitions. It is a fact that various health facilities may have already existing systems.
or plans to implement similar, comparable, or compatible systems that primarily address their needs as service delivery providers. However, it is also imperative to serve national and regional interests that administrative level of service providers, planners and policy makers get an over-all picture of the country’s state of health and needs. Thus, it is critical that quality data/information must be provided in a timely way for better health care. Information technology has a lot to do on this. Standards must be agreed upon and used to achieve interoperability, and therefore use technological resources optimally.

To promote interoperability and facilitate the submission of quality data to the national health data reporting system that comes from various systems that may be used by health facilities, a mandatory software certification shall be implemented by the DOH. The DOH software certification aims to promote awareness and observance to health data standards, enhance data quality, and conformity to national health data reporting system. Health facilities, e.g. hospitals and rural health units, can use the iHOMIS, ClinicSys, other DOH information systems, and DOH certified software for implementation.

II. DECLARATION OF POLICIES

1. Strengthening health systems and improving efficiency and effectiveness in health service delivery need both operational and summary data. The former supports routine activities at the health provider level, whereas the latter to manage national health resources, develop policies, assess performance, and determine major investments, technical support and programs to achieve national health goals. Thus, information need to be made available when needed.

2. As one nation, all health facilities need to comply with the national health data reporting systems and standards to gain a true picture of the Philippines Health System, e.g. health status of the Filipino people, health issues, concerns and/problems that can be addressed by the health sector, and others. Different health systems shall comply with the following national health data reporting systems of the DOH:

   a. Health Emergency Management Service Integrated Information System (includes Surveillance in Post Extreme Emergencies and Disasters)
   b. Integrated Chronic Non-communicable Disease Registry System (includes Blindness, Cancer, COPD, Coronary Artery Diseases, Diabetes, Mental Health, Renal Diseases, Stroke, Online National Electronic Injury Surveillance System, Philippine Organ Donor and Recipient Registry System, Philippine Registry for Persons with Disabilities, among others)
   e. Regulation Systems (includes Adverse Drug Online Reporting System, Integrated Drug Test Operations and Management Information System, Online Hospital Statistical Reporting, Online Yellow Prescription Pad System, among others)

3. The Health Enterprise Architecture has provided the holistic view of the country’s health processes/systems, information, information technology assets, and interoperability standards. It serves as guide in the development of health information systems to meet the country’s requirements and support improvements in the health systems; helps describe the state of the
health information system in the country; as well as provide the roadmap for continuing growth.

4. Information and communication technologies (ICTs) can provide the means to join different systems and facilitate sharing of data/information. Various health facilities have already adopted the use of ICTs in their operations. With the use of technologies and standards for interoperability, the national health data reporting system to the Department of Health allows data aggregation from various data sources or different health facilities’ information systems. Health facilities, according to their capacities, may implement their own systems as long as these comply with the national health data reporting standards.

5. This Order shall complement the following issuances, resolutions or provisions:

   a. Philippine Digital Strategy 2011-2016, a national strategy with the purpose of harnessing the potential and power of information and communications technologies to support the attainment of the government’s agenda and objectives contained in the social contract with the Filipino people and the Philippines Development Plan 2011-2016, and respond to the global trends towards a digital economy and knowledge societies and ensure that the country’s economy and society is prepared to compete in this digital economy and take advantage of its opportunities.

   b. E-gov Masterplan 2014-2016 that provides the framework to strengthen and integrate existing information systems that are vital to the delivery of services and information.

   c. Integrated Government Philippines (iGovPhil) which aims to set-up a government-shared network that will facilitate deployment and integration of mission-critical ICT projects especially those that deliver common government services.


   e. International Commitments: The Philippines is a signatory to a number of global agreements such as the Millennium Development Goals, the Geneva Declaration on the World Summit on Information Society and the 58th World Health Assembly. Of which, the Philippines has pledged to meet specific commitments, highlights of which are the following:

      World Summit on Information Society wherein the Philippines is a signatory:

      o Facilitate access to the world’s medical knowledge and locally-relevant content resources for strengthening public health research and prevention programs.

      o Alert, monitor and control the spread of communicable diseases, through the improvement of common information systems.

      o Promote the development of international standards for the exchange of health data, taking due account of privacy concerns.

      o Encourage the adoption of ICTs to improve and extend health care and health information systems to remote and underserved areas and vulnerable populations.

      o Strengthen and expand ICT-based initiatives for providing medical and humanitarian assistance in disasters and emergencies

      o Promote collaborative efforts of governments, planners, health professional and other agencies along with the participation of international organizations for creating a reliable, timely, high quality and affordable health care and health information systems and for promoting continuous medical training, education and research through the use of ICT’s, while respecting and protecting citizens’ right to privacy.
58th World Health Assembly

- Draw up a long-term strategic plan for developing and implementing eHealth services in the various areas of health sectors including health administration which includes an appropriate legal framework and infrastructure and encourage public and private partnership.
- Develop the infrastructure for ICTs for health as deemed appropriate to promote equitable, affordable and universal access.
- Build on closer collaboration with private and non-profit sectors in ICTs.
- Reach communities, including vulnerable groups, with eHealth services appropriate to their needs.
- Mobilize multi-sectoral collaboration for determining evidence-based eHealth standards and norms and to share the knowledge of cost-effective models, thus ensuring quality, safety and ethical standards and respect for the principles of confidentiality of information, privacy, equity and equality.
- Establish national centres and networks of excellence for eHealth best practice, policy coordination, and technical support for health-care delivery, service improvement, information to citizens, capacity building, and surveillance.
- Establish and implement national electronic public-health information systems and to improve, by means of information, the capacity for surveillance of, and rapid response to, disease and public-health emergencies.

66th World Health Assembly – Urges member states to:

- Consider, as appropriate, options to collaborate with relevant stakeholders, including national authorities, relevant ministries, health care providers, and academic institutions, in order to draw up a road map for implementation of eHealth and health data standards at national and subnational levels.
- Consider developing, as appropriate, policies and legislative mechanisms linked to an overall national eHealth strategy, in order to ensure compliance in the adoption of eHealth and health data standards by the public and private sectors, as appropriate, and the donor community, as well as to ensure the privacy of personal clinical data.
- Consider ways for ministries of health and public health authorities to work with their national representatives on the ICANN Governmental Advisory Committee in order to coordinate national positions towards the delegation, governance and operation of health-related global top-level domain names in all languages, including “health”, in the interest of public health.

III. OBJECTIVES

This Order provides the policy and the guidelines for the implementation of a Software Certification for National Health Data Reporting towards improving the timeliness of submission and quality of health data for efficient and effective health care service delivery. Detailed objectives are to:

1. Set direction on software certification to conform to national health data reporting requirements.
2. Set procedures and guidelines in the implementation of software certification.
3. Implement procedure and guidelines as stipulated by the Administrative Order.

IV. SCOPE OF APPLICATION

This Order applies to all government/public and private health facilities like barangay health stations, rural health units, clinics, hospitals, and other ancillary service providers who have or intend to develop software for use in their facilities; and software developers who have developed or will be developing software for health facilities, and interested in being certified
by the Department of Health on Software Certification in compliance to National Health Data Reporting.

V. DEFINITION OF TERMS

For purposes of this Order, the following terms are defined as follows:

<table>
<thead>
<tr>
<th>No.</th>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>1</td>
<td>Certification</td>
<td>Status achieved as to conformity to national health data reporting.</td>
</tr>
<tr>
<td>2</td>
<td>Certifying Body (CB)</td>
<td>A group or team whose membership includes the Department of Health, Philippine Health Insurance Corporation and industry experts who are authorized to conduct testing and certification in accordance to the criteria adopted by the DOH.</td>
</tr>
<tr>
<td>3</td>
<td>Clinic Information System (ClinicSys)</td>
<td>An integrated information system designed to manage the services and management of a clinic like rural health units and barangay health stations. It records, stores and organizes medical information about a patient, generates summarized health data and reports as needed for various public health programs and other national health data reporting.</td>
</tr>
<tr>
<td>4</td>
<td>Department of Health (DOH)</td>
<td>The executive department of the Philippine government responsible for ensuring access to basic public health services by all Filipinos through the provision of quality health care and the regulation of all health services and products.</td>
</tr>
<tr>
<td>5</td>
<td>Department of Health Software Certification (DSC)</td>
<td>A process where software is subjected for testing in conformity to the national health data reporting standards.</td>
</tr>
<tr>
<td>6</td>
<td>Department of Science and Technology (DOST)</td>
<td>A government agency mandated to provide central direction, leadership and coordination of scientific and technological efforts and ensure that the results there from are geared and utilized in areas of maximum economic and social benefits for the people.</td>
</tr>
<tr>
<td>7</td>
<td>Electronic Health Record for Health Information Exchange (EHR-HIE)</td>
<td>A system that allows health care professionals and patients to appropriately and securely access and share a patient’s vital medical information electronically.</td>
</tr>
<tr>
<td>8</td>
<td>Health Facilities</td>
<td>Refers to government/public and private barangay health stations, rural health units, private clinics, government/private hospitals, and other ancillary service providers.</td>
</tr>
<tr>
<td>9</td>
<td>Information and Communication Technology (ICT)</td>
<td>Refers to technology used to handle telecommunications, network-based control and monitoring functions, emails, broadcast media, business intelligence, audiovisual processing and transmission systems, among others.</td>
</tr>
<tr>
<td>10</td>
<td>Information Management Service (IMS)</td>
<td>Central ICT arm of the DOH.</td>
</tr>
<tr>
<td>11</td>
<td>Information Technology (IT)</td>
<td>Application of computers and telecommunications equipment to store, retrieve, transmit and manipulate data.</td>
</tr>
<tr>
<td>12</td>
<td>Integrated Hospital Operations and Management Information System (IHomis)</td>
<td>An integrated hospital information system designed to manage the admission, emergency room, outpatient department, billing, cashiering, medical records, medical social service, wards, laboratory, pharmacy, radiology, dietary, revenue centers, and other ancillary services of a hospital. It is compliant with the Philhealth’s e-Claims system requirements and national health data reporting</td>
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</tbody>
</table>
VI. IMPLEMENTING GUIDELINES

A. CERTIFYING BODY

The Secretary of Health shall create a Certifying Body consisting of the Department of Health, Philippine Health Insurance Corporation and industry experts who are authorized to conduct testing and certification in accordance to the criteria adopted by the DOH.

1. The CB shall be chaired by a senior officer from the DOH, and the Information Management Service –DOH shall act as the Secretariat.
2. The CB shall be composed of members called as certifiers, carefully selected based on impartiality and objectivity.
3. The CB shall be tasked to:
   i. Develop standards and/or criteria as sound basis for software certification.
   ii. Design and implement processes, technical specifications and infrastructure, testing tools, and innovative solutions to make efficient the software certification.
   iii. Formulate and implement policies and procedures on processing of complaints and appeals.
   iv. Develop the Manual of Operations and other necessary manuals or documents.
   v. Issue the DOH Software Certificate as evidence of conformity.
   vi. Publish certification standards and requirements, downloadable forms, list of certified software, and other issuances.
4. Officers and members of the CB shall have a term of two (2) years, after which the Secretary of Health can renew or get new/additional members.
5. Honorarium to be paid to non-DOH members or industry experts shall be based on Department of Budget and Management - National Budget Circular No. 2007-510, dated May 8, 2007 and/or other applicable government rules and regulations.

B. CERTIFICATION STANDARDS

1. Software Certification is mandatory, as being in conformity with the national health data reporting systems of the DOH.
2. The National Health Data Dictionary of the DOH shall serve as the standard reference for common data definitions/meanings or semantics, syntax, formats, structures, data contents, and codes.
3. Data sets for software certification shall include the requirements of Philhealth and other offices under the Department of Health to achieve data harmonization and process optimization. National data sets for certification are as follows:

<table>
<thead>
<tr>
<th>Data Sets Certification No.</th>
<th>National Health Data Reporting</th>
<th>Legal Basis</th>
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<tbody>
<tr>
<td>DSC-2013-01</td>
<td>Adverse Drug Reaction</td>
<td>Department Order 2012-0121 – Implementing Procedures and Guidelines for Adverse Drug Online Reporting System</td>
</tr>
<tr>
<td>DSC-2013-03</td>
<td>CNCD - Cancer</td>
<td>DOH AO 2013</td>
</tr>
<tr>
<td>DSC-2013-04</td>
<td>CNCD - COPD</td>
<td>DOH AO 2013</td>
</tr>
<tr>
<td>DSC-2013-05</td>
<td>CNCD - Coronary Artery Diseases</td>
<td>DOH AO 2013</td>
</tr>
<tr>
<td>DSC-2013-06</td>
<td>CNCD - Diabetes</td>
<td>DOH AO 2013</td>
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<tr>
<td>DSC-2013-07</td>
<td>CNCD - Mental Health</td>
<td>DOH AO 2013</td>
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<tr>
<td>DSC-2013-08</td>
<td>CNCD - Stroke</td>
<td>DOH AO 2013</td>
</tr>
<tr>
<td>DSC-2013-11</td>
<td>Field Health Services Programs</td>
<td>DOH AO # 2011-0010 Implementing Procedures and Guidelines in Reporting Field Health Services Data to the DOH Central Office</td>
</tr>
<tr>
<td>DSC-2013-12</td>
<td>Hospital Statistics</td>
<td>DOH AO No. 2011-0020, Section V. Guidelines, A. Streamlining of Licensure and Accreditation of Hospitals, Specific Guidelines, f. Reports, states that “an annual updated consolidated hospital statistical reports shall be prepared by DOH-CO/CHD in accordance with the format posted in at DOH website”</td>
</tr>
<tr>
<td>Document</td>
<td>Title</td>
<td>Reference</td>
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<tr>
<td>DSC-2013-13</td>
<td>Injury (Firecracker and Non-firecracker)</td>
<td>DOH AO 2013</td>
</tr>
<tr>
<td>DSC-2013-16</td>
<td>Philhealth Electronic Claims</td>
<td>PhilHealth Circular No.14 and Office Order No. 69 which broadly aims to streamline key processes such as eligibility check, claims submission, verification and payment in order to serve both members and partner providers.</td>
</tr>
<tr>
<td>DSC-2013-17</td>
<td>Primary Care Benefit</td>
<td>PhilHealth Circular No. 010 s. 2012 re: Implementing guidelines of Universal Health Care Primary Care Benefits Package for Transition Period Cy 2012-2013</td>
</tr>
<tr>
<td>DSC-2013-18</td>
<td>National Stock Inventory</td>
<td>Department Memorandum 2013-0044 – Submission of Inventory Levels of Family Planning Commodities to the National Online Stock Inventory Reporting System</td>
</tr>
<tr>
<td>DSC-2013-19</td>
<td>Violence Against Women and Children</td>
<td>DOH AO No. 1-B, s. 1997 established a Women and Children Protection Unit in All DOH Hospitals.</td>
</tr>
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</table>

4. New or updates on data sets for software certification shall be published accordingly.

5. Each data sets shall have its own technical specifications and data dictionary that details the correct (1) file format, (2) data contents, (3) data structure, (4) use of standard codes and/or data, (5) validations or rules, and (6) compliance to data security and confidentiality, among others.

6. Software Conformity Testing shall specifically focus on the results of data extraction and electronic uploading of data to the DOH designated storage. Other attributes of the software like security and confidentiality at the health facility level, development process, functional and technical designs are not the subject of the software conformity testing.

7. One certificate shall be issued for each Data Set Certification No. that passed the required testing.

8. The DOH ClinicSys and iHOMIS are the DOH standard systems and shall serve as models for testing prior to actual execution of the software certification.

C. CERTIFICATION PROCESS

Processes or procedures for software certification are as follows:

1. Application for Software Certification
   i. Software developers shall submit to the CB their Letter of Intent expressing
interest for certification. Said letter shall be addressed to the Chairman of the Certifying Body, Information Management Service, Department of Health, Central Office, or email to swcertify@co.doh.gov.ph.

ii The CB shall provide information, checklists, materials, manuals, and other necessary documents for software certification. This will enable software developers to gain a thorough understanding of the software certification process and its requirements.

iii The CB shall schedule the date and time of online software conformity testing.

2 Software Conformity Testing

i The CB shall conduct tests to confirm if the software conforms to the DOH specified requirements on national health data reporting.

ii Online interactions shall be needed between the software developer or technical representative, and CB during the conduct of testing.

iii Series of tests shall be conducted to confirm conformity to required standards.

c Issuance of the Results of DOH Software Conformity Testing

i The CB shall issue the DOH software certificate to software developers whose software passed the software conformity testing.

ii For software that did not pass the conformity testing, the concerned software developer shall be duly notified, and can re-apply after six (6) months from date of conformity testing.

iii Software that passed the software conformity testing shall be published via the DOH portal and other designated sites.

D. OPEN-SOURCE SOFTWARE

Open-source software is a computer software with its source code made available and with a license in which the copyright holder provides the rights to study, change, and distribute the software at no cost to anyone and for any purpose. As such, certified software using open-source shall be made available for downloading by the software developer and has link to the DOH official designated website.

E. VALIDITY AND TERMINATION OF THE SOFTWARE CERTIFICATE

1. The validity of the software certificate is three (3) years. If there are changes or updates in the national health data reporting, as deemed necessary, re-certification shall be required to maintain the certificate.

2. Software developers shall be notified in writing of the changes or updates, and schedules for re-certification.

3. The software certificate remains effective during the validity of certification unless terminated by the software developer or the DOH.

F. SUSPENSION

The software certificate shall be suspended or terminated if the software does not conform to the requirements during implementation of the national health data reporting.

G. PUBLICATION

The list of certified software shall be published quarterly to provide the health facilities with a list they can choose from. All certified software shall be posted at the DOH website www.doh.gov.ph upon issuance of its certificate.

1http://en.wikipedia.org/wiki/Open-source_software
H. WARRANTY AND GUARANTEE

The software certificate only guarantees that the software passed the conformity testing on national health data reporting. It does not include the quality attributes of the software on security, confidentiality, development process, features and functionalities as specifically required by the users. The DOH is not held liable to security and confidentiality breaches and risks to patient safety resulting from the use of the certified software.

VII. OPERATIONAL BUDGET

Funds, infrastructure and resources to implement this Order on Software Certification shall come from the Office of the Secretary, and shall be managed by the Information Management Service.

VIII. REPEALING CLAUSE

Provisions from previous issuances that are inconsistent or contrary to the provisions of this Order are hereby rescinded and modified accordingly.

IX. SEPARABILITY

If any provision of this Order is declared invalid, the other provisions not affected thereby shall remain valid and subsisting.

X. EFFECTIVITY

This Order shall take effect fifteen (15) days after its approval and publication in a newspaper of general circulation.

ENRIQUE T. ONA, MD, FPCS, FACS
Secretary of Health

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<thead>
<tr>
<th>Office</th>
<th>IMS</th>
<th>HPDPB</th>
<th>HEA</th>
<th>OSEC</th>
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<tbody>
<tr>
<td>Initial</td>
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