

Dolphin Projectの歴史と主要論文

1995 MML (Medical Markup Language) 開発スタート

(異なる電子カルテ間で医療情報を交換するための日本に適した規格の開発)

1996 MML 1.0 (SGML)

1997 連携医療 (EHR) のコンセプト (吉原) [文献 8]

1999 MML 2.0 (XML) [文献 7, 6]

2001 Dolphin Project スタート (経済産業省の連携医療開発プロジェクト)

2002 MML 3.0 [文献 5, 3] (米国HL7規格へのハーモナイズ)

地域データセンター (Dolphin Data Center) [文献 4]

はにわネット (宮崎), ひご・メド (熊本)

2003 HOT プロジェクト (東京都医師会: Dolphinの仕組みを使用)

2006 まいこネット (京都府: Dolphinの仕組みを使用)

Super Dolphin稼働 (日本レベルでのEHR相互接続) [文献 2]

2007 まいこネットサービス開始 (6月京大病院がデータ提供開始)

2008 携帯電話向けサービス開始 (10月)

2010 京都府立医大がまいこネットに接続

2011 Global Dolphin 稼働 (国際レベルでのEHR相互接続: 中国浙江大学と) [文献 1]

【重要な論文】

- 1) JING-SONG LI, TIAN-SHU ZHOU, JIAN CHU, KENJI ARAKI and HIROYUKI YOSHIHARA: Design and Development of an International Clinical Data Exchange System: The International Layer Function of the Dolphin Project, Journal of the American Medical Informatics Association : 2011 [[Full-Text](#)][[PubMed](#)]
- 2) Tadamasu Takemura, Kenji Araki, Kenji Arita, Toshiaki Suzuki, Kazuya Okamoto, Naoto Kume, Tomohiro Kuroda, Akira Takada and Hiroyuki Yoshihara: Development of Fundamental Infrastructure for Nationwide EHR in Japan, Journal of Medical Systems: 2011 [[Full-Text](#)][[PubMed](#)]
- 3) Jinqiu Guo, Akira Takada, Tie Niu, Miao He, Koji Tanaka, Junzo Sato, Muneou Suzuki, Kiwamu Takahashi, Hiroyuki Daimon, Toshiaki Suzuki, Yusei Nakashima, Kenji Araki and Hiroyuki Yoshihara: Enhancement of CLAIM (CLinical Accounting InforMation) for a Localized Chinese Version, Journal of Medical Systems; 29(5): 463-471, 2005 [[full-Text](#)]
- 4) Akira Takada, Jinqiu Guo, Koji Tanaka, Junzo Sato, Muneou Suzuki, Takatoshi Suenaga, Ken Kikuchi, Kenji Araki and Hiroyuki Yoshihara: Dolphin Project - Cooperative Regional Clinical System Centered on Clinical Information Center, Journal of Medical Systems; 29(4): 391-400, 2005 [[full-Text](#)]
- 5) Jinqiu Guo, Akira Takada, Koji Tanaka, Junzo Sato, Muneou Suzuki, Toshiaki Suzuki, Yusei Nakashima, Kenji Araki, Hiroyuki Yoshihara: The development of MML (Medical Markup Language) version 3.0 as a medical document exchange format for HL7 messages, Journal of Medical Systems; 28(6): 523-533, 2004 [[full-Text](#)]
- 6) Jinqiu Guo, Kenji Araki, Koji Tanaka, Junzo Sato, Muneou Suzuki, Akira Takada, Toshiaki Suzuki, Yusei Nakashima and Hiroyuki Yoshihara: The Latest MML (Medical Markup Language) Version 2.3—XML-Based Standard for Medical Data Exchange/Storage, Journal of Medical Systems; 27(4): 357-366, 2003 [[full-Text](#)]
- 7) Araki K, Ohashi K, Yamazaki S, Hirose Y, Yamashita Y, Yamamoto R, Minagawa K, Sakamoto N and Yoshihara H: Medical markup language (MML) for XML-based hospital information interchange., Journal of Medical Systems; 24(3): 195-211, 2000 [[full-Text](#)] [[PubMed](#)]
- 8) Hiroyuki Yoshihara, kazushi Minagawa and Hisaatsu Tanaka: The concept of Global Medical History Database (GMHD) and Its prototype, Japan journal of Medical Informatics; 17(3): 237-240, 1997 [[full-Text](#)]

【関連論文】

吉原博幸: [世界と日本におけるEHRの現状と問題点](#) 2010 (Web上の解説)

吉原博幸: ドルフィン・プロジェクトの現状と将来[[日本語](#)][[英語](#)] 2008 (Web上の解説)

吉原博幸: ドルフィンプロジェクト：地域医療連携システムの現状と今後; Heart View; 13(4): 38-45, 2009 [[full-text](#)]

吉原博幸: 地域連携医療への電子カルテの応用—地域サイトを結んだ日本レベルの連携医療, 日本医師会雑誌; 135(9): 1989-1992, 2006.12東京 [[full-Text](#)]

Jinqiu Guo, Akira Takada, Tie Niu, Miao He, Koji Tanaka, Junzo Sato, Muneou Suzuki, Toshiaki Suzuki, Yusei Nakashima, Kenji Araki and Hiroyuki Yoshihara: Enhancement of MML Medical Data Exchange Standard for a Localized Chinese Version, Journal of Medical Informatics; 29(5): 555-567, 2005 [[full-Text](#)]

Jinqiu Guo, Akira Takada, Koji Tanaka, Junzo Sato, Muneou Suzuki, Kiwamu Takahashi, Hiroyuki Daimon, Toshiaki Suzuki, Yusei Nakashima, Kenji Araki and Hiroyuki Yoshihara: CLAIM (CLinical Accounting InforMation)---an XML-based data exchange standard for connecting electronic medical record system and patient accounting system. , Journal of Medical Systems; 29(4): 413-423, 2005 [[full-Text](#)]

Koji Tanaka, Junzo Sato, Jinqiu Guo, Akira Takada and Hiroyuki Yoshihara: A Simulation Model of Hospital Management Based on Cost Accounting Analysis According to Disease, Journal of Medical Systems; 28(6): 689-711, 2004 [[full-Text](#)]

Koji Tanaka, Junzo Sato, Jinqiu Guo, Akira Takada and Hiroyuki Yoshihara: Cost Accounting by Diagnosis in a Japanese University Hospital, Journal of Medical Systems; 28(5): 437-446, 2004 [[full-Text](#)]

Hiroyuki Yoshihara: Development of the electronic health record in Japan, International Journal of Medical Informatics; 49(1): 53-58, 1998 [[full-Text](#)] [[PubMed](#)]

Hiroyuki Yoshihara, Kazushi Minagawa and Hisaatsu Tanaka: The concept of Global Medical History Database (GMHD) and Its prototype, TEPER Europe'97 - Toward An Electronic Health Record Europe '97 Conference on the Creation of a Electronic Health Record - ; : 290-293, 1997London, UK [[full-Text](#)]