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| Project Scope Statement  2015 Version  Release 1 |
|  |
| HL7 Mobile Framework for Healthcare Adoption of Short-Message Technologies (mFHAST) |
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| **Point of Contact Name and Email:**  **Nathan Botts (nathanbotts@westat.com)**  **Co-Chairs of Mobile Health Work Group:** [**http://www.hl7.org/Special/committees/mobile/leadership.cfm**](http://www.hl7.org/Special/committees/mobile/leadership.cfm) |
| **Publication Date:** April, 2015 |
|  |
| **URL to download document:**  <http://wiki.hl7.org/index.php?title=MHWG_Projects_mFHAST> |
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| **For prior versions of this document refer to:**  [**http://www.hl7.org/Special/committees/mobile/index.cfm**](http://www.hl7.org/Special/committees/mobile/index.cfm) |

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| The objective of this document is to communicate the type of activities a group is undertaking to achieve specific objectives or to produce specific work products. It’s intended for projects to produce standards or Implementation Guides as well as infrastructure projects. |

1. Project Name and ID

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| **Mobile Framework for Healthcare Adoption of Short-Message Technologies (mFHAST)** | Project ID: |
| |  |  | | --- | --- | |  | TSC Notification Informative/DSTU to Normative Date : | | |
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1. Sponsoring Group(s) / Project Team

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| --- | --- |
| Primary Sponsor/Work Group (**1 Mandatory**) | Mobile Health Workgroup |
| Co-sponsor Work Group(s) |  |
| Co-Sponsor Group Approval Date |  |
| Indicate the level of involvement that the co-sponsor will have for this project:   |  |  |  | | --- | --- | --- | |  | Request formal content review prior to ballot | | |  | Request periodic project updates. Specify period: |  | | |  | Other Involvement. Specify details here: |  | | | |
|  |  |
| **Project Team:** |  |
| Project facilitator (**1** **Mandatory**) | Nathan Botts (nathanbotts@westat.com) |
| Other interested parties and their roles | Gora Datta - LMIC SME ([gora@cal2cal.com](mailto:gora@cal2cal.com))  Public Health and Emergency Response Workgroup-Use Case Advisory |
| Multi-disciplinary project team (recommended) |  |
| Modeling facilitator |  |
| Publishing facilitator | Harry Rhodes (harry.rhodes@ahima.org) |
| Vocabulary facilitator |  |
| Domain expert rep | Paul Petronelli (palm@palmcorp.com) |
| Business requirement analyst | Matthew Graham (mgraham@mayo.edu) |
| Conformance facilitator (for IG projects) |  |
| Other facilitators (SOA, SAIF) |  |
|  |  |
| Implementers **(2** **Mandatory** for DSTU projects)  ***FHIR Project Note:*** *The implementer requirement will be handled by the “balloting” project. Therefore work groups do not fill out the above section. However, feel free to list implementers specific to your work group’s resources if you know of any.* | |
| 1) CAL2CAL | |
| 2) Health eServices, LLC | |
| 3) PALM Associates, Inc. | |
| 4) Epic | |

1. Project Definition
   1. Project Scope

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| The **Mobile Framework for Healthcare Adoption of Short-Message Technologies** (mFHAST) project is developing guidelines and standards for the transport, structure and content of short-message communications across healthcare services and settings.  Planned mFHAST deliverables include a Phase I Comment-only Ballot submission and DSTU to be developed in Phase II.  **Phase I: Comment-Only Development**   1. Use Case Identification and Development – initial domains identified, but are not limited to, include emergency response, public health, long-term care, patient/provider communication, clinical reminders, payer communication and adverse event reporting. 2. Definitions of Short-Message taxonomy, context, and constraints and related sub-factors (e.g., privacy and security) 3. Statement of requirements. A brief report describing requirements gathered from relevant stakeholders 4. Comment Only Ballot - The ballot will seek comments on the proposed summary of short-message transport, structure and content protocols.   **Phase II: DSTU Development**   1. Ballot Reconciliation from Phase I 2. Proof of Concept Demonstration. Demonstration of short message exchange between a mobile healthcare device and a) other health care devices b) Healthcare server based system. 3. Development of DSTU describing mFHAST requirements across Transport, Structure and Content level domains. |

* 1. Project Need

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| Short-message technologies are one of the most widely used mobile applications with estimates of over 3 billion active users and encompassing upwards of 80% of mobile subscribers.[[1]](#footnote-1) Short-message technologies are generally composed of approximately 160 characters depending on device, implementation and character library. Due to the broad penetration and adoption of texting by people world-wide and the low infrastructure implementation requirements it has been identified as a valuable method for communicating health information across all socio-economic health settings.  Many healthcare settings, especially those within rural and low-income environments do not have the infrastructure needed to effectively support messaging payloads above a few kilobytes. This might be due to limitations of the mobile technology (e.g., low-end smartphone) or may be due to a lack of robust network connections within their area (e.g., sparse distribution of cell phone towers). Projects within these areas have frequently adopted short-message services as an intermediary way in which to communicate health care and public health services in a limited fashion. Most times, project-specific short-message structures are used in order to make ad-hoc standards for communicating essential information.  Within rural, remote and underserved settings there is a lack of robust information communication technologies (ICTs). Adoption of mobile solutions is growing, hence making short-message methods of health care communication a viable standard to promote. Communications might include broadcast-level public health messaging, disease management data collection, health services and supply management.  Healthcare-related short-message projects have frequently adopted short-message technologies as an intermediary way in which to communicate health care, public health and emergency response services in a limited fashion. Most times, project-specific short-message structures are used in order to make ad-hoc standards for communicating essential information.  There is currently no known standard for adoption and implementation of short-message technologies within the healthcare domain. Due to the prevalence of these global ad-hoc efforts and the interoperability implications therein it is critical that a standard in this domain be developed.  It is deemed out of scope for this effort, but eventually we will seek to develop reference implementations that include a set of class definitions and APIs that establishes a minimum viable product of the required message set and communications procedures for a particular use case. The RI will accomplish communications between a handset and mobile healthcare device and a Health Informatics server based system.  For the purposes of the initial version of this project we envision the use of unstructured and semi-structured human communications. Subsequent projects may envision more highly structured communications. |

* 1. Success Criteria

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| Short-message technologies are being used by hundreds of projects for a multitude of health related objectives. Most have adopted their own ad-hoc implementations for structured short-message communications.  This project will seek to develop a framework that supports a breadth of disclosure and retrieval options for short-message use cases in a well-structured manner.  The first phase of this effort will seek to simplify the core structure of a short-message standard leading to a HL7 DSTU release. It is envisioned that this will be followed by more highly configurable formats depending on implementations proposed in subsequent phases of development. |

* 1. Project Risks

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| --- | --- |
| Risk Description: | **New HL7 product family and effort of which barriers are currently unknown** |
| Impact: | |  |  |  |  | | --- | --- | --- | --- | | Critical | Serious | Significant | Low | |
| Likelihood: | |  |  |  | | --- | --- | --- | | High | Med | Low | |
| Risk Type: | |  |  |  |  | | --- | --- | --- | --- | | Requirements | Resources | Social-Political | Technology | |
| Risk To HL7: | |  |  |  |  | | --- | --- | --- | --- | | Internal to HL7 |  | External to HL7 |  | |
| Mitigation Plan: | Every effort will be made to reach out and educate the HL7 community and relevant stakeholders to identify early barriers. Phased iterative roll-out to effectively manage scope and better mitigate for risk. |
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| Risk Description: | Prevalence of ad-hoc efforts and vendors in the domain already implemented may introduce a high-level of push-back on proposed standards developed. |
| Impact: | |  |  |  |  | | --- | --- | --- | --- | | Critical | Serious | Significant | Low | |
| Likelihood: | |  |  |  | | --- | --- | --- | | High | Med | Low | |
| Risk Type: | |  |  |  |  | | --- | --- | --- | --- | | Requirements | Resources | Social-Political | Technology | |
| Risk To HL7: | |  |  |  |  | | --- | --- | --- | --- | | Internal to HL7 |  | External to HL7 |  | |
| Mitigation Plan: | Make every effort to educate, harmonize and reach out to stakeholders in the domain for participation in development. |
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* 1. Security Risks

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| Will this project produce executable(s), for example, schemas, transforms, stylesheets, executable program, etc. If so the project must review and document security risks. | Yes | No | Unknown |

* 1. External Drivers

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| None |

* 1. Project Objectives / Deliverables / Target Dates

|  |  |
| --- | --- |
|  | **Target Date** |
| Core Use Case Documentation | 2015 May WGM |
| Statement of Requirements | 2015 September WGM |
| Submit Comment Only Ballot | 2016 January WGM |

* 1. Common Names / Keywords / Aliases

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| **Short Message Technologies:** This workgroup will be using the term Short-Message Technologies (SMTs) to refer to the domain of technologies that utilize short-message mediums, commonly known as text messaging applications. Accordingly, the scope of this work is not specific to SMS, Twitter, iMessage etc., but is meant to encompass a broader range of activities that may use anyone of these technologies. |

* 1. Lineage

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| **N/A** |

* 1. Project Requirements

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| * Development of short-message definition document * Development of short-message use case repository * Development of short-message testing environment * Drafting of short-message standards   Further requirements are under development and can be found at: http://wiki.hl7.org/index.php?title=MHWG\_Projects\_mFHAST |

* 1. Project Dependencies

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| No dependencies identified to date. |

* 1. Project Document Repository Location

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| mFHAST Project Directory: <http://wiki.hl7.org/index.php?title=MHWG_Projects_mFHAST> |

* 1. Backwards Compatibility

[*Click here*](#Backwards_Compatibility_help) *to go to Appendix A for more information regarding this section and FHIR project instructions.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Are the items being produced by this project backward compatible? | Yes | No | Unknown | N/A |
|  | | | | |
| For V3, are you using the current data types? | Yes | No |  |  |
| If you check 'No' please explain the reason: | | | | |
|  | | | | |

* 1. External Vocabularies

[*Click here*](#External_Vocabularies_help) *to go to Appendix A for more information regarding this section.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Will this project include/reference external vocabularies? | Yes | No | Unknown | N/A |
| If yes, please list the vocabularies: | | | | |

1. Products

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| --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | |  | Non Product Project- (Educ. Marketing, Elec. Services, etc.) | | |  |  | | --- | --- | |  | V3 Domain Information Model (DIM / DMIM) | |
| |  |  | | --- | --- | |  | Arden Syntax | | |  |  | | --- | --- | |  | V3 Documents – Administrative (e.g. SPL) | |
| |  |  | | --- | --- | |  | Clinical Context Object Workgroup (CCOW) | | |  |  | | --- | --- | |  | V3 Documents – Clinical (e.g. CDA) | |
| |  |  | | --- | --- | |  | Domain Analysis Model (DAM) | | |  |  | | --- | --- | |  | V3 Documents - Knowledge | |
| |  |  | | --- | --- | |  | Electronic Health Record (EHR) Functional Profile | | |  |  | | --- | --- | |  | V3 Foundation – RIM | |
| |  |  | | --- | --- | |  | Logical Model | | |  |  | | --- | --- | |  | V3 Foundation – Vocab Domains & Value Sets | |
| |  |  | | --- | --- | |  | V2 Messages – Administrative | | |  |  | | --- | --- | |  | V3 Messages - Administrative | |
| |  |  | | --- | --- | |  | V2 Messages - Clinical | | |  |  | | --- | --- | |  | V3 Messages - Clinical | |
| |  |  | | --- | --- | |  | V2 Messages - Departmental | | |  |  | | --- | --- | |  | V3 Messages - Departmental | |
| |  |  | | --- | --- | |  | V2 Messages – Infrastructure | | |  |  | | --- | --- | |  | V3 Messages - Infrastructure | |
| |  |  | | --- | --- | |  | FHIR Resources | | |  |  | | --- | --- | |  | V3 Rules - GELLO | |
| |  |  | | --- | --- | |  | FHIR Profiles | | |  |  | | --- | --- | |  | V3 Services – Java Services (ITS Work Group) | |
| |  |  | | --- | --- | |  | New/Modified/HL7 Policy/Procedure/Process | | |  |  | | --- | --- | |  | V3 Services – Web Services (SOA) | |
| |  |  | | --- | --- | |  | New Product Definition | |  |
| |  |  | | --- | --- | |  | New Product Family | |  |
| This project will be developing a new standard that defines structures, methods, terms and requirements for use of short-message technologies within healthcare. | |

1. Project Intent (check all that apply)

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | |  | Create new standard | |  | Revise current standard (**see text box below**) | |  | Reaffirmation of a standard | |  | New/Modified HL7 Policy/Procedure/Process  Withdraw an Informative Document | |  | N/A (Project not directly related to an HL7 Standard) | | |  |  | | --- | --- | |  | Supplement to a current standard | |  | Implementation Guide (IG) will be created/modified | |  | Project is adopting/endorsing an externally developed IG: Specify external organization in Sec. 6 below;  Externally developed IG is to be (select one): | |  | Adopted - OR -  Endorsed |  | Endorsed | |
|  | |

* 1. Ballot Type (check all that apply)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | |  | Comment Only | |  | Informative | |  | DSTU to Normative | | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | |  |  | | --- | --- | |  | Normative (no DSTU) | |  | Joint Ballot (with other SDOs or HL7 Work Groups) | |  | N/A (project won’t go through ballot) | | |
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* 1. Joint Copyright

*Check this box if you will be pursuing a joint copyright. Note that when this box is checked, a Joint Copyright Letter of Agreement must be submitted to the TSC in order for the PSS to receive TSC approval.*

|  |  |  |
| --- | --- | --- |
| |  |  | | --- | --- | |  | Joint Copyrighted Material will be produced | |

1. Project Logistics
   1. External Project Collaboration

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| --- | --- | --- |
| Current collaboration discussions include the Office of the National Coordinator’s S&I Framework, electronic Long-Term Services and Supports (eLTSS) project, and the Electronic Health Record vendor Epic. | | |
| For projects that have some of their content already developed: | | |
| How much content for this project is already developed? | **None** | |
| Was the content externally developed (Y/N)? | **No** | |
| Date of external content review by the ARB? | **TBD** | |
| Is this a hosted (externally funded) project? (not asking for amount just if funded) | Yes | No |

* 1. Realm

|  |  |  |  |
| --- | --- | --- | --- |
| |  |  | | --- | --- | |  | Universal | | Realm Specific |
|  | Check here if this standard balloted or was previously approved as realm specific standard |
|  | While participation and pilots are currently U.S. realm, efforts are under way to identify international participants due to the number of known SMT projects being conducted outside the U.S. |

* 1. Project Approval Dates

|  |  |
| --- | --- |
| Affiliate/US Realm Task Force Approval Date  (for US Realm Specific Projects) | **TBD** |
| Sponsoring Group Approval Date | **Mobile Health 02/20/2015** |
| Steering Division Approval Date | **TBD** |
| |  |  |  | | --- | --- | --- | | [PBS Metrics and Work Group Health Reviewed](http://gforge.hl7.org/gf/download/docmanfileversion/7241/10172/PBSMetricGuidanceforSDCoChairs2013Final.doc)? (required for SD Approval) | Yes | No | | |
| FHIR Project: FHIR Management Group Approval Date | **N/A** |
| Technical Steering Committee Approval Date | **TBD** |
| |  |  |  | | --- | --- | --- | | TSC has received a Copyright/Distribution Agreement (which contains the verbiage outlined within the SOU), signed by both parties. | Yes | No | | |

* 1. Stakeholders / Vendors / Providers

*This section must be completed for projects containing items expected to be ANSI approved, as it is an ANSI requirement for all ballots*

|  |  |  |
| --- | --- | --- |
| **Stakeholders** | **Vendors** | **Providers** |
| Clinical and Public Health Laboratories | Pharmaceutical | Clinical and Public Health Laboratories |
| Immunization Registries | EHR, PHR | Emergency Services |
| Quality Reporting Agencies | Equipment | Local and State Departments of Health |
| Regulatory Agency | Health Care IT | Medical Imaging Service |
| Standards Development Organizations (SDOs) | Clinical Decision Support Systems | Healthcare Institutions (hospitals, long term care, home care, mental health) |
| Payors | Lab | Other (specify in text box below) |
| Other (specify in text box below) | HIS | N/A |
| N/A | Other (specify below) |  |
|  | N/A |  |
| |  | | --- | | Other:   * Non-Governmental Organizations (NGO) * Governmental Organizations (e.g., ONC S&I Framework Initiative eLTSS) | | | |

* 1. Synchronization With Other SDOs / Profilers

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| --- | --- | --- |
| Check all SDO / Profilers which your project deliverable(s) are associated with. | | |
| ASC X12 | CHA | LOINC |
| AHIP | DICOM | NCPDP |
| ASTM | GS1 | NAACCR |
| BioPharma Association (SAFE) | IEEE | Object Management Group (OMG) |
| CEN/TC 251 | IHE | The Health Story Project |
| CHCF | IHTSDO | WEDI |
| CLSI | ISO | Other (specify below) |
| * ISO Liaison – Gora Datta/Harry Rhodes | | |

1. Tomi T. Ahonen (January 13, 2011). "Time to Confirm some Mobile User Numbers: SMS, MMS, Mobile Internet, M-News". Blog. Retrieved September 16, 2013. [↑](#footnote-ref-1)