C.O.M.B.A.T.

Planning & Design Subcommittee

Kickoff Meeting

September 22, 2005

Agenda

- ❑ **Introductions**
- ❑ **Backgrounder**
  - ❖ COMBAT Objectives
  - ❖ COMBAT Workflow
  - ❖ Workgroup Support
- ❑ **Objectives of the P & D Subcommittee**
- ❑ **Open Standards**
- ❑ **Open Source**
- ❑ **Methods for Accomplishing our Work**
- ❑ **Artifacts Resulting from Planning & Design**
- ❑ **Outcomes of Applying the Artifacts**
- ❑ **The Recommended Architectural Principles**
- ❑ **Call for Action and Participants**

❑ **John Hardin – SubCommittee Chair**

  ❖ Chief Technology Officer, MedAccessPlus Health Network

  ❖ Chair, OASIS ebSOA Technical Committee

  ❖ Former Chief Architect, eBusiness at General Motors

❑ **John Casillas – founder, MBProject**

❑ **Tell us about you...**

MB Project
MEDICAL BANKING
POLICY RESEARCH

❑ C.O.M.B.A.T. Initiative

- ❖ Historical to present:
  - Conceptualized in May 2001 (SOMBEX)
  - Active R&D since Sept. 04
  - Launched in July 2005
- ❖ Based on:
  - Open Source
  - Open Standards
- ❖ Focused on delivering:
  - A Standards Profile
  - A Reference Architecture
- ❖ Business drivers: Real-time administrative & clinical messaging
  - Seamless financial processing
  - Distribution of electronic medical records via banking system

❑ **Very little "new" needs to be invented**

❑ **Leveraging existing standards, packages & protocols:**

   ❖ HIMSS & IHE

   ❖ OASIS

   ❖ HL7

   ❖ HIPAA

   ❖ SWIFT

   ❖ XBRL

   ❖ ACORD

❑ **Some of the Challenges:**

   ❖ Identity Management and Trust Services are crucial

   ❖ Only top layers are real-time; not even most players

   ❖ Industry and Enterprise Registries need to be built

   ❖ Critical mass adoption isn't here yet

COMBAT Objectives

- **Real-time administrative and clinical messaging for healthcare**
  - ❖ A common platform for bank customers - consumers and healthcare providers:
    - HSA administration – the "holy grail" is real time processing
    - Consumer management of HSAs/FSAs/etc., and PHR via online banking portal
    - Remittance management – the oft forgotten loop where high ROI is lost or found
- **Administrative messaging**
  - ❖ Implement all of the HIPAA transactions in order to support real-time processes
  - ❖ Link processes in standardized "mbXML" profiles and prove out instances in our reference architecture
  - ❖ Publish mbXML profiles for general usage
- **Clinical messaging**
  - ❖ Implement a reference architecture that aggregates electronic healthcare records on demand by authorized bank customer
    - Consumer requesting his/her own records
    - Authorized doctor requesting records on behalf of patient – connecting physicians that treat the same patient
  - ❖ Federated identity management is core to process
  - ❖ Immaterial where records are stored; need to be accessible for end user presentment
  - ❖ ROI for banks (and healthcare in general)

COMBAT Workflow

Primary Responsibility	Function	Artifacts / Deliverables
Workgroups	Define industry requirements	Draft White Papers that incorporate potential UML models/use-cases
Steering Committee	Define business requirements	Reduce UML models into specific tasks that will be provided to Planning & Design Subcommittee
Subcommittee: Planning & Design	Define technical requirements	Reduce tasks into open source technical specifications using existing standards whenever/as as possible Design architecture and technical strategy (i.e., adaptation of mbXML profiles into existing banking and healthcare systems) Assist in build-out
Subcommittees: Planning & Design Programming & Testing	Design, build-out and test system	Work with P&D Sub to build reference architecture, mbXML profiles and test the technology Document testing protocols
Subcommittee: Awareness & Education	Publish and disseminate artifacts	Works closely with Secretariat Create learning media to foster adoption Support general marketing and educational development

Workgroup Support

Workgroup	Administrative Messaging	Clinical Messaging
Workflow Automation Council	Draft a profile that links administrative transactions to create a real time process flow (i.e., submit eligibility, submit claim, adjudication and/or fiscal intermediary discount, return and post remittance.) Recommend potential solutions re: 835/remittance creation, distribution and integration. Create a testing instance for 835 receipt and automated posting that is vendor-neutral.	Draft White Paper showing how banks can become involved in distribution / aggregation of e/pHR.
HIPAA Compliance	WG has already defined scope of HIPAA impact on banks; must now look at the impact of other emerging policy (i.e., FACTA, state regs) as it impacts this market function.	What is the best policy posture re: privacy and security of medical records that can facilitate this market function?
Charity	Draft White Paper showing the business level issues re: charity vs bad debt accounting. How can these principles be incorporated into the reference architecture. Review previous White Paper to design bank-based support system for foundation/charitable funds management.	Implement a program for access to PHR in the community safety net setting. Check with HIPAA Compliance workgroup on policy issues.

Workgroup Support

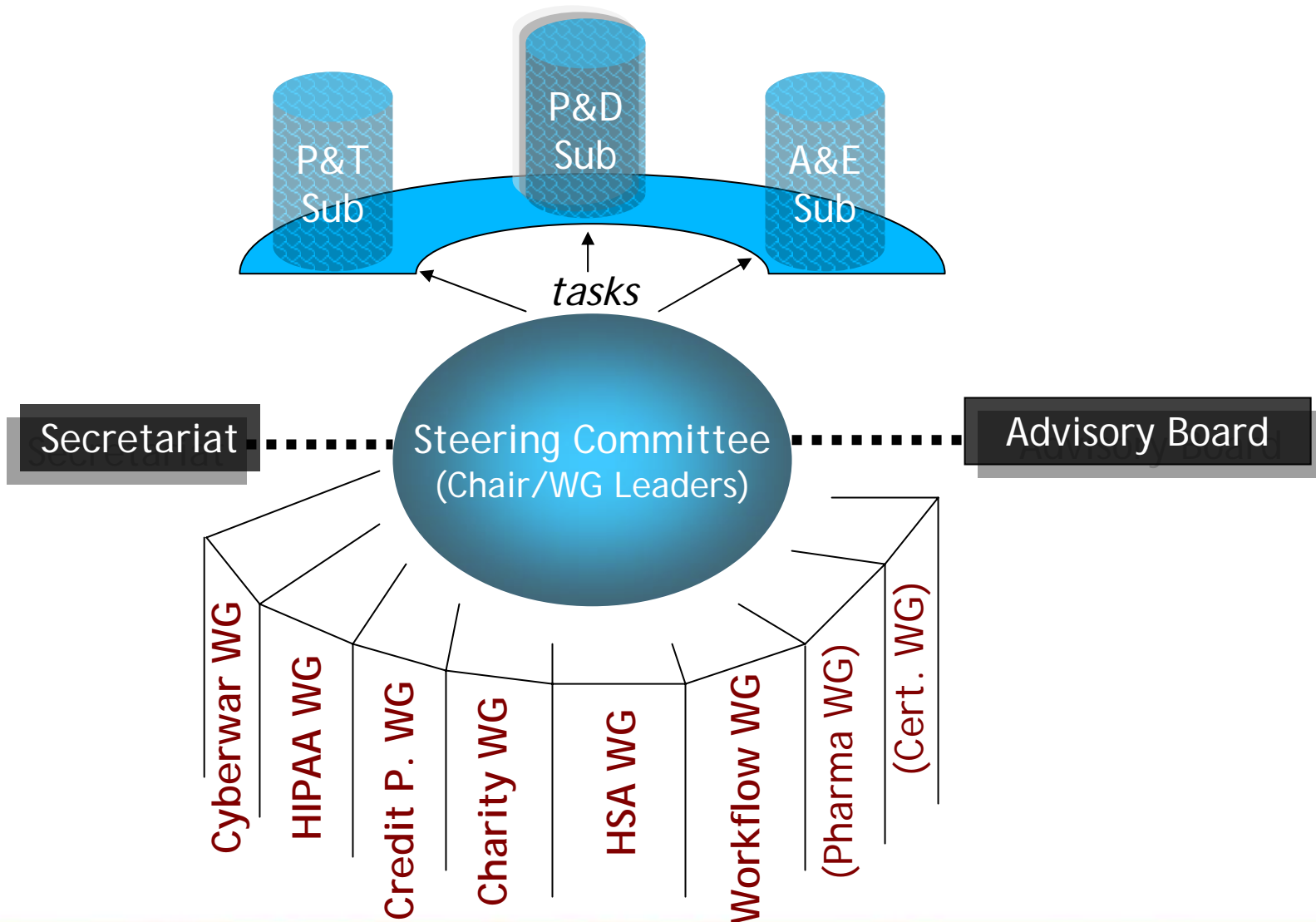| Workgroup	Administrative Messaging	Clinical Messaging
Healthcare Credit Practices	Review White Paper on policy issues and provide a course of action. Draft White Paper on potential financial intermediary function; show accounting entries among industry players (XBRL). Draft White Paper related to liquidity scenarios that can result from timely remittance system.	Potential to develop consumer-centric credit plans for paying healthcare balances. Define general formats, potential to market through online portals, etc.
Health Savings Account WG	Define processes that will result in real time adjudication and funds disbursement, including all actors, accounting entries.	Present HSA management tools on online portal with authorized access to personal healthcare records.
Cyberwar	What information flowing through medical banking channels can assist in bio-survielance? Patterns that can predict terrorist attack? Layering homeland security functions (positive ID, cross-border processing, human trafficking) onto card platform. Charity fronts used to fund terrorism; is there a medical banking model that can help to fight this?	Utilization of medical records to detect fraud and abuse; funneling government healthcare funds to non-authorized / illegal activities.

COMBAT Implementation

Build / Educate

Governance

Requirements

P&T Sub

P&D Sub

A&E Sub

tasks

Secretariat

Steering Committee
(Chair/WG Leaders)

Advisory Board

Cyberwar WG

HIPAA WG

Credit P. WG

Charity WG

HSA WG

Workflow WG

(Pharma WG)

(Cert. WG)

❑ **Define the Infrastructure and Architecture**
  ❖ Open Source to provide abstracted "type of" components
  ❖ Open Standards to communicate between entities

❑ **Work with Steering Committee**

❑ **Work with other subcommittees**

❑ **Build the framework** *(P&D Sub and P&T Sub)*

❑ **Test transactions** *(P&D Sub and P&T Sub)*

❑ **Publish findings and recommendations as mbXML** *(A&E Sub)*

❑ **Transfer knowledge regarding the framework to members** *(A&E Sub)*

Open Standards

- ❑ Open Standards allow for vendor neutrality
- ❑ Standards Requirements:
  - ❖ Identity Management
  - ❖ Security Management
  - ❖ Message Transport
  - ❖ Message Payload Formats
  - ❖ Business Process Modeling
  - ❖ Business Process Execution
  - ❖ Business Activity Reporting
- ❑ All these exist, and are stable and mature.
- ❑ We will prove the usage of these together to accomplish Medical Banking.

☐ **Open Source allows us to specify components while being vendor neutral.**

☐ **Components:**

- ❖ Security
- ❖ Third party Identity Management may be donated by Covisint as a "blackbox" service
- ❖ Registry / Repository to store and manage integration artifacts
- ❖ Registry / Repository to store and manage document locations
- ❖ Service Binding management
- ❖ Message handlers
- ❖ Transformation engine
- ❖ Business Rule and Business Process management
- ❖ Database management

- ❑ **Work with Steering Committee and Subcommittees**
- ❑ **Define requirements**
- ❑ **Define processes**
- ❑ **Define formats**
- ❑ **Express these artifacts as:**
  - ❖ Use Cases
  - ❖ UML Activity Diagrams
  - ❖ UML Sequence Diagrams if necessary
  - ❖ Integration specs (Schema, etc.)
- ❑ **Express these requirements as XML based documents and configuration files for use in the architecture.**

❑ **Take these artifacts:**

- ❖ Use Cases
- ❖ UML Activity Diagrams
- ❖ UML Sequence Diagrams if necessary
- ❖ Integration specs (Schema, BPSS, BPEL, etc.)

❑ **Package them as a Usage Profile called mbXML, a document detailing**

- ❖ Audience and Introduction
- ❖ Targeted Functions Description
- ❖ Each component type and message format in the context of:
- ❖ Each business process that satisfies the function
- ❖ All artifacts are to be independent of the software implementation

❑ **Publish the mbXML Usage Profiles**

   ❖ Press releases

   ❖ Liaisons to other groups (HIMSS, OASIS, WS-I etc.)

   ❖ Encourage production implementations

❑ **Medical Banking Project Implementation**

   ❖ Serves as an always-on Test Harness

   ❖ Certification for implementations that pass the testing

❑ **Permanent Demonstration Implementation**

   ❖ Web browser based document storage and review

   ❖ Web browser based explanation of the processes and artifacts

   ❖ Web browser based demonstration

❑ **Service Oriented Architecture**

❑ **Registry-based Integration Framework**

❑ **HIMSS IHE Infrastructure Technical Committee components**

❑ **Federated Enterprise Reference Architecture (FERA) principles**

   ❖ Created by Semantion, Intel, donated to OASIS
   ❖ Included as the primary architectural organization principle in ebSOA TC

❑ **We need:**

  ❖ Architects

  ❖ Engineers

  ❖ SWIFT, XBRL, ACORD, BPSS, BPEL and other open standards expertise

  ❖ JBOSS, Hermes, MySQL / Postgres and other open source expertise

  ❖ XML Coders

  ❖ Java Coders

❑ **We will compile our mailing list from those interested.**

❑ **Speak up now, or contact evc@mbproject.org**