PDF Healthcare Overview

A guide to safe access and transport of health information

What is PDF Healthcare?

- A "Best Practices Guide" describing attributes of the Portable Document Format (PDF) to facilitate the capture, exchange, preservation and protection of healthcare information
  - ☐ Share data easily between healthcare institutions
  - ☐ Ease the transition into digital health records for information exchange and sharing
  - ☐ Bridge the gap between healthcare providers and consumers

PDF Healthcare Objective

- Objective
  - Utilizing PDF features and functionality, the objective is to develop a secure, electronic container that can store and transmit relevant healthcare information, including but not limited to personal documents, clinical notes, lab reports, electronic forms, scanned images, photographs, digital X-rays, and ECGs, important for maintaining and improving one's health.

Background

- eHealthcare is a reality in today's environment
- PDF advantages in healthcare
  - Long-standing success and adoption of PDF
  - PDF provides a secure and universal container for multiple data types regardless of data source or destination
  - PDF is platform- and system-neutral
  - PDF allows for interoperability and bi-directional information exchange
  - Selected records can be easily and quickly printed from PDF when necessary
- PDF usage addressing specific industry needs include:
  - PDF/A (Archiving), PDF/E (Engineering), PDF/UA (Universal Access), PDF/X (Printing)

Identifying the Need

- **Issues**
  - ☐ Improving patient safety while lowering costs
    - Many healthcare errors and unnecessary expenses occur during the exchange of patient-related information between and among physicians / institutions.
  - ☐ Sending / receiving paper-based health records
    - Handwritten, paper-based records, often illegible, cannot be quickly transmitted and easily searched.
  - ☐ Need for a universal container to hold various types of health information
    - Eliminates need for multiple types of specialized or proprietary readers
  - ☐ Need for consumer access to personal healthcare data - any time, any where, on any device
    - Consumers want to take a more active role in the management of their healthcare; for example, by being able to amend and update their personal health information.

Identifying the Need (continued)

- **Issues**
  - ☐ **Security and liability**
    - Consumers want data to be safe and secure while being portable
  - ☐ **Ease of use**
    - PDF reader is ubiquitous, universal, trusted and common to multiple platforms
  - ☐ **Current information systems have little or no interoperability capabilities that can serve the needs of the patient/consumer by protecting the patient's privacy and securing the patient's information**
    - Information can be available regardless of the source of its creations
  - ☐ **Paper records can be easily destroyed (e.g., during natural disasters) with no means for recovery / data rebuilding, except for the dependence on a patient's memory**
    - Digitized data can be stored easily and in multiple places if needed

Why PDF Healthcare?

- PDF is powerful and flexible
- PDF can focus on the specific needs of the healthcare market
- Interoperability and portability
  - PDF is based on open, published specifications
- The PDF Healthcare Best Practices Guide will be developed and maintained by an external committee with healthcare industry knowledge
- PDF Readers are ubiquitous, easy to access and use as well as being a trusted document container

Initial PDF Healthcare Offering

- **Best Practices Guide**
  - ☐ Describes the attributes of the Portable Document Format (PDF) that are relevant to facilitate the capture, exchange, preservation and protection of healthcare information

- **Implementation Guide / Use Cases**
  - ☐ Supplemental information that will provide examples of interoperability with existing healthcare standards such as ASTM's Continuity of Care Record (CCR)
  - ☐ Future use cases could include Health Level 7's Clinical Document Architecture (CDA) as well as other, new, emerging standards

Initial PDF Healthcare Offering (continued)

- **Implementation Guide / Use Cases (continued)**
  - The first use case example will be based on the CCR standard and will include the following:
    - patient demographics
    - insurance information
    - problems and diagnoses
    - medication list
    - allergies
    - immunizations
    - actors, such as information about Primary Care Physicians (PCPs) or specialists

The Development Process

- Work is organized by accredited standards development organizations (SDOs):
  - AIIM International & ASTM International
  - Published as joint project between AIIM and ASTM
- Timeframe as of today:
  - Version 1 of the Best Practices Guide – available at http://www.aiim.org/productcatalog/product.aspx?ID=1675
  - Version 1 of the Implementation Guide – available at http://www.aiim.org/pdfh/ig
- Implementation use cases
  - ASTM CCR use case – early 2008
  - HL7 CDA use case – projected late 2008
  - HL7/ASTM CCD use case – projected late 2008
  - Others to be determined

Mission

PDF

- provides a trusted and universal means by which healthcare data is captured, exchanged, preserved and protected
- facilitates the use of digital healthcare content of various platforms and devices
- encourages and supports healthcare patients / consumers to control and account for their own and family health records

Therefore, through the development, deployment and evolution of the PDF Healthcare guides, the following will be demonstrated:

- PDF will support the migration of multiple record types to a universal PDF-based container
- PDF will promote and accelerate the adoption of an electronic healthcare record
- PDF will provide efficiencies potentially resulting in:
  - Error reductions
  - Elimination of redundancies
  - Improvements in workflow processes
  - Improvements in patient care delivery and communication

Objectives - 2008

- Identify, document, distribute, and publish multiple use cases to physicians and consumers

- Explore and develop a strategy for including the HL7 CDA / CCD document format

- Gather feedback from users and identify needs for version 2 of the BPG and IG

Partial List of Participants

- AIIM / ASTM
- Adobe Systems, Inc.
- American Academy of Family Physicians
- American Academy of Pediatrics
- CapMed
- Cerner
- Dak Systems Consulting
- DrFirst
- eClinicalWorks LLC
- Generator LLC
- Good Health Network
- Intel
- Massachusetts Medical Society

- Med Commons
- MEDecision
- MediKeeper
- MinuteClinic
- National Health Clinic
- NextGen
- Northern Illinois Physicians for Connectivity
- Northrop Grumman
- Point and Click Solutions
- Schering-Plough
- SureScripts
- YourTimeMatters.com

Additional Information

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To purchase and download the Best Practice Guide:
http://www.aiim.org/productcatalog/product.aspx?ID=1675

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