Paving the Road to Interoperability with Standards

W. Ed Hammond
Davera Gabriel

Duke University and HL7 International

Home of HL7® FHIR®

HL7 INTERNATIONAL

Healthcare Information Needs to be Exchanged

The HL7 Vision

A world in which everyone can securely access and use the right health data when and where they need it.

The HL7 Mission

To provide standards that empower global health data interoperability.

Improving Patient Care and Lowering Healthcare Cost

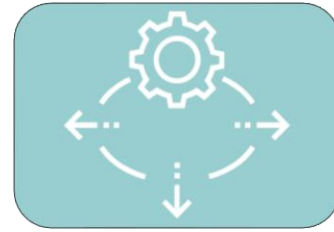# HL7 Standards Span the Healthcare Continuum

Pharmacy Medication Lists

Home Health Monitoring Devices

Payers/Financial Systems

Government Agencies, Public Health, Research

Clinician Decision Support

Hospitalization Summaries

Doctors Orders and Clinician Notes

Product Labeling

Lab Test Results

Genomics

Mobile Health

Emergency Care

Medical Records

HL7 Product Families

HL7 Version 2

HL7 Version 3

HL7 Clinical Document Architecture (CDA®)

HL7® FHIR®

HL7 Affiliates Across the Globe

HL7 Collaborates

Volunteers Work Together on Standards

In-person and virtually

HL7 is a Community Effort

Regulators   Clinical Researchers   Nurses   Payers   Physicians

Providers   IT Specialists   Hospitalists   Developers   Consultants

Why Participate in HL7?

Help make healthcare better for everyone

Jump-start innovation and speed time to launch on interoperability projects

Future-proof your business by staying ahead of standards and trends

Why Participate in HL7?

Learn and collaborate with peers, customers, competitors, and potential partners

Influence new standards in ways that matter to your business

Support HL7's vision by becoming a member today

HL7.org

HL7 Resources

Membership	why.HL7.org
HL7 Standards	HL7.org/standards
Work Groups	HL7.org/WorkGroups
Education	HL7.org/LearnNow
Events	HL7.org/Events
HL7 Affiliates	HL7.org/Affiliates

HL7® FHIR®

Fast Healthcare Interoperability Resources

"The HTML of Healthcare"
— John Halamka, MD, MS

"The Web, for Healthcare"
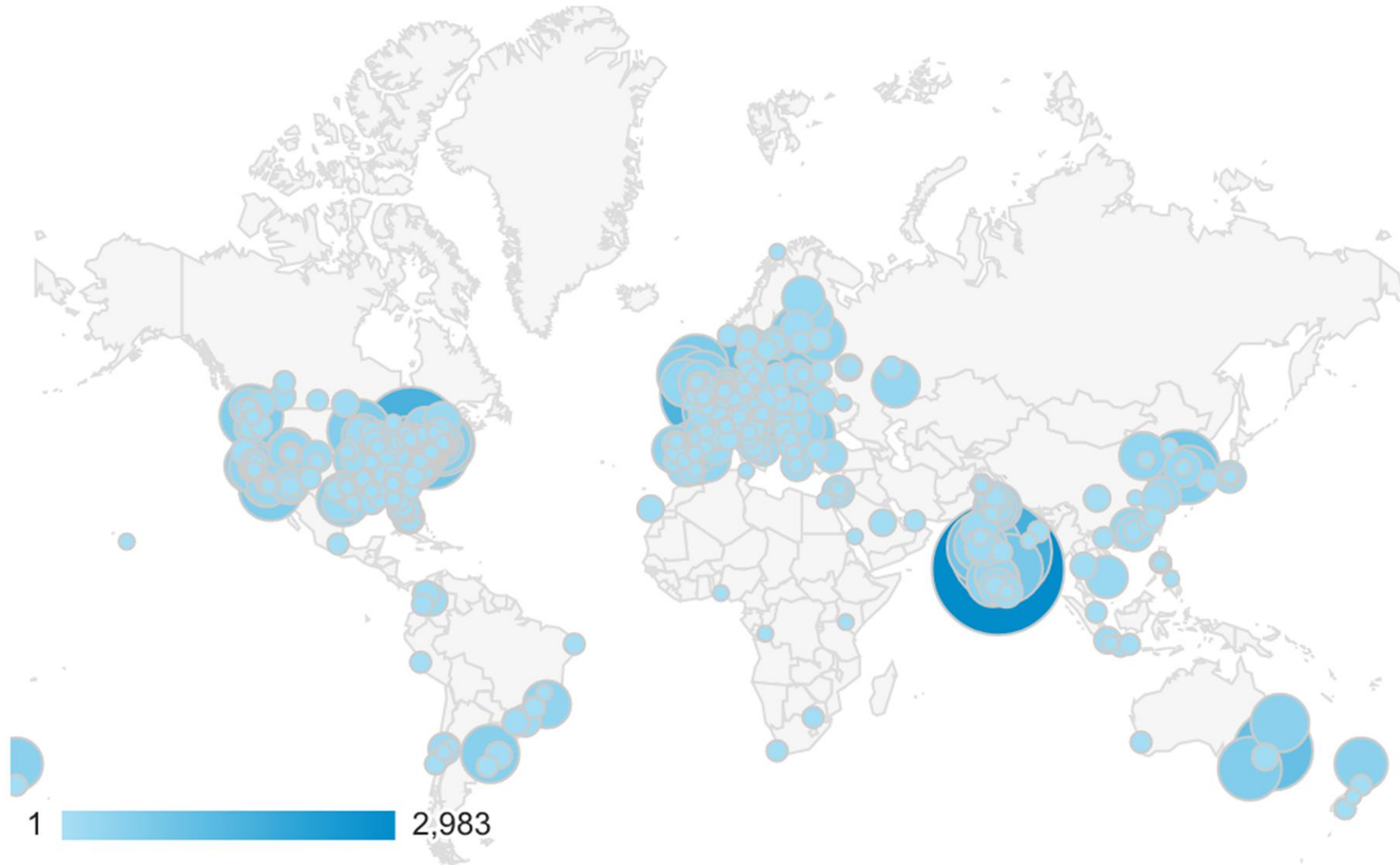— Grahame Grieve

Fundamentals of HL7 FHIR

- A next generation **standards framework & platform,** built on 30 years of HL7 experience, designed for implementation

- Based on REST, a pattern for using web technologies to manage information (the platform used by Facebook, Twitter…) and APIs

- Content based on Resources: essential, portable modular information components easily assembled into working systems - Like web pages directed toward computers; fast and scalable

- Flexible outputs: web, messages, documents, services

Principals of HL7 FHIR

- Data resides at the **source of truth**

- **APIs** access data: pull what you need, instead of taking what's pushed

- Focus on **implementers**

- Include rigorous **semantics**

- Design for the common **80%;** extensions for the rest

- Off-the-shelf *security and authorization* (OAuth2, OIDC, https)

- **Speed, scalability**

- Human **readable**, ease of understanding

- Open source (Creative Commons), **freely available** for all.

Who's Using HL7 FHIR?

New Directions

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- Working with SIGGRAPH and Web3D opens new doors.
- We look forward to working with you for new opportunities to make life better for all.

Possible applications

- Virtual visits
- Surgical scheduling
- Family tree
- Drug structures
- Genomic structures
- Clinical support
  - Exercise physiology involving respiratory system, cardiovascular system, muscular system
  - Organ models
- Patient support
  - Mental health
  - Behavior modification
  - Fall prevention
  - Aging
  - Consent for research – showing what is proposed
  - Consent for surgery – showing surgery
  - Pain management
- GIS
- Others