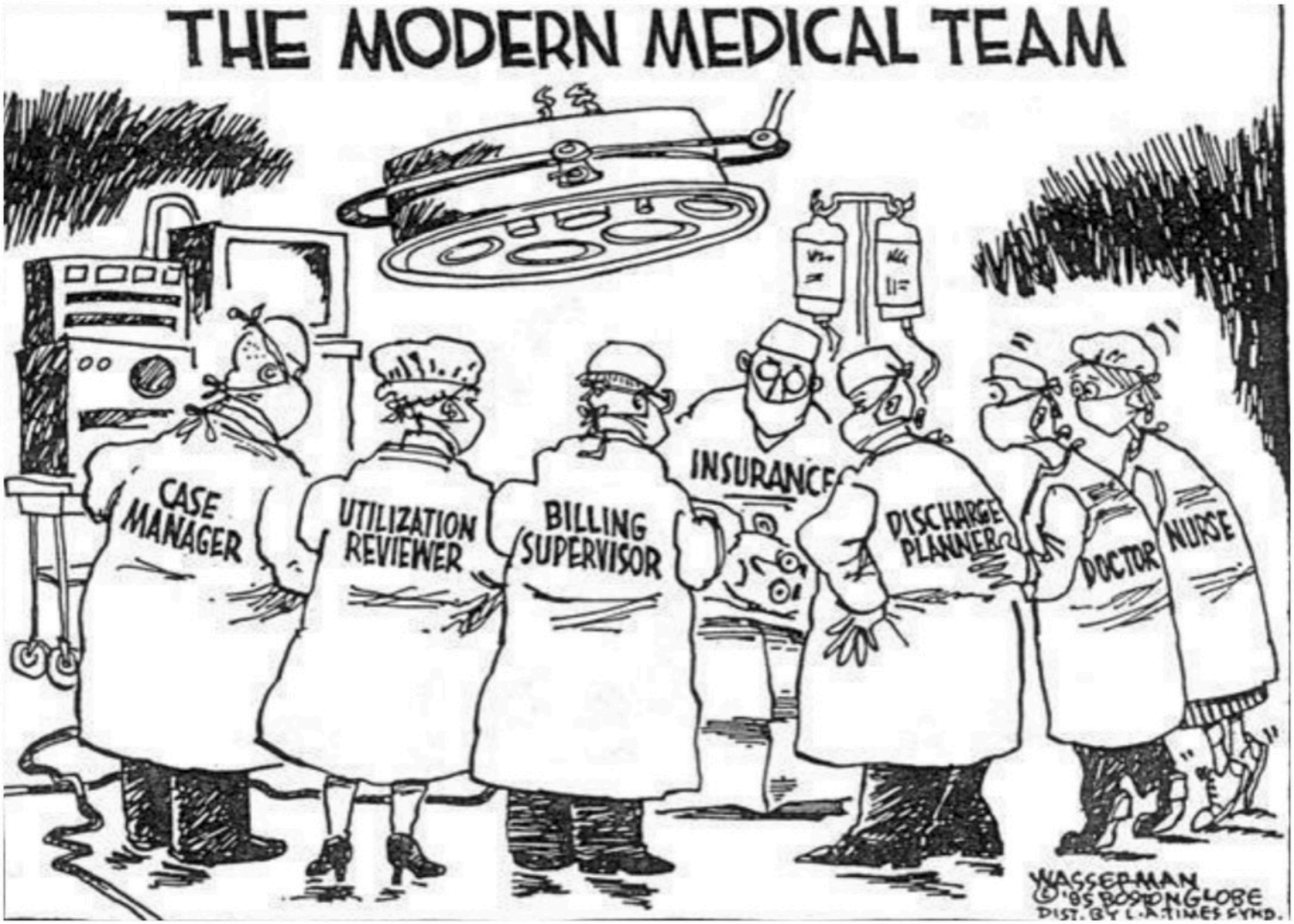
“Reducing Clinician Burden” Project Overview

Health Level Seven (HL7)
Electronic Health Record Work Group (EHR WG)
17 January 2019

Quantifying the EHR Burden

Surveys Say...

- 3 out of 4 physicians believe that EHRs increase practice costs, outweighing any efficiency savings – Deloitte Survey of US Physicians, 2016
- 7 out of 10 physicians think that EHRs reduce their productivity – Deloitte
- 4 in 10 primary care physicians (40%) believe there are more challenges with EHRs than benefits – Stanford Medicine/Harris Poll, 2018
- 7 out of 10 physicians (71%) agree that EHRs greatly contribute to physician burnout – Stanford/Harris
- 6 out of 10 physicians (59%) think EHRs need a complete overhaul – Stanford/Harris
- Only 8% say the primary value of their EHR is clinically related – Stanford/Harris


THE MODERN MEDICAL TEAM
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Reducing Clinician Burden

Stakeholders

WHAT/WHEN – Burden Targeted	WHO – Might Best Address Burden	
In Clinical Practice – At Point of Care	Providers, Clinical Professional Societies	With Engaged Clinicians
In Health Informatics Standards, e.g. • HL7 EHR System Functional Model and Profiles • Messages (HL7 v.2x), Documents (HL7 CDA), Resources (HL7 FHIR) • Implementation Guides (C-CDA, IPS)	Standards Developers/Profilers: • HL7, DICOM, IHE, ISO TC215, NCPDP, ASC X12N... Standards Coordinating Bodies • Joint Initiative Council	
In Regulation, Policies	Government, Accreditation Agencies	
In Claims, Payment Policies	Public and Private Payers	
During System/Software Design	EHR/HIT System Developers/Vendors	
During System/Software Implementation	EHR/HIT System Implementers	

Reducing Clinician Burden

Assessing the Burden

- Primary focus on clinician burdens including time and data quality burdens associated with:
  - Use/engagement of EHR/HIT systems
  - Capture, exchange and use of health information
- Consider:
  - Clinical practice – at the point of care
  - Regulatory, accreditation, administrative, payor mandates
  - EHR/HIT system design, functionality, usability and implementation
  - Data quality and usability
- Gather details from many reference sources:
  - Trade publications, professional society journals, articles, studies, personal experience
- Goal is not to boil the ocean, rather to understand the extent of the burden.

Reducing Clinician Burden

Defining Terms (DRAFT)

Reducing (reduce)	• “To bring down, as in extent, amount, or degree; diminish”, and “To gain control of... [to] conquer”, and “To simplify the form of... without changing the value”, also “To restore... to a normal condition or position” – The Free Dictionary • “To lower in... intensity” – Dictionary.com • “To narrow down”, also “To bring to a specified state or condition” – Merriam-Webster
Clinician	• “A health professional whose practice is based on direct observation and treatment of a patient” – Mosby's Medical Dictionary • “An expert clinical practitioner and teacher” – Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health • “A health professional, such as a physician, psychologist, or nurse, who is directly involved in patient care” – American Heritage Medical Dictionary
Burden	• “A source of great worry or stress”, and “[Something that] cause[s] difficulty [or] distress”, also “To load or overload” – The Free Dictionary • “Something that is carried, [as in a] duty [or] responsibility”, also “Something oppressive or worrisome” – Merriam-Webster Dictionary

Reducing Clinician Burden

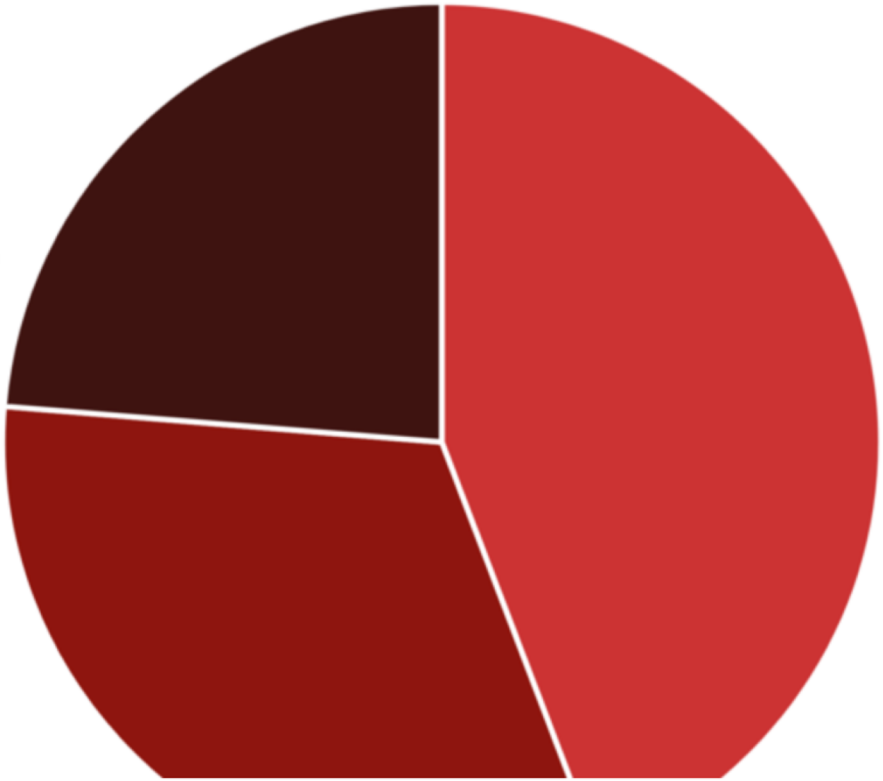
Defining Terms (DRAFT)

Clinician Burden	Anything that hinders patient care, either directly of indirectly [such as]: 1) Undue cost or loss of revenue, 2) Undue time, 3) Undue effort, 4) Undue complexity of workflow, 5) Undue cognitive burden, 6) [Uncertain quality/reliability of data/record content,] 7) Anything that contributes to burnout, lack of productivity, inefficiency, etc., 8) Anything that gets in the way of a productive clinician-patient relationship. -- Peter Goldschmidt

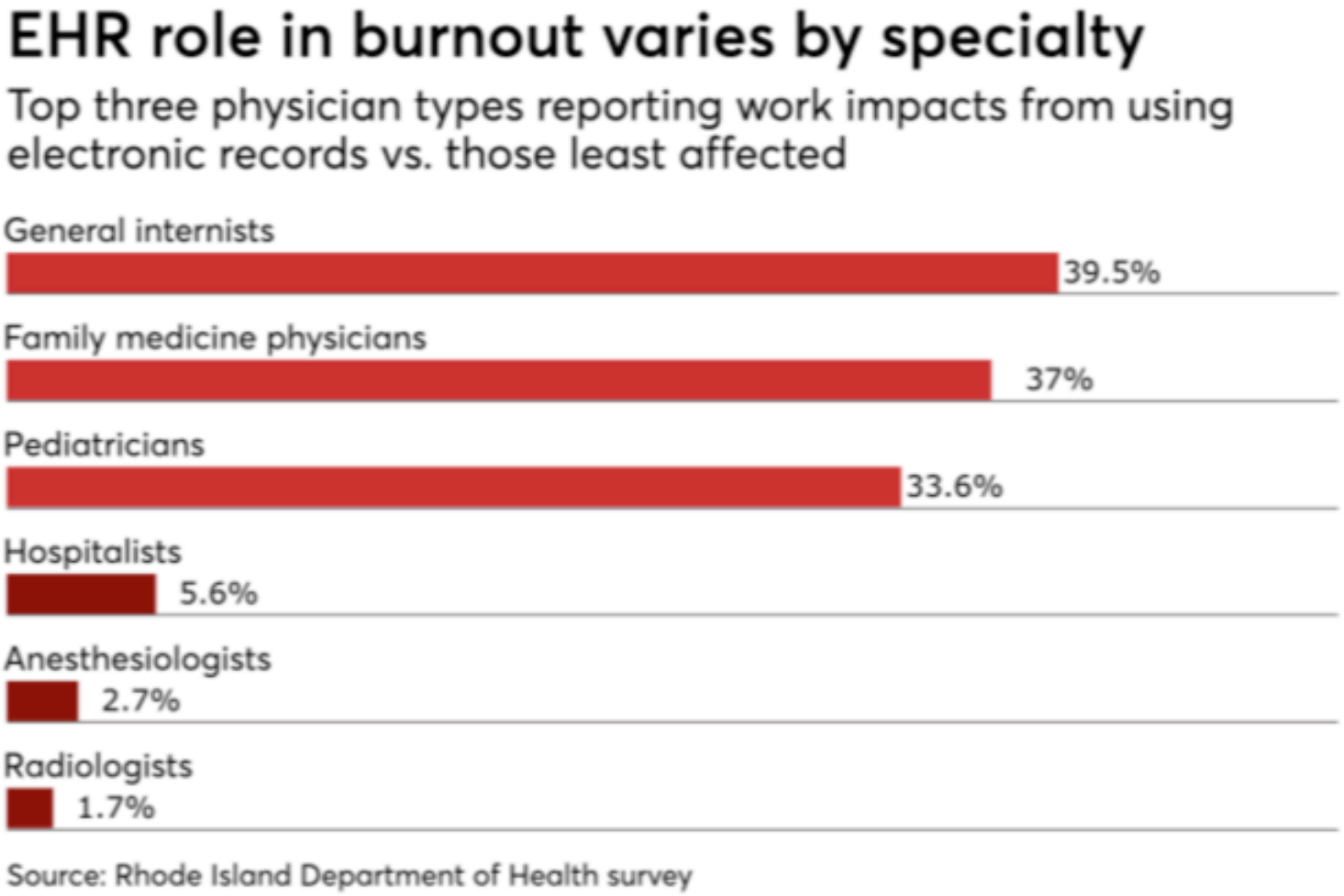
How physicians use their computers

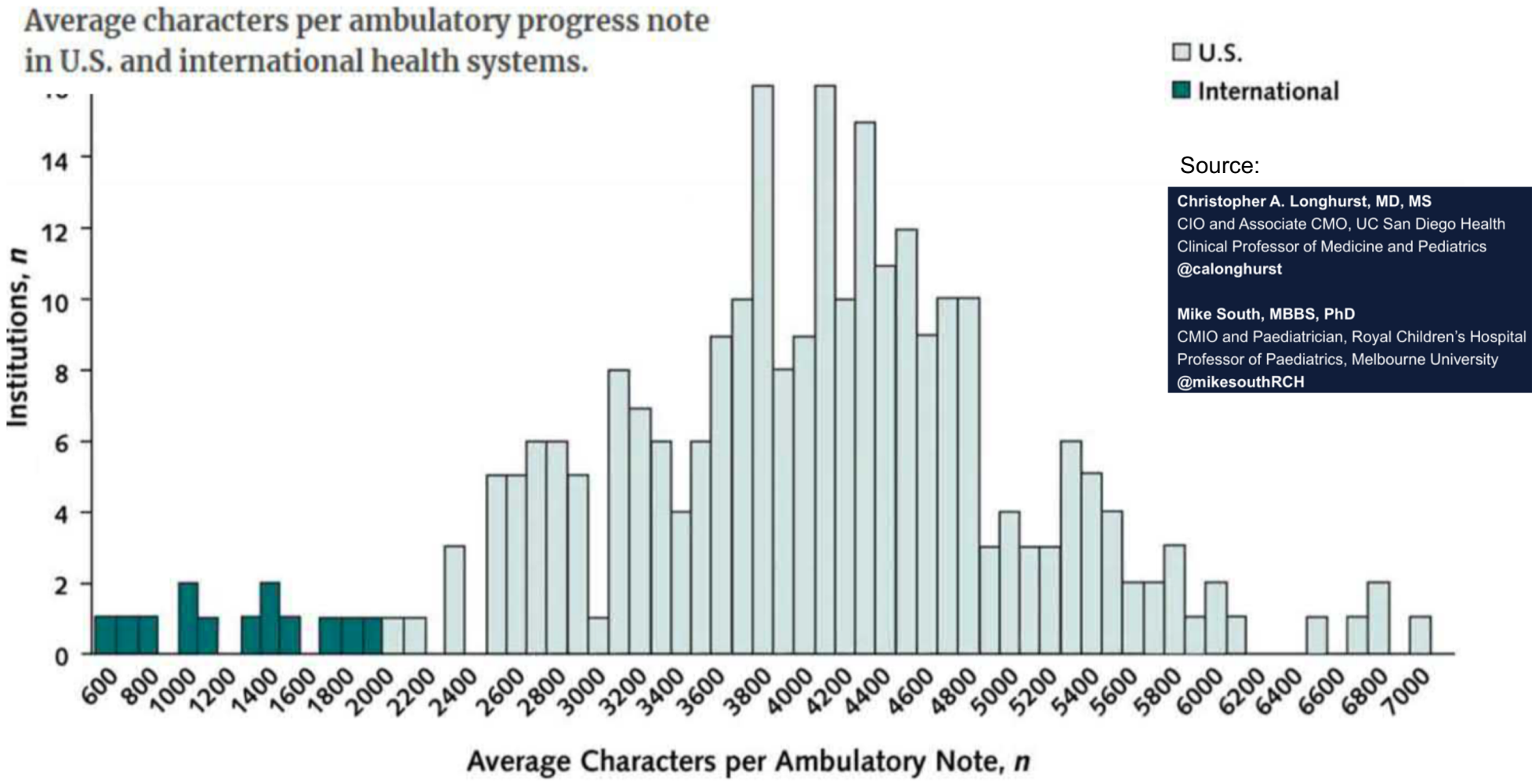
Percent of time spent per day by EHR task category

- Clerical (documentation, order entry, etc.), 44%
- Medical care (chart review, etc.), 32%
- Inbox management, 24%



Source: Health Data Management


EHR role in burnout varies by specialty
Top three physician types reporting work impacts from using electronic records vs. those least affected
General internists
39.5%
Family medicine physicians
37%
Pediatricians
33.6%
Hospitalists
5.6%
Anesthesiologists
2.7%
Radiologists
1.7%
Source: Rhode Island Department of Health survey



Source:

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Reducing Clinician Burden Project

Outreach + Expressed Interest

- Standards Developers
  - Joint Initiative Council (JIC), comprising HL7, ISO TC215 (HIT), CEN TC251 (HIT/Europe), DICOM (Diagnostic Imaging), CDISC (Clinical Research), GS1 (IDs/Labeling), SNOMED (Clinical Vocabulary), IHE (Standards Profiling), PCHCA (Personal Connectivity)
- International Healthcare Community
  - Australia, Canada, Finland, Italy, Netherlands, New Zealand, Sweden, United Kingdom
- Government
  - US Centers for Medicare and Medicaid Services (CMS)
  - US Office of National Coordinator for HIT (ONC)
  - US National Institutes of Health (NIH)
  - US Veterans Administration (VA)
  - UK National Health Service (NHS)
- Accreditation Bodies
  - Joint Commission
- Clinical Professional Societies
  - American College of Physicians (ACP)
  - American College of Surgeons (ACS)
  - American Medical Informatics Association (AMIA)
  - American Nurses Association (ANA)
- Providers
  - Adventist Health, Beth Isreal/Deaconess, Cedars-Sinai Medical Center, Duke University, Intermountain Healthcare, Kaiser Permanente, Loma Linda University, Mayo, Sutter Health, University of Arkansas, University of Nebraska, VA
- Payers
  - UnitedHealth Group
- EHR/HIT System Developers
  - CentriHealth, Cerner, Epic, TLD Systems
- Consortia
  - Health Record Banking Alliance
  - Health Services Platform Consortia
  - Clinical Information Interoperability Council

Reducing Clinician Burden – Breaking It Down

Topics/Categories

- 1) Generally
- 2) Patient Safety (and Clinical Integrity)
- 3) Administrative tasks
- 4) Data entry requirements
- 5) Data entry scribes and proxies
- 6) Clinical documentation: quality and usability
- 7) Prior authorization, coverage verification, eligibility tasks
- 8) Provider/patient face to face interaction
- 9) Provider/patient communication
- 10) Care coordination, team-based care
- 11) Clinical work flow
- 12) Disease management, care and treatment plans
- 13) Clinical decision support, medical logic, artificial intelligence
- 14) Alerts, reminders, notifications, inbox management
- 15) Information overload
- 16) Transitions of care
- 17) Health information exchange, claimed "interoperability"
- 18) Medical/personal device integration
- 19) Orders for equipment and supplies
- 20) Support for payment, claims and reimbursement
- 21) Support for cost review
- 22) Support for measures: administrative, operations, quality, performance, productivity, cost, utilization
- 23) Support for public and population health
- 24) Legal aspects and risks
- 25) User training, user proficiency
- 26) Common function, information and process models
- 27) Software development and improvement priorities, end-user feedback
- 28) Product transparency
- 29) Product modularity
- 30) Lock-in, data liquidity, switching costs
- 31) Financial burden
- 32) Security
- 33) Professional credentialing
- 34.1) Identity matching
- 34.2) Identity and credential management
- 35) Data quality and integrity
- 36) Process integrity
- 37.1) Problem list
- 37.2) Medication list
- 37.3) Allergy list
- 37.4) Immunization list
- 37.5) Surgery, intervention and procedure list

Reducing Clinician Burden

Project Plan

- Now
  - Continue environmental scan – to compile burden topics
  - Engage focus teams to address burden topics
  - Refine, develop targeted recommendations to reduce burdens
  - Identify:
    - What is the source of the burden?
    - Are there recommendations to address the burden?
    - Who (stakeholder) might best address burden?
    - Burdens already tackled: with proposals and/or successful solutions
  - Respond to ONC Draft Strategy
- Then
  - Publish and work to implement recommendations

Reducing Clinician Burden

Focus Teams

- Clinical documentation, quality and usability
  - Lead: Dr. Lisa Masson (Lisa.Masson@cshs.org)
- Clinical decision support, medical logic, artificial intelligence + Alerts, reminders, notifications, inbox management + Information overload
  - Lead: Dr. James McClay (jmcclay@unmc.edu)
- Clinical workflow
  - Lead: Dr. David Schlossman (dschloss39@gmail.com)
- Legal aspects and risks
  - Lead: Dr. Barry Newman (barrynewman@earthlink.net)
- System lock-in, data liquidity, switching costs
  - Lead: Dr. Michael Brody (mbrody@tldsystems.com)
- State of data content quality
  - Leads: Dr. Reed Gelzer (r.gelzer@snet.net), Gary Dickinson (gary.dickinson@ehr-standards.com)

Reducing Clinician Burden

Focus Teams (con't)

- Anticipated: More teams to form (convened on RCB topics)
- To participate: Contact team lead
- Process is open, transparent and inclusive – All are welcome!

Reducing Clinician Burden

Tasks for Volunteers

- Review/evaluate US ONC DRAFT “Strategy on Reducing Regulatory and Administrative Burden Relating to the Use of Health IT and EHRs”
  - Develop HL7 Comments
  - Offer background and source materials for others to comment
- Review Recent US CMS Initiatives and Impact on RCB
  - CMS Patients over Paperwork Initiative:
    - Link 1 Link 2
  - CMS Meaningful Measures:
    - Link
  - CMS Evaluation and Management Guidelines:
    - Link 1 Link 2
- Refine Our RCB Terms

ONC Draft Strategy

Focus on Common Solutions

- US Office of National Coordinator (ONC) *DRAFT Strategy on Reducing Regulatory and Administrative Burden Relating to the Use of Health IT and EHRs*
  (published 28 November 2018, comments due 28 January 2019)
  - "Specific sources of clinician burden... will require coordinated action on the part of a variety of stakeholders across the health care system, including federal, state, local, territorial, and tribal government entities, commercial payers, clinical societies, electronic health record (EHR) developers, various health care provider institutions, and other service providers."
  - "ONC can help to lead the health IT industry towards common solutions that result in reduced burden for clinician users by promoting common standards for health IT systems that support greater efficiency and interoperability, as well as best practices for usability of these systems." [emphasis added]

ONC Draft Strategy

Three Primary Goals

"[The ONC] report outlines three primary goals informed by extensive stakeholder outreach and engagement for reducing health care provider burden:

1. "Reduce the effort and time required to record information in EHRs for health care providers during care delivery.
2. "Reduce the effort and time required to meet regulatory reporting requirements for clinicians, hospitals, and health care organizations.
3. "Improve the functionality and intuitiveness (ease of use) of EHR [systems]."

Reducing Clinician Burden

To Be Considered

- What are the risks if burden is not reduced?
  - e.g., clinician burnout, clinicians choosing other roles/assignments
- If clinician burdens are reduced...
  - Are burdens increased elsewhere (e.g., to other members of the healthcare team)?
  - Are benefits to other aspects of the health/healthcare business model also reduced?
  - What is the trade-off: Safety? Cost? Time? Efficiency? Effectiveness?

Reducing Clinician Burden

Schedule

- Bimonthly teleconferences, Monday at 3PM ET (US)
  - 1st and 3rd Mondays each month
    (NOT 21 January, 4 and 18 February, 4 and 18 March, 1 April)
  - Register at GoToWebinar:
    https://attendee.gotowebinar.com/register/5319012395688064 03
    (After registering, you will receive a confirmation email containing information about joining the webinar.)
- Focus teams meet independently: TBA
- Face-to-face
  - HL7 Meeting in San Antonio
  - Thursday, 17 January 2019, 9AM to 12:30PM

Reducing Clinician Burden

Contacts

- Comments on the DRAFT analysis worksheet are welcome (including additional reference sources) and should be addressed to the HL7 EHR WG Co-Chairs:
  - Gary Dickinson FHL7, Lead: gary.dickinson@ehr-standards.com
    CentriHealth/UnitedHealth Group
  - Michael Brody DPM: mbrody@tldsystems.com
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    Arkansas Children's Hospital/University of Arkansas

Reducing Clinician Burden

Reference Points

- Latest Project Documents
  - Project overview
  - DRAFT Analysis worksheet
  - Links to reference sources
  - http://wiki.hl7.org/index.php?title=EHR_Interoperability_WG#.22Reducing_Clinician_Burden.22_Project
- Comments may also be directed to:
  - US Centers for Medicare/Medicaid Services (CMS) reducingproviderburden@cms.hhs.gov

San Antonio Face to Face – Thursday Q1/Q2

Reducing Clinician Burden

1. Review RCB project overview
2. Review RCB Analysis Worksheet
3. Review comments submitted to the HL7 Policy Advisory Committee regarding the ONC Draft Strategy
4. Get reports from focus team leads, as available
5. Consider how to incorporate recommendations to fully remove burdens
6. Develop template to capture burden reduction success stories
7. Other business

Reducing Clinician Burden

Analysis Worksheet – Tabs

1. Burdens
2. Time Burdens
3. Data Quality Burdens
4. Terms: Reducing, Clinician, Burden
5. Reference Sources
6. Leads: EHR WG Co-Chairs
7. Acknowledgements: Reviewers + Contributors
8. Topics

Analysis Worksheet – Columns

B) Clinician Burdens (the current situation) – Raw Input

C) Recommendations – Raw Input

D) Reference Sources

E) Targeted RCB Recommendation(s) – refined from our reference (and other) sources

F) RCB Proposals and Successful Solutions