

# “Reducing Clinician Burden” Project Overview

Health Level Seven (HL7)  
Electronic Health Record Work Group (EHR WG)  
3 December 2018

## 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



## Reducing Clinician Burden

# Assessing the Burden

- 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:
  - 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)	<ul style="list-style-type: none"><li>• “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</li><li>• “To lower in... intensity” – Dictionary.com</li><li>• “To narrow down”, also “To bring to a specified state or condition” – Merriam-Webster</li></ul>
Clinician	<ul style="list-style-type: none"><li>• “A health professional whose practice is based on direct observation and treatment of a patient” – Mosby's Medical Dictionary</li><li>• “An expert clinical practitioner and teacher” – Miller-Keane Encyclopedia and Dictionary of Medicine, Nursing, and Allied Health</li><li>• “A health professional, such as a physician, psychologist, or nurse, who is directly involved in patient care” – American Heritage Medical Dictionary</li></ul>
Burden	<ul style="list-style-type: none"><li>• “A source of great worry or stress”, and “[Something that] cause[s] difficulty [or] distress”, also “To load or overload” – The Free Dictionary</li><li>• “Something that is carried, [as in a] duty [or] responsibility”, also “Something oppressive or worrisome” – Merriam-Webster Dictionary</li></ul>

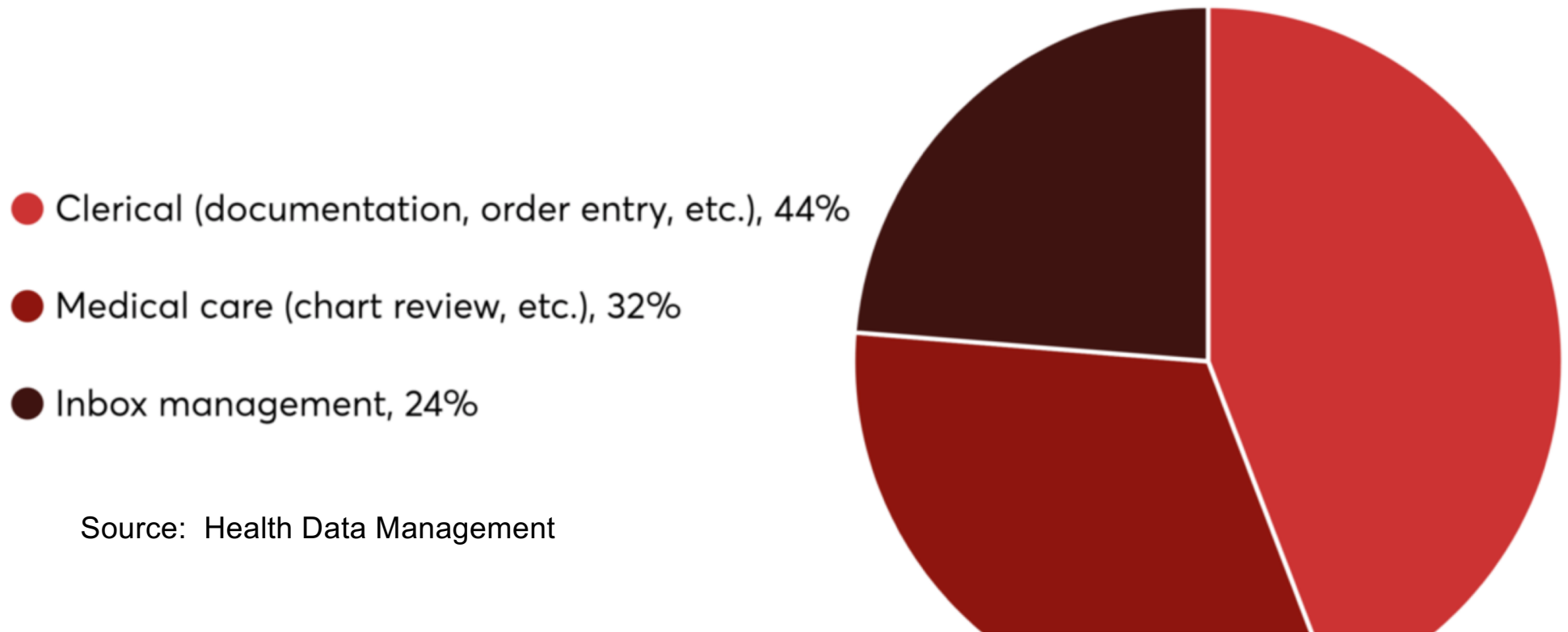
## Reducing Clinician Burden

# Defining Terms (DRAFT)

<b>Clinician Burden</b>	<p>Anything that hinders patient care, either directly or indirectly [such as]:</p> <ol style="list-style-type: none"><li>1) Undue cost or loss of revenue,</li><li>2) Undue time,</li><li>3) Undue effort,</li><li>4) Undue complexity of workflow,</li><li>5) Undue cognitive burden,</li><li>6) [Uncertain quality/reliability of data/record content,]</li><li>7) Anything that contributes to burnout, lack of productivity, inefficiency, etc.,</li><li>8) Anything that gets in the way of a productive clinician-patient relationship.</li></ol> <p>-- Peter Goldschmidt</p>
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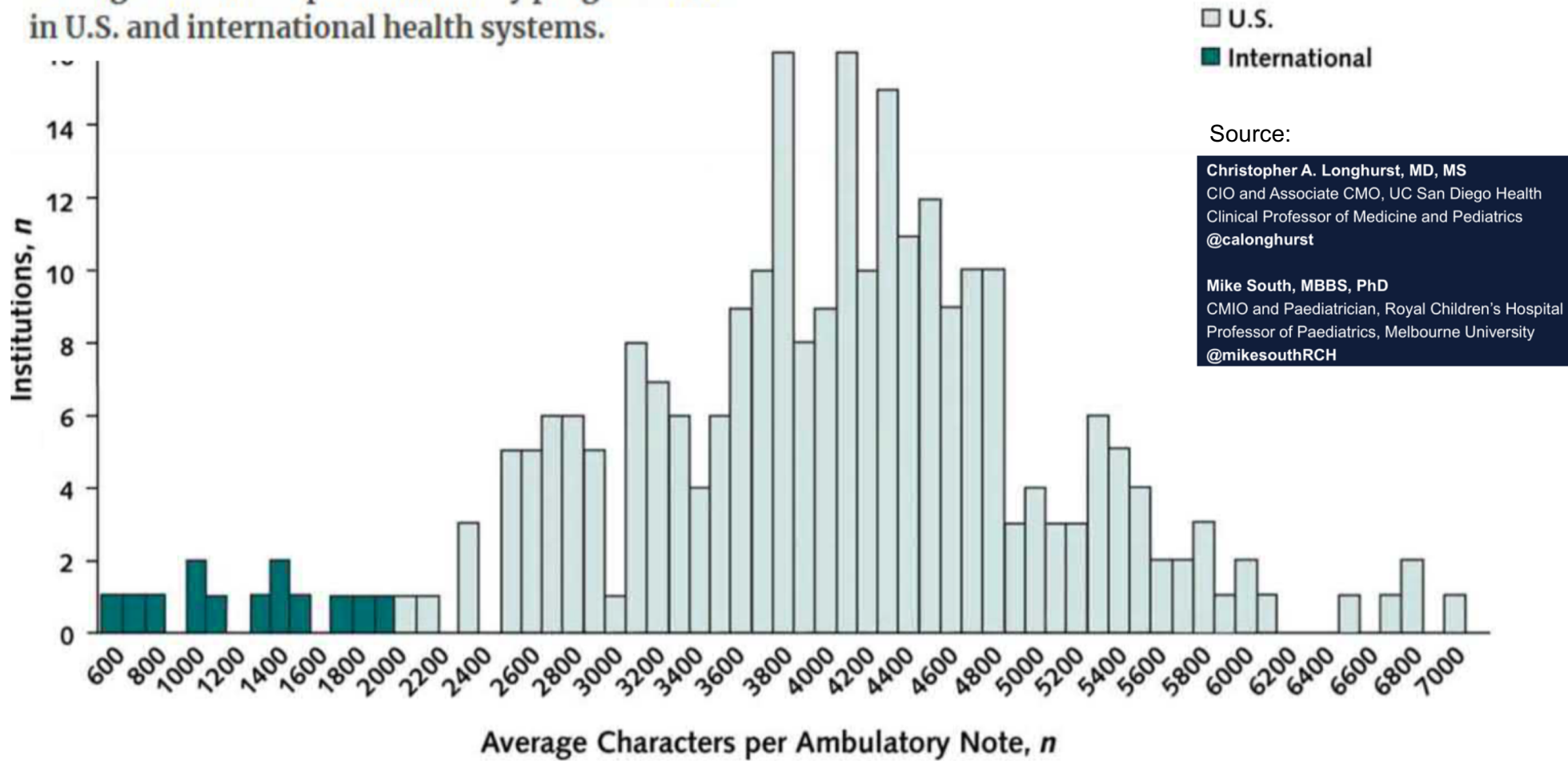
# How physicians use their computers

Percent of time spent per day by EHR task category



Source: Health Data Management

## Average characters per ambulatory progress note in U.S. and international health systems.





## 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
- Professional Societies
  - American College of Physicians (ACP)
  - American College of Surgeons (ACS)
  - American Nurses Association (ANA)
- Providers
  - Adventist Health, Beth Israel/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 (32)

- Administrative tasks
- Data entry requirements
- Scribes, data entry proxies
- [Clinical documentation: quality and usability](#)
- Prior authorization, verification, eligibility tasks
- Provider/patient
  - Face to Face Interaction
  - Communication
- Care coordination, team-based care
- [Clinical work flow](#)
- Disease management, care and treatment plans
- [Clinical decision support, medical logic, artificial intelligence](#)
- [Alerts, reminders, notifications, inbox management](#)
- [Information overload](#)
- Transitions of care
- Health information exchange, claimed “interoperability”
- Medical/personal device integration
- Orders for equipment and supplies
- Support for payment, claims and reimbursement
- Support for cost review
- Support for measures: administrative, operations, quality, performance
- Support for public and population health
- Legal aspects and risks
- User training, proficiency
- Common function/information models
- Software development priorities
  - End-User Feedback
- Product transparency
- Product modularity
- [Lock-in, data liquidity, switching costs](#)
- Financial burden
- Security
- Professional Credentialing
- [State of data content quality](#)

Reducing Clinician Burden

# Analysis Worksheet – Tabs

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

Reducing Clinician Burden

# Analysis Worksheet – Columns

B) Clinical Burdens – 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

Reducing Clinician Burden

# Targeted Recommendations

WHAT – Burden Targeted	WHO – Might Best Address Burden	With Engaged Clinicians
Health Informatics Standards <ul style="list-style-type: none"> <li>• HL7 EHR System Functional Model/ Profiles</li> <li>• Messages (HL7 v.2x), Documents (HL7 CCDA), Resources (HL7 FHIR)</li> <li>• Implementation Guides</li> </ul>	Standards Developers/Profilers: <ul style="list-style-type: none"> <li>• DICOM, HL7, IHE, ISO TC215, NCPDP, ASC X12N...</li> </ul> Standards Coordinating Bodies <ul style="list-style-type: none"> <li>• Joint Initiative Council</li> </ul>	
Regulation, Policies	Government, Accreditation Agencies	
Claims, Payment Policies	Public and Private Payers	
System/Software Design	EHR/HIT System Developers/Vendors	
System/Software Implementation	System Implementers	
Advisories	Professional Societies, Consultants	

## Reducing Clinician Burden

# Project Plan

- Now
  - Continue environmental scan – to compile burden topics
  - Engage small teams to address burden topics/categories
  - Refine, develop targeted recommendations to reduce burdens
  - Identify:
    - What is the burden targeted?
    - Are there existing recommendations for targeted burdens?
    - Who might best address burden?
    - Burdens already tackled: with proposals and/or successful solutions
- Then
  - Publish and work to implement recommendations

## Reducing Clinician Burden

# Teams Engaged

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

Reducing Clinician Burden

# Teams Engaged

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



# Additional Tasks for Volunteers

- Review ONC DRAFT “Strategy on Reducing Regulatory and Administrative Burden Relating to the Use of Health IT and EHRs”
  - Develop HL7 Comment Recommendations
- 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

## 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  
(19 November, 3 and 17 December, 7 January)
  - Register at GoToWebinar:  
<https://attendee.gotowebinar.com/register/1978986084296101377>  
(After registering, you will receive a confirmation email containing information about joining the webinar.)
- Small teams meet independently: TBA
- Next face-to-face
  - HL7 Meeting in San Antonio
  - Thursday, 17 January 2019

## 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](mailto:gary.dickinson@ehr-standards.com)  
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  - Pele Yu MD: [Pele.Yu@archchildrens.org](mailto:Pele.Yu@archchildrens.org)  
Arkansas Children's Hospital

## 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](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](mailto:reducingproviderburden@cms.hhs.gov)