Improving Clinical Care and Public Health with Electronic Case Reporting

Friday, March 24, 2017

1:30PM-3:00PM ET | 12:30PM-2:00PM CT | 11:30AM-1:00PM MT | 10:30AM-1:00PM PT
Improving Clinical Care and Public Health with Electronic Case Reporting

Purpose
Promote awareness and support of electronic case reporting (eCR), the Digital Bridge partnership and its eCR efforts, and recommendations to advance eCR in your jurisdiction.
GoTo Webinar Instructions

1. Audio
   - Default setting is VOIP (computer mic/speakers)
   - If you prefer phone, use dial-in number and unique pin

2. Questions
   - During presentations, ask questions using Question pane
Get-to-know you...

1. Which of the following best describes your area of work?
   a. Local public health
   b. State public health
   c. Non-governmental public health
   d. Health care delivery
   e. Health information technology
   f. Journalism
   g. Academia
   h. Other governmental work (e.g., defense, etc.)
   i. Other

2. Which best describes your knowledge of electronic case reporting (eCR)?
   a. “I have no idea what eCR is.”
   b. “I have heard about eCR, and have a vague understanding.”
   c. “I know about eCR, but don’t know what it means to Digital Bridge.”
   d. “I am an eCR expert, and can explain it to anyone.”
Improving Clinical Care and Public Health with Electronic Case Reporting

Featured Speakers

John Lumpkin, MD, MPH
Senior Vice President, Robert Wood Johnson Foundation

Bill Mac Kenzie, MD
Deputy Director for Science, Center for Surveillance, Epidemiology and Laboratory Services, CDC

Susan Mosier, MD, MBA, FACS
Secretary and Director of Public Health, Kansas Department of Health and Environment

Arthur Davidson, MD, MSPH
Director, Public Health Informatics and Epidemiology and Preparedness, Denver Public Health Department
Welcome

Mary Ann Cooney, MPH, MSN
Chief, Health Systems Transformation
Association of State and Territorial Health Officials

E. Oscar Alleyne, DrPH, MPH
Senior Advisor, Programs
National Association of City and County Health Officials
Managing Information to Build Health Beyond Health Care

John R. Lumpkin, MD, MPH, FAAN
Senior Vice President
Robert Wood Johnson Foundation
Coming Soon: A Wearable Artificial Kidney?
Small trial suggests device might be feasible, potentially freeing patients from dialysis machines

By Robert Preidt
Tuesday, June 7, 2016
Do we have the best health in the world?
The U.S. has the lowest life expectancy at birth among OECD comparable countries

Life expectancy at birth in years, 2011

<table>
<thead>
<tr>
<th>Country</th>
<th>Life Expectancy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switzerland</td>
<td>83</td>
</tr>
<tr>
<td>Japan</td>
<td>82</td>
</tr>
<tr>
<td>France</td>
<td>83</td>
</tr>
<tr>
<td>Australia</td>
<td>82</td>
</tr>
<tr>
<td>Sweden</td>
<td>83</td>
</tr>
<tr>
<td>Comparable Country Average</td>
<td>82</td>
</tr>
<tr>
<td>Canada</td>
<td>81</td>
</tr>
<tr>
<td>Netherlands</td>
<td>82</td>
</tr>
<tr>
<td>Austria</td>
<td>81</td>
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<tr>
<td>United Kingdom</td>
<td>81</td>
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<tr>
<td>Germany</td>
<td>81</td>
</tr>
<tr>
<td>Belgium</td>
<td>80</td>
</tr>
<tr>
<td>United States</td>
<td>79</td>
</tr>
</tbody>
</table>

1900

- LEADING CAUSE OF DEATH
- PNEUMONIA
- TUBERCULOSIS
- DYSENTARY
- LIFE EXPECTANCY 49 YEARS
- 4-5% GNP EXPENDED ON HEALTH CARE
1960

- LEADING CAUSES OF DEATH
- HEART DISEASE
- CANCER
- STROKE
- LIFE EXPECTANCY 65 YEARS
- 4-5% GNP ON HEALTH CARE
Life expectancy vs. health expenditure over time (1970-2014)

Health spending measures the consumption of health care goods and services, including personal health care (curative care, rehabilitative care, long-term care, ancillary services and medical goods) and collective services (prevention and public health services as well as health administration), but excluding spending on investments. Shown is total health expenditure (financed by public and private sources).

Data source: Health expenditure from the OECD; life expectancy from the World Bank. Licensed under CC-BY-SA by the author Max Roser. The data visualization is available at OurWorldinData.org and there you find more research and visualizations on this topic.
71% of those 17 to 24 are ineligible to serve in the military.
The rise of oils, fats and grains
percent change in average daily per-capita calories (1970 value = 100)

Source: USDA
We, as a nation, will strive together to build a culture of health enabling all in our diverse society to lead healthy lives, now and for generations to come
what is a culture of health?
Being healthy and staying healthy is an esteemed social value.
health of the population guides public and private decision-making
In the past, the benefits of modern medical science have not been enjoyed by our citizens with any degree of equality. Nor are they today. Nor will they be in the future – unless government is bold enough to do something about it.

– Harry Truman
Government alone can cause problems. Government alone cannot fix them.

- Jim Edgar 1991
individuals, businesses and governments work collectively to foster healthy communities and lifestyles.
Geography and demographics do not serve as barriers to good health.
the economy is less burdened by excessive and unwarranted health care spending
we are all supported to make **proactive choices** that will improve our health.
we will only be able to succeed if we take chances and consider completely new approaches and ways of thinking
Asthma hotspots and participant enrollment

Participants enrolled/zip code
- 0 - 5
- 6 - 10
- 11 - 20

Primary roads:

Indiana

Kentucky

Ohio River

Avg. wind direction
SW (210 degrees)
Public health and health care use the same data – they just look at it differently

- Christine Gebbie
Metabolic Screening Program

- Sample collected at hospital
- Results returned to physician
- Abnormals followed up
- Where available therapeutic diet provided
<table>
<thead>
<tr>
<th>DISEASE OR SUSPECTED DISEASE</th>
<th>OUTBREAK RELATED</th>
<th>CASE</th>
<th>CARRIER</th>
<th>DATE OF ONSET</th>
<th>MALE</th>
<th>FEMALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PATIENT'S LAST NAME, FIRST NAME</td>
<td>AGE</td>
<td>NATIVE AMERICAN</td>
<td>ASIAN OR PACIFIC ISL.</td>
<td>BLACK</td>
<td>WHITE</td>
<td>UNK.</td>
</tr>
<tr>
<td>PATIENT'S STREET ADDRESS</td>
<td>CITY OR POST OFFICE</td>
<td>COUNTY</td>
<td>TELEPHONE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OUT-PATIENT</td>
<td>IN-PATIENT</td>
<td>NOT TREATED IN HOSPITAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PHYSICIAN'S NAME</td>
<td>ADDRESS</td>
<td>CITY OR TOWN</td>
<td>TELEPHONE</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DATE OF REPORT</td>
<td>REPORTED BY (PLEASE CIRCLE)</td>
<td>HEALTH JURISDICTION</td>
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<tr>
<td>STATE LAB</td>
<td>ICP</td>
<td>HOSP.</td>
<td>PHYSICIAN</td>
<td>HOSP. LAB</td>
<td>PRIVATE LAB</td>
<td></td>
</tr>
<tr>
<td>OTHER</td>
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Despite state and local laws requiring medical providers to report notifiable infectious diseases to public health authorities, reporting is believed to be incomplete. Through means of an analytical literature review, the reporting completeness is 9 to 99%.
Average Notifiable Disease

- Sample collected at hospital
- Results returned to physician
- Report filed
- Then ........................................
Reporting Varies by Jurisdiction
Reporting Varies by Jurisdiction
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Reporting Varies by Jurisdiction
Completeness of Notifiable Infectious Disease Reporting in the United States: An Analytical Literature Review

Timothy J. Doyle, M. Kathleen Glynn, and Samuel L. Groseclose

Despite state and local laws requiring medical providers to report notifiable infectious diseases to public health authorities, reporting is believed to be incomplete. Through means of an analytical literature review, the
Initial Coordination for Digital Bridge eCR Proof-of-Concept Working Groups

- August 5, 2016; Facilitators – John Lumpkin & Andy Wiesenthal
Participating Organizations
Vision

We will work together to improve the health of our nation by creating a bi-directional exchange of health information between public health and health care.
Critical Concepts

- Paper-based thinking
- Progress will be uneven
- We build towards the future
Hillel the Elder
born 110 BCE

Do not say, “when I am free, I will study” for you will never be free

If not us, who – if not now, when