Electronic Health Record Association

Public Health Data Systems: Current status, future needs

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The Role of Health IT

Conclusion: The EHR is an essential tool in supporting the clinical needs of a health system managing the COVID-19 pandemic.

**Identifying Patients**
CDC travel screens, standardized symptom screening, defining a COVID-19 positive patient, accommodating drive-through testing

**Dashboards/Reporting**
Lab results, capacity, ventilator usage, patient volumes, etc.

**Triage**
Online patient-facing tools to self-diagnose, standardized phone triage, predictive models to assess risk

**Telehealth**
Asynchronous questionnaire-based visits, synchronous video visits, tele-urgent care, COVID-19 home care plans

**Communication**
Patient portals, patient messaging en masse, lab results shared with patients automatically

**Effective Resource Use**
Remote monitoring at home, PPE conservation (use video in the hospital, virtual patient registration, track inventory), benchmarked capacity metrics

**Staff Expansion**
Simple workflows, limited security, streamlined training

**Surge Planning**
Add new areas/beds, extend EHR to non-traditional settings

**Reestablishing Care**
Rescheduling canceled cases, proactive outreach to high-risk patients

**Addressing Social Risk**
Social determinant tracking and reporting, PTSD resources for staff

**Financial Stability**
Reports, forecasting, cost-savings measures

**Contact Tracing**
Identify highest risk individuals, inside the walls, out in the community

**Testing**
“Advertise” tests to patients, support self-scheduling, provide results online

**Vaccinations**
Determine areas of community spread for vaccine trials, understand vaccine effectiveness and reinfection potential, spot mutated strains, eligibility, scheduling, administration, reporting, adverse events, certificates
Data Needs and Challenges

Data requests to providers from public health agencies, research and industry initiatives have included:

- (Real World Data) Research
- Syndromic Surveillance
- Laboratory Reports
- Immunizations
- Case Reports
- Operational Statistics
  - Admissions, Hospital capacity, Bed availability, Tests performed, Ventilator utilization, Demographics, Co-morbidities
- Incremental Data Access
- Scheduling Availability
- Immunization Certificates

Data reporting challenges encountered include:

- Short-turnaround requests for large volumes of historical data
  - Ensuring consistent & complete reporting
  - Minimum necessary
- Aligning measures and reporting across requesters
  - Variant measure definitions
  - Duplicate reporting
  - Competing requests
- Right-sizing reporting and transaction content
- State variations
- Data quality
Our Recommendations:

Upgrade the National Reporting Infrastructure
- Core dataset
- Report once, share widely
- Standards
- Incentives and funding
- Education and training

Establish a Surge Process and Infrastructure
- Emergency capacity
- Additional data definitions
- Ongoing preparedness evaluation

Clarify Privacy and Consent Requirements
- For patients
- For healthcare delivery organizations
- Data retention and protection policies
- Research

Encourage Participation in National Networks
- Carequality, CommonWell, eHealth Exchange, etc.
- Patient info at the point of care
- Additional data beyond core dataset

Support Accurate, Unique Patient Identification
- If not a national unique identifier, then something else