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.

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The Role of Health IT

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

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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

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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

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