COVID-19
Impact on health care systems

Princeton Conference
November 19, 2020

Timothy G. Ferris, M.D.
CEO, Mass General Physicians Organization
Massachusetts General Hospital

MASSACHUSETTS GENERAL HOSPITAL

MASSACHUSETTS GENERAL PHYSICIANS ORGANIZATION

Academic Medical Centers at their best

o   <u>Working for a singular important purpose</u>
- Emotions running high: fear, pride, weariness

o   <u>Remarkable Pivot for Science Infrastructure</u>
- basic, translational and clinical researchers
  - o   4 vaccine candidates from local collaboratives
  - o   Rapid dissemination of new knowledge
    - \>60,000 hits from all over world to our clinical protocols
    - 65 new trials; >230 publications;

o   <u>And also the usual work</u>:
- despite 4x increase in intubated patients, 60% of inpatient work remained non-covid
  - o   Preventable mortality
- Teaching challenges (risks and opportunities)
- Community health (unequal illness burden)

Impacts from COVID-19: accelerating existing trends

Digital Health
- Video visits, clinical apps, admin apps, analytics (clinical/operations/finance)
- Will healthcare finally start to see the productivity gains that digital has brought to other industries? State licensure as a major restraint on effective methods to improve access

System capacity
- Regional level loading + equipment sharing = coopetition
- IDS: significant ability to match resources to capacity challenges on a daily basis
- Supply chain vulnerabilities

Workforce
- Over 500 clinicians retrained and redeployed
- Increased sensitivity to equity issues surface during times of stress; increase acute mental health concerns

Health Disparities
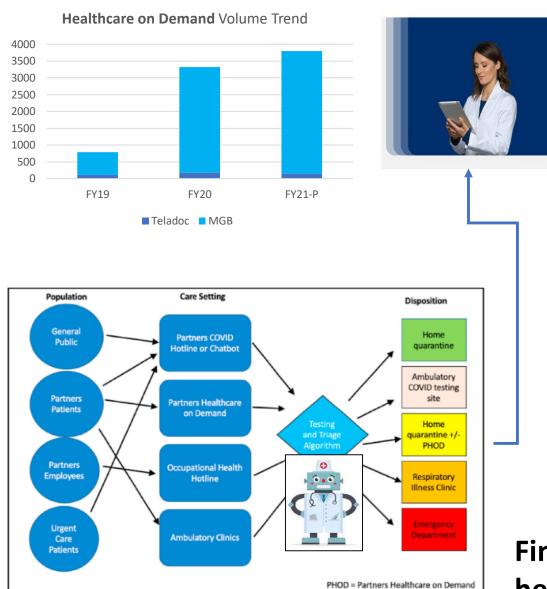- Data/Funding/attention

Financial
- Ended year with small loss (revenue down 20%, federal relief funds made up 75% of deficit)
- Federal relief rationally designed, poorly implemented (appeared capricious or worse)
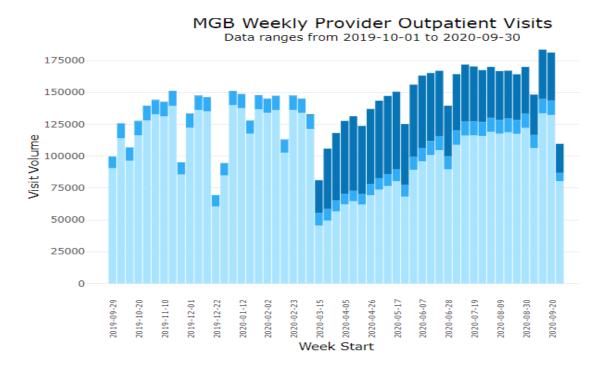
Structural issues
- Leaner management structure: more efficient decision making
- Large worked out better (balance clinical and financial loads)
- Port in the storm v. anti-trust

MASSACHUSETTS GENERAL HOSPITAL

MASSACHUSETTS GENERAL PHYSICIANS ORGANIZATION

Healthcare on Demand Volume Trend

(Bar chart, y-axis 0–4000: FY19 ≈ 800, FY20 ≈ 3300, FY21-P ≈ 3800. Legend: ■ Teladoc ■ MGB)

Population — Care Setting — Disposition diagram:

- Population: General Public, Partners Patients, Partners Employees, Urgent Care Patients
- Care Setting: Partners COVID Hotline or Chatbot, Partners Healthcare on Demand, Occupational Health Hotline, Ambulatory Clinics → Testing and Triage Algorithm
- Disposition: Home quarantine, Ambulatory COVID testing site, Home quarantine +/- PHOD, Respiratory Illness Clinic, Emergency Department

PHOD = Partners Healthcare on Demand

From 0.6% to 62% of Ambulatory Care in 6 Weeks

MGB Weekly Provider Outpatient Visits
Data ranges from 2019-10-01 to 2020-09-30

(Bar chart, Visit Volume y-axis 0–175000, x-axis Week Start from 2019-09-29 to 2020-09-20)
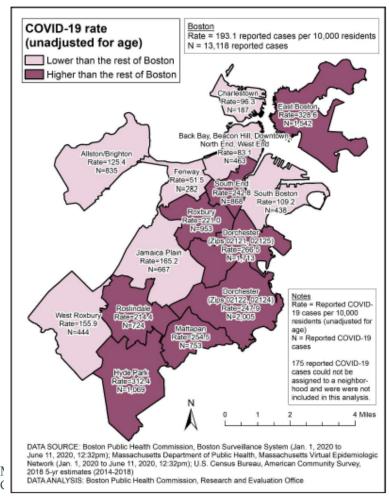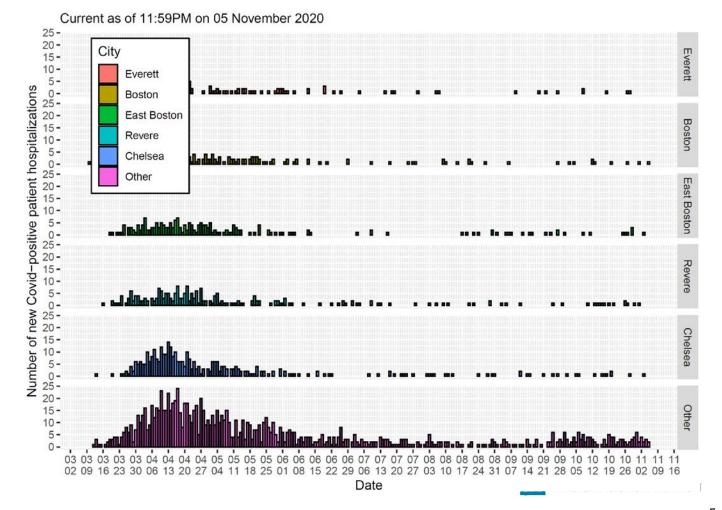
Finally, tech delivers increased productivity to healthcare delivery

Highlighted social inequities

Vulnerable populations hit disproportionately

Comparing NHS to US

- NHS
  - Very inexpensive
    - 40% of nursing jobs vacant
    - Lowest beds/pop in OECD
    - "Age of plant" = Victorian era
  - Command and control
    - Spend your budget (or more)
    - Limited initiative – wait until you are told
    - Follow the letter of the instruction from on high
  - COVID-19
    - Problem solving at national level (pros and cons)
    - Minimal waste in re-budgeting
    - Re-opening: very slow (never recovered)