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ACMQ Virtual Conference, August 2020
• Recap of Digital Technology, Tools, & Virtual Health for HTN Quality Improvement

• Impact of COVID-19 on Quality Improvement within Organizations

• Quality Improvement Models & Tools

• Quality Improvement Innovation: Process, Technology, & Future Digital State
RECAP: VIRTUAL HEALTH & HYPERTENSION

- Quality Improvement using Digital Tools & Technology
  - Education
  - Training
  - Monitoring
  - Data Collection
  - Quality Dashboards

Innovation with Digital Technology
QI REIMAGINED: COVID-19 IMPACT WITHIN ORGANIZATIONS

- Redeployment of Clinical Quality Improvement (QI) personnel
  - Focus on clinical care for COVID-19 Patients
- Stay at home orders
  - Non-essential sent home
  - Working remotely
- CMS suspended and/or modified some QI reporting (i.e. MIPS)

- Quality Improvement Teams
  - Priorities Changed
  - Workflow processes disrupted
  - Programs & Projects placed in hibernation
  - Frequency of meetings changed

QI During the COVID-19 Pandemic, Oesterrich et al, June 2020
CMS News, March 2020
COVID-19: PS and QI skills to deploy during the Surge, Staines et al, May 2020
QI REIMAGINED: QI MODELS & TOOLS

**QI Models** (PDSA, Lean, Six Sigma, etc.)

- Historically created based on in person meetings
- Limited use of digital technology and tools to do the work except collection, analytics, and dashboards/scorecards

**QI Tools** (Cause Analysis, Data Collection, Process Analysis, etc.)

- Small and/or large group meetings—in person
- Creation of analysis, flow diagrams, rounding, and other events--in person

HQB, Chap 1, Jaffe et al, 2019
QI REIMAGINED: INNOVATION OF PROCESSES WITH DIGITAL TECHNOLOGY

- Did your Organization have a previous designed policy & procedure on what to do for continuing organization quality improvement activities for disasters, significant weather events, pandemics, etc.?

- If so, did you consider
  - Working Remotely
  - How to limit Project Disruption
  - Data Collection impacts
  - Having technology to continue using your QI Models & Tools
QI REIMAGINED: INNOVATION & ADAPTATION OF PROCESSES WITH DIGITAL TECHNOLOGY

Data Collection & Analysis

Many are automated
Some manual observation & documentation

Digitally Delivered QI Models & Tools

General Collaboration
Visual Collaboration
Task/Project Management
Process Mapping Tools
QI REIMAGINED: FUTURE DIGITAL STATE

• Wider Dissemination & Access
• Engagement
• Improved Efficiency
  • Consultants
  • Costs
• Digital Command Centers
  • Developed with Quality Improvement in mind
  • Quality Improvement steering Operations
  • Standard Work & Guiding Tenets

• PEOPLE, PROCESS, TECHNOLOGY!

Use of Systems Engineering to Design a Hospital Command Center, Kane et al, May 2019
Digital Technology & The Future of Health of Health Systems, Mitchell & Kan, Jan 2019
THANK YOU
REFERENCES

- Quality Improvement During the COVID-19 Pandemic
  https://www.ccjm.org/content/early/2020/06/01/ccjm.87a.ccc041

- COVID-19: patient safety and quality improvement skills to deploy during the surge

- CMS announces Relief for Clinicians, Providers, Hospitals, and Facilities Participating In Quality Reporting Programs in Response to COVID-19

- Use of Systems Engineering to Design a Hospital Command Center

- Digital Technology and the Future of Health Systems