The AHA Physician Alliance regularly convenes senior physician executives in member health systems as part of its Physician Leadership Circle to discuss strategic opportunities and challenges. Dr. Michael Howell, Google AI’s chief clinical strategist, recently led a discussion by sharing insights on what clinicians should know about artificial intelligence (AI) and machine learning. Below are highlights.

**AI will solve and disrupt medicine, but not overnight.**
There have been huge advances in fundamental machine learning – consider image recognition, translation and computational power – however the field has yet to determine where these advances can most benefit health care delivery. Estimates predict it could take two to three years for leaders to set direction and another 10-12 years for changes to materialize.

**AI’s impact will be targeted.**
AI and machine learning will have the greatest impact on:
- Personalized medicine (e.g., genetics/genomics),
- Diagnostics and imaging, and
- Care management and decision support (e.g., health monitoring, medication management, virtual consultation).

**AI will be a tool, not a replacement for physicians.**
Just as spreadsheets and accounting software did not replace CFOs, AI and machine learning is not expected to replace physicians, but it likely will fundamentally change how they work. Physicians should be part of technological innovation, shaping technology into care models.

**To succeed, AI must be integrated into clinical team protocols.**
Without workflow integration, AI support tools are doomed to fail so physician leaders and organizations should start considering what key actions are essential and involve clinical teams from the beginning.

**What are the AI implications concerning you?**
Join the Physician Leadership Circle and share your thoughts. Email physicianalliance@aha.org to join.

Visit [www.aha.org/physicians](http://www.aha.org/physicians) for more information, tools and resources from the AHA Physician Alliance.