The 2019 ARM is organized around the following 21 themes in health services research and policy:

**AGING, DISABILITY, AND END-OF-LIFE**
This theme encourages abstract submissions that address one or more of its three dimensions: aging, disability, and palliative and end-of-life care
- Innovative strategies to improve access, quality, and coordination of services (including prevention).
- Social determinants of health and access to non-health supports and accommodations (e.g. housing, education, work, and transportation)
- Alternative payment models in long-term services and supports (LTSS) across the care spectrum
- Reducing disparities in access to, and quality of, LTSS and end-of-life care
- Encouraging patient- and family-centeredness across the lifespan, including patient self-determination and caregiver support.
- Optimizing function and quality of life for people with degenerative conditions such as dementia

**BEHAVIORAL HEALTH**
- Evaluating the implementation and effects of federal and state policy changes (e.g., Medicaid and ACA behavioral health benefit expansions, ACOs/shared savings models, cannabis legalization, immigration laws) on health services utilization, cost, and outcomes, and equity
- Understanding and overcoming disparities in behavioral health services use and outcomes
- Provider and patient-focused strategies to prevent and manage unhealthy use of alcohol, opioids, and other substances
- Development, testing, and implementation of behavioral health services (e.g., integrated care models, payment models, community-based models) to improve access, quality, and equity of care
- Innovations in behavioral health services, including telemedicine and technology
- Behavioral health interventions addressing the prevention of suicide and gun violence

**CHILD AND FAMILY HEALTH**
- Opioid epidemic and Its Effect on Children’s Health and Mental Health Across the Lifespan
- The NIH Environmental Influences on Child Health Outcomes (ECHO) to include development and methodological improvements in understanding inputs into child and adult thriving, positive health outcomes and well-being, including psycho-social, familial, health behaviors and the physical environment to inform healthcare delivery care and policy
- Innovations for the Delivery of Child, Adolescent, and Family Health Care: Cross-Sector, New Models of Integrated Care, Health System
- ACA and Medicaid Changes and the Impact on Child Health and Healthcare
- Measurement and reporting of child and family healthcare quality/safety for health systems, providers and policymakers including approaches to Patient- and Family-Centeredness: Promoting Engagement and Agency Among Families and Communities, Patient/Stakeholder Engagement in the Research Process
- Emerging Applications of Tele-Medicine in the Provision of Healthcare for Children and Their Families

**CONSUMER CHOICE AND INCENTIVES**
- Impact of insurance plan design (e.g., high-deductible, alternative payment models) on healthcare choices and utilization
- Health plan selection, including how consumers choose plans to the impact of their choices
- Consumerism and use of different types of information (e.g., prices, quality, ratings) in health care decisions
- Incentives (e.g., financial, social) and behavioral economics to influence consumer and provider decisions
- Strategies and evidence on enhanced consumer engagement and shared decision making
- New methods for providing information and data to promote health consumerism (e.g., data visualization, health numeracy, health literacy)
COVERAGE, ACCESS, AND MEDICAID

- Trends in coverage (employer sponsored, Marketplace, Medicaid, uninsured, and churning between programs) and the impacts of federal and state policy and regulatory changes on coverage
- Trends in access, utilization, health, financial security, and labor market outcomes and impacts of federal and state policy and regulatory changes on these outcomes
- Trends in public and private health insurance benefit design, including provider networks, premiums, cost-sharing, deductibles, tiered benefits, and value-based insurance design, and their impacts on coverage, access, use, health and cost
- State Medicaid policy variation, including waiver approaches, and implications for coverage, access, use, health, and program costs
- New state work requirements for Medicaid and their implications for coverage, access, use, health, and program costs
- Legal and regulatory issues with implications for health insurance coverage and access to care, including those related to provisions of the ACA and alternative reform proposals

NEW NAME: DIGITAL TECHNOLOGIES, DATA, AND DATA SCIENCE

- Ethical, legal, and regulatory/policy issues surrounding digital technologies (e.g., EHRs, telehealth, sensors), consumer-oriented technologies (e.g., patient portals), administrative systems (i.e., insurance, scheduling), and ancillary systems (e.g., pharmacy, radiology, laboratory, long-term care, home care)
- Progress in the governance, adoption, implementation, interoperability, diffusion, and value-creation from digital technologies and digital data for clinical care, population health management, public health, and research
- Socio-technical and organizational issues surrounding the governance and use of digital technology platforms to enable clinical transformation, population health management, and the development of a learning health system
- Patient-generated health data, patient and community engagement, and consumer-facing technologies (e.g., electronic patient reported outcomes, mHealth, and wearables)
- Emerging data sources (e.g., sensor technologies, social media, social determinants, genomics, digital dust, financial, and linked open data) and methods (e.g., big data analytics, data science, and real world evidence) to accelerate discovery and inform policy and health system transformation
- Collecting, managing, governing, and analyzing data to generate real world evidence (i.e., derived from data collected outside of randomized controlled trials)

DISPARITIES AND HEALTH EQUITY

- Interdisciplinary research examining disparities in health and health care delivery by age, gender, race, ethnicity, socioeconomic status, sexual orientation, geography, immigration status, and disability, with an emphasis on intersectionality of multiple factors
- Quantitative, qualitative, and mixed-methods research focused on disparities in access to care and/or inequitable health outcomes in domestic and/or international settings
- Process and outcome evaluations of policies, programs, and interventions designed to reduce disparities
- Structural discrimination (racism, sexism, etc.) in health care delivery and the health care workforce (diversity, patient-provider concordance, etc.)
- Psychosocial factors (stigma, implicit bias, patient-provider interactions, etc.) in health care delivery
- Use of health information technology to detect and address disparities

DISSEMINATION, IMPLEMENTATION, AND IMPACT

- Advances in methods and measures for assessing implementation determinants, processes, and outcomes
- Rigorous mixed-methods research that elucidates barriers and facilitators to implementation of evidence-based practices across domestic and global settings and across disease areas
- Cutting-edge research that moves the field beyond conceptual heuristic frameworks and towards
causal theories of implementation with an eye towards targets and mechanisms

- Innovative approaches in designing implementation strategies via systematic and rigorous methods that include stakeholder perspectives
- Comparative effectiveness trials testing implementation strategies and their effect on implementation outcomes
- Strategies to reduce the use of interventions or de-implemention of practices that are not evidence-based, have been prematurely and widely adopted, yield sub-optimal benefits for patients, or are harmful or wasteful
- Studies testing the effectiveness of dissemination or implementation strategies to reduce health disparities and improve quality of care among rural, minority, low literacy and numeracy, and other underserved populations

HEALTH WORKFORCE
This theme encourages submissions that advance the science of health workforce research

- Measuring patient and population outcomes from workforce interventions in new care delivery and payment models
- Measuring provider outcomes and behaviors (e.g. payment, satisfaction, burnout, distribution, specialty choice)
- Innovative quantitative and qualitative data, theory, and methodologies to study the health workforce (e.g. ethnography, social network analysis, latent class analysis)
- Workforce implications of increasing use of technology and telehealth
- Emerging workforce interventions to address disparities and social determinants of health
- Impact of regulatory and practice environments on deployment of health workforce
- Factors influencing health professional career trajectories, including longitudinal outcomes of educational programs

HIGH COST, HIGH NEED POPULATIONS

- Identifying and defining high cost, high need populations using existing and novel data sources
- Understanding the intersection of complex social, behavioral, and medical care needs
- Understanding high cost, high need populations across the lifespan and across care settings (e.g. pediatric care, primary care, long-term care, hospice care)
- Measuring care quality, outcomes and value for high cost, high need populations
- Improving care quality, outcomes, and value for high cost, high need populations through clinical innovations or innovations in payment models and finance

IMPROVING SAFETY, QUALITY, AND VALUE

- Novel interventions that aim to improve quality, safety, or value of care including new policies, payment strategies, improvement programs, tools, or care models at the federal, state, or local level
- Studies of the role of patients, caregivers, and the public in improving the quality, safety, and value of care
- Approaches for achieving person-, provider-, and community-level engagement in quality, safety, or value improvement
- Studies of the impact of errors, delays in diagnostic testing and treatment, and overuse on quality and cost of care
- Studies on reducing variation in safety, quality, or value of care, including studies on reducing disparities in access to or receipt of safe, high-quality, and high-value care
- Studies of contextual factors (payment, organizational, professional) that influence the effectiveness of improvement interventions, their implementation, and sustainability
- Studies of cognitive, team-based, and systems-oriented solutions to improve the quality and safety of care including digital quality and safety measurement and monitoring systems and computer-assisted decision tools.
LESSONS FROM ABROAD
This theme encourages abstract submissions from a range of country contexts, from low, middle, and high income settings
- Translation of evidence into practice or policy, within a single country or across borders
- Encourage patient/ consumer involvement in care delivery co-design
- Solutions for balancing health needs, multi-morbidity and long-term care
- Tackling inequities in health and/or health care: political, organizational and technical responses
- Innovations in health services and systems research: data, methods, participation
- Responding to the challenge of non-communicable diseases and injuries: lessons from countries at all levels of development

MEASURING SAFETY, QUALITY, AND VALUE
- Measuring provider, practice, and health system characteristics to support improvement of the safety, quality, value, and equity of health services
- Measuring misuse and overuse of health services, including medications
- Measures and methods to support value-based care models including those focused on family and patient-reported outcomes
- Role of population health measures in driving progress in safety, quality and value
- Application of qualitative and mixed methods to measure the safety, quality, value, and equity of health services
- Developing quality metrics that consider patient and disease heterogeneity and support precision health methods
- Improvement methods and tools to support use of measurement data to improve safety, quality, and value

MEDICARE
- Prescription drugs, specialized services and markets (i.e. dialysis, hospice, LTSS)
- Medicare Advantage
- Dual Eligibles
- Role of consumer choice
- Performance measurement and quality of care
- MACRA, incentives, provider integration and consolidation
- Interactions between Medicare and other payers

METHODS RESEARCH
- Artificial intelligence, precision medicine, predictive modeling, machine learning, and deep learning in health care
- Innovative approaches to development or standardization of informatics tools (e.g., systems science, decision science, and simulation) and metrics (qualitative and quantitative)
- Methods for adapting and scaling up innovations towards complex settings
- Methods for causal inference and personalized interventions
- Qualitative and quantitative methods for patient/stakeholder engagement or for collaborative partnerships
- Real-world evidence using compilation, linkage, and analysis of health data (e.g., claims, electronic health records, genomics, imaging, digital apps, patient registries, and pragmatic clinical trials)

ORAL HEALTH
- Coverage, access, and payment for oral health care in the era of health reform, ACOs, and Medicaid expansion
- Dental care delivery system innovations, including but not limited to; new workforce models, care coordination, oral health promotion and disease prevention, disease management, patient safety, quality of care, and value-based payment reform
- Factors associated with and strategies to promote access to care and oral health throughout the life course, including childhood, adolescence, during pregnancy, and in aging populations
- Identifying and addressing disparities in access to care, coverage, utilization, and oral health
- Data quality, sharing and analytic methods; standards, metrics and measures including claims-based quality measures and patient-centered oral health outcomes
- Role of dentistry in addressing the opioid epidemic

ORGANIZATIONAL BEHAVIOR AND MANAGEMENT
- Organizational and system factors driving cost, quality of care, and patient care experiences
- Approaches to defining, measuring, rewarding, and improving team performance in health care
- Strategies or initiatives to improve operational efficiency and clinician/staff engagement in performance improvement, including unintended consequences
- Interventions and policies that promote the adoption of evidence-based organizational capabilities and processes in health care, including organizational unlearning and divestment
- Role of clinicians, managers, teams, boards, and consumers in leading and managing change in health care organizations

PATIENT-CENTERED RESEARCH
- Share best stakeholder engagement strategies to engage diverse and priority populations to appropriately conduct patient-centered outcomes research (PCOR)
- Development of new PCOR/CER methodology and engagement strategies
- PCOR influence on policy and national research directions
- Reports on patient-centered interventions in clinical trials
- Design and testing of individually-tailored interventions in research
- Patient feedback on real-world evidence and use in healthcare
- Communicating real-world evidence and health data to support shared decision-making

PAYMENT AND DELIVERY SYSTEMS INNOVATIONS
- Feasibility of payment and delivery systems reform, including implementation challenges
- Trends and patterns in the adoption of alternative payment models and delivery systems innovations
- Effects of payment and delivery systems reforms on the delivery of care, health outcomes, population health management, quality, equity, care coordination, or the value of care
- Effects of alternative payment models at the level of the payer, organizational provider or individual practitioner
- Effects of payment and delivery systems reforms intended to address the social determinants of health and improve linkages between providers and their communities
- Ethical dimensions of changes in provider payment and incentives
- Delivery systems innovations designed to address limited supply of providers in rural communities, such as telemedicine

PUBLIC AND POPULATION HEALTH
- Deaths of despair, gun violence, and mental health: prevalence trends and public health solutions
- New evidence on what works to improve population health, including multi-sectoral approaches
- Increasing health equity through: public policy, community level advocacy initiatives, and efforts to address social determinants of health
- Examining intersectionality as a framework for population health and structural racism as a contributing factor to health inequity
- Making the business case for population health: economic evaluations of evidence-based interventions
- Innovative systems science, metrics, and measurement to evaluate systems change
- Ethical dimensions of resource allocation and public policy affecting population health
WOMEN’S HEALTH
This theme encourages abstracts that address the full continuum of women’s health issues across the lifespan

- Women’s preventive health services (e.g. breast cancer screening, HPV vaccinations and screening, chronic disease prevention)
- Reproductive health and maternal health (e.g. family planning including contraception, prepregnancy care and abortion, pregnancy and childbirth, maternal morbidity and mortality, infertility, menopause)
- Diseases that are women-specific or disproportionately affect women (e.g. gynecologic cancers, uterine fibroids, sexually transmitted diseases, chronic pain, anxiety/depression, osteoporosis)
- Gender as a biological and social determinant of health and health care (e.g., differences in manifestation of cardiovascular diseases, differences in health care needs, inclusion in research)
- Social determinants of women’s health and related health care issues (e.g. disparities/inequities, access, intimate partner violence, caregiving role of women, stress, community outreach)
- Quality and safety in women’s health care (e.g. evidence-based practices, comparative effectiveness, quality measures, safety bundles, provider training, shared decision making, patient satisfaction)
- Organization, delivery, and financing of women’s health care (e.g., integrative care models, care coordination, reduce overutilization, cost and cost-effectiveness, value-based payment models)