National Agenda for Surgical Disparities Research

Current Efforts and Next Steps
PROBLEM STATEMENT: SURGICAL DISPARITIES

- Healthcare disparities are differences in disease burden on the basis of factors which disproportionately impact socially disadvantaged populations
  - EX: A 2010 study of national inpatient data found each incremental increase in income was associated with a 7% decrease in mortality risk in numerous cardiovascular and oncologic procedures (Source: Bennett et al. 2010; doi: 10.1097/SLA.0b013e3181f2ac64.)

- These disparities are seen in the surgical setting, in access to care, quality of care, and/or surgical outcomes
  - Surgical disparities have been documented across many surgical specialties, due to factors such as:
    - Race/Ethnicity
    - Age
    - Geography
    - Disability status
    - LGBT status
    - Socioeconomic status

- To address surgical disparities, the National Institutes of Health and American College of Surgeons convened the 2015 NIH-ACS Summit on Surgical Disparities Research
The summit was held May 7-8 at the NIH Campus in Bethesda, MD

- Convened an expert group of 60 national leaders in surgery, disparities research, clinical care, military health systems, government and funding agencies

Two-day event featured presentation of 5 thematic areas of surgical disparities research (see infographic on the left)

- Identified by the NIH-ACS planning committee
- Resulted from an exhaustive literature search of current surgical disparities research to create a framework to guide future work

The objective of the summit was to create a list of priorities to guide national funding and research efforts to address surgical disparities
NIH-ACS Summit on Surgical Disparities Research

- Day 1: Introduction to the summit and overview of deliverables, and interactive presentations of the 5 thematic areas with consensus-building exercises *(yielding 400+ comments for research priorities)*

- Day 2: Refining list of priorities for each of the 5 themes, and list of top 5 overall priorities (see infographic on the right)

- Further details available in this video link:

  **2015 NIH-ACS Summit**

## Findings NIH-ACS Summit: Clinician Factors

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<th>Research topic</th>
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| Defining and evaluating standards of cultural dexterity |  • What is the definition of cultural competency and its role in surgery?  
  • What are the most effective strategies and methods for cultural competency training? How do you teach or learn cultural competency?  
  • How do we standardize provider level education of cultural competency training and when should it be implemented? |
| Provider-patient communication and evaluation of provider training |  • What resources or tools are available for dealing with challenging patients and patients with language barriers?  
  • How do we utilize translators effectively for patient-provider interactions?  
  • What is the role of the patient navigator and ancillary staff in improving patient-provider communication? |
| Implicit bias and mindfulness training and evaluation |  • What are interventions to reduce or "unlearn" biases?  
  • Can utilization of checklists reduce bias?  
  • How does implicit bias apply to specific groups of patients when gauged in terms of race/ethnicity, gender, SES, sexual orientation, weight, co-morbidities, or geography? |
| Improvement and exploration of new and existing surgical quality metrics |  • How can report cards of patient experience feedback affect outcomes?  
  • What metrics or measurement should be used to evaluate the quality of a surgeon? |
| Role and impact of patient-provider concordance       |  • How does patient-provider concordance affect outcomes? What outcomes can we measure to assess concordance?  
  • Does inter-surgeon concordance play a role in surgical disparities? |

## FINDINGS NIH-ACS SUMMIT: PATIENT FACTORS

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| Role of patient education and health literacy in patient-provider communication | • Do we need different patient education curriculum for different SES levels and racial groups?  
• Can we develop a tool to measure patients' understandings of their disease and expectations of outcomes?  
• Is community outreach or outreach in schools effective to disseminate knowledge? |
| Patient perceptions, decision making, and engagement in personal health and behaviors | • How do decision support tools impact difference populations of patients?  
• How malleable are patient risk perceptions and preferences?  
• Should patient choice be valued more highly than surgical recommendations? |
| Optimizing preoperative co-morbidities and partnering with primary care providers | • How can we address patient health prior to elective surgery (e.g. obesity, etc.)?  
• How can we improve preoperative conditions to improve patient outcomes?  
• How do chronic conditions inform patient outcomes? |
| Additional themes prioritized during group discussion: | Surgical applications of biology and epigenetic factors, Equity in access to clinical trials among minority/disenfranchised patients, Geographic and other barriers to accessing care |

## Findings NIH-ACS Summit: Systemic/Access Factors

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| Assessing the effects of payment strategies in the context of policy reform on access to care | • What is the impact of relative value units in the context of surgical disparities?  
• What are other comparable service measures that can be used by hospitals to permit comparison of the amount of resources required to perform services?  
• What are other methods of evaluating and determining physician bonus plans based partially on productivity and patient care? |
| Care coordination and integration and tailored guidelines for vulnerable populations | • What are innovative strategies to promote patient care coordination?  
• What strategies can be implemented to retain patients for follow-up care after surgical procedures? |
| Regionalization of care versus strengthening safety net hospitals | • What are the implications of building existing infrastructure in safety net hospitals in the context of differential access and surgical disparities? |
| Role of healthcare as a mitigating factor of social determinants of health | • How do the social determinants of health impact surgical outcomes in the context of systemic barriers to patient access to care?  
• How can social determinants inform future interventions to improve access to care and/or systemic policy change? |
| Evaluation of health technology and electronic health record impact on research and surgical outcomes | • What are strategies to standardize and incentivize use of the electronic health record in surgical care?  
• How can the adoption of health information technology be evaluated in its impact on surgical outcomes? |

## Findings NIH-ACS Summit: Care/Quality Factors

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| Leveraging evidence-based medicine, *e.g.* electronic health records, to reduce disparities and improve adoption of evidence-based care | • How can "meaningful use" of electronic health records improve evidence-based care and patient outcomes?  
• How do we strengthen health centers' infrastructure to standardize electronic health record use? |
| Approaches for standardizing and integrating existing data repositories to mitigate disparities | • What are the existing barriers to ongoing data reporting by healthcare organizations?  
• How can these barriers be overcome to standardize surgical care, quality, and follow-up? |
| Evaluating methods for incorporating patient preferences for treatment and expectations for outcomes in surgical decision making | • How do we engage patients in shared healthcare decision making?  
• How can we better incorporate patient preferences in treatment courses?  
• How can we better assess patient expectations for surgical care and/or patient satisfaction? |
| Evaluating the impact of incentive strategies on disparities | • How do we incentivize shared decision-making and its impact on surgical outcomes?  
• What are innovative ways to incentivize quality surgical care? |
| Developing and implementing standard data definitions for known and suspected risk factors for disparities | • What is a working quality metric for use by healthcare organizations and clinicians?  
• What is a standard definition of "disadvantaged populations"?  
• How do we define and distinguish the impact of race from factors such as socioeconomic disadvantage and/or health literacy? |

### FINDINGS NIH-ACS SUMMIT: POST-OP/REHAB FACTORS

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| Leveraging existing databases and developing needed methodology to prospectively collect long-term functional, quality of life, and employment outcomes | • How can we develop databases to capture longer-term outcomes, including patient-centered outcomes such as quality of life, functional status, compliance, employment, independent living, and disease/procedure-specific outcomes?  
• How do we implement and evaluate such methods?                                                                                                                                                                                                                                               |
| Evaluating communication approaches regarding end-of-life care, palliative care, and postoperative or post-injury expectations for recovery | • How do we characterize disparities in palliative care and end-of-life care?  
• How do we better understand discrepancies in advanced care planning and quality among surgical patients?  
• How do we address disparities in access to palliative care procedures?                                                                                                                                                                                                                       |
| Exploring barriers to prioritizing patients' values and measuring the effectiveness of these strategies | • How do language, cultural, and/or other barriers impede prioritizing patient preferences' in postoperative care?  
• How do we better engage patients with limited health literacy?                                                                                                                                                                                                                                                                                     |
| Exploring the value of post-injury and postoperative recovery and rehabilitation services in terms of cost, quality, and patient-oriented outcomes | • How do we set metrics to evaluate post-injury cost and quality and its impact on surgical patient outcomes?  
• How do we reform existing post-injury and postoperative rehabilitation care to improve outcomes for disadvantaged populations?                                                                                                                                                                    |
| Improving access to physical therapy, occupational therapy, and speech therapy with sustainable payment models, e.g. tele-therapy, to improve rehabilitative outcomes during the critical post-acute period | • How do payment models and incentive strategies impact post-acute care follow-up?  
• How do we evaluate the potential benefit of tele-therapy to rural patients and/or surgical patients of limited mobility?  
• How do we overcome financial barriers to physical therapy, occupational therapy, and speech therapy for patients of low SES backgrounds?                                                                                                                                                       |

Five Overarching Priorities Identified for Surgical Disparities Research at the 2015 National Institutes of Health and American College of Surgeons Summit

Research Should Be Directed Toward:
1. Improving patient-Clinician communication by helping clinicians deliver culturally dexterous, competent care and measuring its effect on the elimination of disparities.
2. Fostering engagement and community outreach by using technology to optimize patient education, health literacy, and shared decision making in a culturally relevant way; disseminating these technologies; and evaluating their effect on reducing surgical disparities.
3. Improving care at facilities with a higher proportion of minority surgical and trauma patients. This includes evaluation of regionalization of care vs strengthening of safety-net hospitals within the context of differential access and surgical disparities.
4. Evaluating the longer-term effect of acute interventions and rehabilitation support within the critical period of injury or illness on functional outcomes and patient-defined perceptions of quality of care.
5. Improving patient centeredness by identifying expectations for postoperative and postinjury recovery. This includes adhering to patient values regarding advanced health care planning and palliative care needs.

Our findings are in the current JAMA Surgery issue

The NIH is also working on requests for proposals in surgical disparities research, beginning in Summer/Fall 2016

Please share this info colleagues and networks via:

- **WORD-OF-MOUTH**, Scholarly meetings, with your research departments and faculty chairs
- **TWITTER**: In @JAMASurgery: 5 priorities for #surgicaldisparities #research, based on @NIMHD @AmCollSurgeons findings: [link to paper]
- **FACEBOOK**: Last year, the @NIMHD @American College of Surgeons held a summit on surgical disparities research. The meeting resulted in the identification of 5 funding and research priorities: [infographic]
- **EMAIL**: With communication contacts, in departmental newsletters and other announcements
- **RESEARCH**: Use this work to guide future grant proposals, future research study design, and future policy briefs for governments and funders who prioritize health disparities research

Please contact us for dissemination materials and more information at:
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