

## **Section 1 Background**

1. What is quality in medicine and why do we need to work on it?
2. Where does safety fit in?
3. What is perioperative medicine and why do we need it?
4. The case for improvement in perioperative medicine
5. The Promise and Pitfalls of Big Data Studies in Perioperative Medicine
6. Clinical trials in perioperative medicine
7. Large scale audits: using citizen science to gather high quality "big data"
8. Education in perioperative medicine
9. System thinking in perioperative medicine
10. Patient- Centered Care in Perioperative Outcomes
11. Shared decision making
12. Clinical Outcomes and Measures in Perioperative Care
13. Equity and Perioperative Care
14. Qualitative research in perioperative medicine
15. Publication in Perioperative Medicine
16. The SQUIRE 2.0 (Standards for Quality Improvement Reporting Excellence) guidelines: a framework for designing and reporting quality improvement studies; applications in Perioperative Care
17. Leveraging the Perioperative Period to Address Population Health
18. Building for sustainability
19. Risk Management and Perioperative Quality
20. Using innovative payment models to drive improvement in perioperative care

## **Section 2 Improvement Science Tools for Change**

21. What is programme theory and why is it important to perioperative quality improvement?
22. An Overview of Common Improvement Methodologies and their Background
23. The Model for Improvement: A tool to drive perioperative improvement
24. Lean in Healthcare
25. Other Performance Improvement Tools: From Compliance to Excellence
26. Building a Measurement System that Works: Milestones, Measure Development and Sampling.
27. Analyzing Variation with Run Charts
28. Statistical Process Control Charts for Clinical Users
29. Process mapping
30. Driver diagrams
31. Care bundles for Perioperative Improvement
32. Human Factors in Peri-Operative Care: General Principles
33. Human Factors and Perioperative Improvement: Handover checklists and protocols for safe and reliable care transitions
34. Checklists for Safer Perioperative Care
35. Social aspects of change in perioperative care and the importance of context
36. Stakeholder engagement
37. Techniques for Creating Urgency
38. Leadership in Perioperative Quality
39. Establishing and running quality collaboratives: the Michigan experience
40. Excellent Perioperative Patient Experience
41. An International Perspective on Training and Setting?Standards in Perioperative Medicine

## **Section 3 Putting It All Together – Clinical Quality Improvement Examples**

42. Implementation of enhanced recovery for colorectal surgery: a real world example of quality improvement
43. Quality Improvement through the lens of the Multicenter Perioperative Outcomes Group

44. The Michigan Urological Surgery Improvement Collaborative (MUSIC) Reducing Operative Complications from Kidney Stones (ROCKS) quality initiative
45. ERAS protocols
46. Pain Care Pathways and Patient Reported Outcomes
47. Health Services Research
48. The Perioperative Brain Health Initiative
49. Quality Improvement in Emergency Surgery: learning from two large scale programmes to reduce mortality after emergency laparotomy
50. Perioperative Quality Improvement Programme (PQIP)
51. Using Real-World Data for Improvement – The Seattle Children’s Example
52. Optimizing Perioperative Medicine Value, and the High Value Practice Academic Alliance: A Case Based Study on Preoperative Assessment
53. Perioperative Medicine for Older People: translating a geriatrician-led perioperative care model from an inner-London teaching hospital to a district general hospital
54. Clinical Quality Improvement Examples: Agency for Healthcare Research and Quality Improving Surgical Care and Recovery
55. Cardiovascular Disease: Preoperative Testing and Evaluation for Non-Cardiac Surgery
56. Orthopedics and regional anesthesia: an outpatient total shoulder replacement pathway
57. A Case Study: National Emergency Laparotomy Audit
58. Provider resilience and care for the carer
59. Nursing and perioperative quality improvement
60. Certified Registered Nurse Anesthetists and Perioperative Medicine
61. Environmental Sustainability and Perioperative Quality Improvement
62. Gaining and Keeping C-Suite Support for Perioperative Quality Improvement Initiatives