## Value Of Imaging Through Comparative Effectiveness Program (VOICE) Program Syllabus

## Evidence-Synthesis and Systemic Review Meta-Analyses (ESSR)

Week	Date	Workshop/Course Topic
Pre-work	September 9 – 16, 2021	Complete the Online Course 1 <b>Pre-Test</b> online:
		1. Go to RSNA's Online Learning Center.
		2. Click <b>Log In</b> in the top-right corner
		3. 6.4. Click <b>RSNA login</b> and use your RSNA credentials to log in.
		a. If you do not know your username, please contact <u>customerservice@rsna.org</u> or 1-877- 776-2636 (toll free US and Canada only) or 1-630-571-7873 (toll).
		4. Click <b>My Learning</b> at the top.
		5. Click <b>Launch</b> next to the course title: VOICE: Evidence-Synthesis and Systemic Review Meta-Analyses (ESSR) (2021)
Week 1	September 17 – 18, 2021	Virtual Workshop 1: Introduction to CER and Evidence Synthesis
	September 24, 2021	Virtual Workshop 1 Evaluation - CME booklets due
	October 1 – 7, 2021	Online Course 1: Evidence-Synthesis and Systematic Review Meta-Analyses (ESSR) all materials released online. Complete the following:  • Week 1 Readings • Lectures: - ESSR Intro: Dr. Bangalore - What is a Meta-Analysis?
Week 2	October 8 – 14, 2021	<ul> <li>Week 2 Readings</li> <li>Lectures: <ul> <li>Interpretations of Meta-Analysis</li> <li>Strengths of Meta-Analyses</li> </ul> </li> </ul>

<sup>\*</sup>Weeks based on Friday-Thursday schedule

		<ul><li>Limitations of Meta-Analyses</li><li>Meta-Analysis: "The How"</li></ul>
Week 3	October 15 – 21, 2021	<ul> <li>Week 3 Readings</li> <li>Lectures: <ul> <li>Preparing for a Systematic Search</li> <li>Basics of Database Searching</li> <li>Searching in Pubmed</li> </ul> </li> </ul>
Week 4	October 22 – 28, 2021	<ul> <li>Week 4 Readings</li> <li>Lectures:         <ul> <li>Translating and Recording Searches</li> <li>Reference Management</li> <li>Eligibility and Screening Results</li> </ul> </li> </ul>
Week 5	October 29 – November 4, 2021	<ul> <li>Week 5 Readings</li> <li>Lectures:         <ul> <li>Principles of Meta-Analysis</li> <li>Types of Data</li> <li>Fixed Effect vs. Random Effect Model (Part 1)</li> <li>Fixed Effect vs. Random Effect Model (Part 2)</li> </ul> </li> </ul>
	November 3, 2021, 11:00 AM – 1:00 PM Central (12:00 – 2:00 PM Eastern, 9:00 – 11:00 AM Pacific)	RSNA VOICE Evidence-Synthesis and Systematic Review Meta-Analyses (ESSR) <b>Webinar</b> with Drs. Kang, McInnes and Nicholson, (Sanelli).
Week 6	November 5 – November 11, 2021	<ul> <li>Week 6 Readings</li> <li>Lectures:         <ul> <li>Performing Meta-Analysis Using</li> <li>Revman (Part 1)</li> <li>Performing Meta-Analysis Using</li> <li>Revman (Part 2)</li> </ul> </li> </ul>
Week 7	November 12 – 18, 2021	<ul> <li>Week 7 Readings</li> <li>Lectures: <ul> <li>Interpreting Results</li> <li>Presenting Results</li> <li>Quality of Evidence</li> </ul> </li> </ul>
Week 8	November 19 – 25, 2021	<ul> <li>Week 8 Readings</li> <li>Lectures:         <ul> <li>Meta-Analyses: Publication Bias</li> <li>Meta-Analyses: Heterogeneity</li> </ul> </li> </ul>

Catch up /	November 26 – December 9, 2021	Catch up / break
Break		
Week 9	December 10 – 16, 2021	<ul> <li>Week 9 Readings</li> <li>Lectures:         <ul> <li>Diagnostic Test Accuracy Systematic</li> <li>Reviews</li> <li>Meta-Analyses of Continuous</li> <li>Variables: A Case Study</li> </ul> </li> </ul>
Catch up / Break	December 17, 2021 – February 3, 2022	Catch up / break. Participants submit draft manuscripts of systematic review via email to faculty for feedback if desired.
	February 4 – March 4, 2022	Faculty provide feedback via email to participants on draft systematic review manuscripts.

## Decision Analysis (DA)

Week	Date	Workshop/Course Topic
Pre-work	February 3 – 17, 2022	Purchase TreeAge Student Course License (\$55) at <a href="https://www.treeage.com/shop/">https://www.treeage.com/shop/</a> two weeks before Workshop 2, which will grant you access for six-months through the end of the program.
	February 17 – 24, 2022	Complete the Online Course 2 and 3 <b>Pre-Test</b> online:
		1. Go to RSNA's Online Learning Center.
		2. Click <b>Log In</b> in the top-right corner
		3. 6.4. Click <b>RSNA login</b> and use your RSNA credentials to log in.
		a. If you do not know your username, please contact <u>customerservice@rsna.org</u> or 1-877-776-2636 (toll free US and Canada only) or 1-630-571-7873 (toll).
		4. Click <b>My Learning</b> at the top.
		5. Click <b>Launch</b> next to the course title:
		a. VOICE: Decision Analysis (DA) (2022)
		b. VOICE: Cost Effectiveness Analysis (CEA) (2022)

	February 25 – 26, 2022	Workshop 2: Decision Analysis and Cost Effectiveness
	March 3, 2022	Workshop 2 Evaluation - CME booklets due
	March 1, 2022	Online Course 2: Decision Analysis (DA) all materials released online.
Week 1	March 4 - 10, 2022	Online Course 2: Decision Analysis (DA) all materials released online. Complete the following:  • Week 1 Readings • Week 1 Labs • Lecture: - Introduction to Cost-Effectiveness Analysis
Week 2	March 11 – 17, 2022	<ul> <li>Week 2 Readings</li> <li>Complete Week 1 Labs</li> <li>Lectures:         <ul> <li>Valuing Health Outcomes (Part 1)</li> <li>Valuing Health Outcomes (Part 2)</li> <li>Valuing Health Outcomes (Part 3)</li> <li>Assessing Utilities: How Much Risk Are You Willing to Take?</li> </ul> </li> </ul>
Week 3	March 18 – 24, 2022	<ul> <li>Week 3 Readings</li> <li>Week 3 Labs</li> <li>Lecture:         <ul> <li>Model Parameterization</li> </ul> </li> </ul>
Week 4	April 1 –7, 2022	<ul> <li>Week 4 Readings</li> <li>Week 4 Labs</li> <li>Lectures: <ul> <li>Common Transformations (Part 1)</li> <li>Common Transformations (Part 2)</li> </ul> </li> </ul>
Week 5	April 8 – 14, 2022	<ul> <li>Week 5 Readings</li> <li>Complete Week 4 Labs</li> <li>Lecture:         <ul> <li>Model Credibility and Validation</li> </ul> </li> </ul>
Week 6	April 15 – 21, 2022	<ul> <li>Week 6 Readings</li> <li>Week 6 Lab</li> <li>Lectures: <ul> <li>Base Case and Sensitivity Analysis</li> <li>(Part 1)</li> </ul> </li> </ul>

		- Base Case and Sensitivity Analysis (Part 2)
Week 7	April 22 – 28, 2022	<ul><li>Week 7 Readings</li><li>Week 7 Lab</li></ul>
	April 22, 2022, 11:00 AM – 1:00 PM Central (12:00 – 2:00 PM Eastern, 9:00 – 11:00 AM Pacific)	RSNA VOICE Decision Analysis (DA) <b>Webinar</b> with Drs. Kang, Sanelli, Ferket and Lowry.

## Cost Effectiveness Analysis (CEA)

Week	Date	Workshop/Course Topic
	March 1, 2022	Online Course 3: Cost Effectiveness Analysis (CEA) all materials released online.
Week 1	April 29 – May 5, 2022	<ul> <li>Week 1 Readings</li> <li>Week 1 Labs</li> <li>Lectures:         <ul> <li>Introduction to Cost-Effectiveness Analysis</li> <li>Value Assessment and Cost-Effectiveness Analysis: Course Introduction (Part 1)</li> <li>Value Assessment and Cost-Effectiveness Analysis: Course Introduction (Part 2)</li> </ul> </li> </ul>
Week 2	May 6 – 12, 2022	<ul> <li>Complete Week 1 Readings</li> <li>Week 2 Labs</li> <li>Lectures:         <ul> <li>CEA Modeling Standards</li> <li>Test Characteristics: How Accurate was that Test?</li> <li>The Bayes Theorem: What Are the Odds?</li> <li>Diagnoses, Predictive Values, and Whether You're Sick or Not: NPV and PPV</li> </ul> </li> </ul>

Week 3	May 13 – 19, 2022	<ul> <li>Week 3 Readings</li> <li>Week 3 Lab</li> <li>Lectures: <ul> <li>Diagnostic Testing (Part 1)</li> <li>Diagnostic Testing (Part 2)</li> <li>Probabilities, Heuristics &amp; Biases</li> </ul> </li> </ul>
Week 4	May 20 – 26, 2022	<ul> <li>Week 4 Readings</li> <li>Week 4 Lab</li> <li>Lectures: <ul> <li>Measuring and Valuing Costs (Part 1)</li> <li>Measuring and Valuing Costs (Part 2)</li> <li>Measuring and Valuing Costs (Part 3)</li> </ul> </li> </ul>
	May 25, 2022, 11:00 AM – 1:00 PM Central (12:00 – 2:00 PM Eastern, 9:00 – 11:00 AM Pacific)	RSNA VOICE Cost Effectiveness Analysis (CEA)  Webinar with Drs. Kang, Sanelli, Bresnahan and Pandya.
Week 5	May 27 – June 2, 2022	<ul><li>Week 5 Lab</li><li>Lecture:</li><li>Medicare Reimbursement</li></ul>
Week 6	June 3 – 9, 2022	<ul> <li>Week 6 Readings</li> <li>Week 6 Labs</li> <li>Lecture: <ul> <li>Implementation Science</li> </ul> </li> </ul>
Week 7	June 10 – 16, 2022	<ul> <li>Week 7 Readings</li> <li>Week 7 Lab</li> <li>Lecture:         <ul> <li>Critiquing CEA Literature</li> </ul> </li> </ul>
Week 8	June 17 – 23, 2022	<ul> <li>Week 8 Readings</li> <li>Week 8 Lab</li> <li>Lecture:         <ul> <li>Sensitivity Analysis</li> </ul> </li> </ul>
Week 9	June 24 – 30, 2022	<ul> <li>Week 9 Readings</li> <li>Week 9 Lab</li> <li>Lecture:         <ul> <li>Prioritizing Ethics</li> </ul> </li> </ul>