

## SALIENT team methodological expertise with selected references

<p align="center"><b>Quantitative Data Acquisition<sup>1-9</sup></b></p>
<p>Obtaining, cleaning, managing, linking, and creating longitudinal analytical data sets from diverse sources of “big data” and national survey data. <b>Appendix 1</b> lists data resources developed by SALIENT investigators.  <b>(Bouldin, Cochran, French, A. Jones, Mohanty, Nelson, Pugh, Samore, Smith, Vanneman)</b></p>
<p align="center"><b>Quantitative Methods<sup>5-7,7-20</sup></b></p>
<p>Objective Measurement and numerical study of data from various sources using computational techniques from disciplines including but not limited to: longitudinal, secondary data analysis, Bayesian analysis, latent class/transition analysis, Markov models, causal inference, hierarchical models, multilevel and stepped-wedge analysis, epidemiology.  <b>(Bouldin, Burningham, Cochran, French, A. Jones, Kean, Kennedy, Mohanty, Nelson, Pugh, Presson, Smith, Vanneman)</b></p>
<p align="center"><b>Economic Methods/Analysis<sup>21-25</sup></b></p>
<p>Designing and conducting health economic evaluations of programs and interventions by assessing healthcare resource utilization alone—through cost analyses and budget impact analyses—or in conjunction with health outcomes—through cost-effectiveness analyses and return on investment assessments.  <b>(French, Maloney, Nelson, Smith, Vanneman, Waitzman, Wilson)</b></p>
<p align="center"><b>Informatics &amp; Network Science<sup>4,20,21,26-35</sup></b></p>
<p>Machine learning/artificial intelligence, simulation models, network analysis, creation of decision support tools and dashboards  <b>(Burningham, Butler, Haun, M. Jones, Kennedy, Pugh, Samore, Valente, Vega Yon, White)</b></p>
<p align="center"><b>Survey and Ecological Momentary Assessment Methods<sup>19,27,36,37</sup></b></p>
<p>Designing, administering, and analyzing surveys and ecological momentary assessment data of Veterans, caregivers, and non- veteran comparison groups for HSR&amp;D, QUERI and DoD funded projects.  <b>(Bouldin, Fagerlin , A. Jones, Kalvesmaki, Knight, Millar, Potter, Pugh, Vanneman, Wetter)</b></p>
<p align="center"><b>Qualitative Data Collection/Analysis<sup>19,26,36,38-44</sup></b></p>
<p><b>Collecting</b> qualitative data (open-ended or semi-structured interviews or written communication, observation, focus groups, document review, ethnography, participatory action research). <b>Analyses:</b> e.g., grounded theory, narrative synthesis, phenomenology, rapid templated analysis, rapid ethnography, periodic reflection, Integrating NLP &amp; qualitative analysis; <b>Mixed Methods:</b> Integrating the collection, analyses, &amp; presentation of qualitative and quantitative data using concurrent, explanatory, and exploratory designs.  <b>(Bouldin, Butler, Fagerlin, Haun, Kalvesmaki, Knight, Naranjo, Smith, Vanneman, Zickmund)</b></p>
<p align="center"><b>Implementation &amp; Quality Improvement Science<sup>26,27,39-41,45-49</sup></b></p>
<p>Projects with operational partners include antibiotic stewardship, clinical models for disease-specific treatment (chronic multi-symptom illness/environmental exposure, addiction, traumatic brain injury, neurological conditions), homelessness, &amp; decision-aid tools.  <b>(Butler, Cochran, Gordon, Haun, Kean, Leykum, Lowery, McAndrew, Naranjo, Pugh, Rubin, Schlechter, Smith)</b></p>
<p align="center"><b>Operations Research and Program Evaluation<sup>9,25-27,38,41,43,44,48,50-56,56</sup></b></p>
<p>Work with operational/clinical partners to evaluate clinical programs, institutional and governing policies, and practices. Program evaluation using formative and summative techniques inform operational partners throughout the development, implementation, and scaling of various programs and operations in clinical and non-clinical settings.  <b>(Bouldin, Cochran, Haun, Kalvesmaki, Hunt, Kean, McAndrew, McMahan-Grenz, Pugh, Smith, Vanneman, Zickmund)</b></p>
<p align="center"><b>Knowledge Translation<sup>50</sup></b></p>
<p>Communication and dissemination of findings via user centered design (e.g., playbooks, policy briefs, infographics, toolkits)  <b>(Benzinger, Fagerlin, Haun, Kean, McMahan-Grenz, Rathunde, Smith, White)</b></p>
<p align="center"><b>Policy Analysis<sup>8,17,19,23,25,42,52</sup></b></p>
<p>Policy process evaluation, cost-benefit analyses, policy implementation processes, policy implementation facilitators, policy goal analyses, multi-policy network analyses.  <b>(French, Haun, Kalvesmaki, Leykum, Nelson, Rathunde, Vanneman, White)</b></p>
<p align="center"><b>Clinical Trials<sup>55,57</sup></b></p>
<p>Cluster randomized trials, pragmatic trials, stepped wedge design, hybrid designs  <b>(Cochran, French, Gordon, Haun, McAndrew, Presson)</b></p>

Underlined names identify lead within method.

## References

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