

Simulation-based Implementation Planning and Contextual Testing (SimPACT)

Phase 1: Contextual Analysis and Adaptation

Task	Activities	Deliverables
Environmental Scan	<ul style="list-style-type: none">• Literature review• Stakeholder interviews• Examine comparable tools	<p>Identify</p> <ul style="list-style-type: none">• Context-specific factors• Strengths/weaknesses of tool• population averages/outliers• Key questions of interest
Preliminary Data Analysis	<ul style="list-style-type: none">• Examine existing data• Synthesize stakeholder input• Synthesize existent literature	<ul style="list-style-type: none">• Quantitative analysis of tool items• Stakeholder insights correlated with data• Identified problematic areas for improvement
Contextual Adaptation of Tool	<ul style="list-style-type: none">• Conduct stakeholder affinity groups interviews• Revise tool (if applicable)• Review contextual impacts: likely and catastrophic	<ul style="list-style-type: none">• Revised tool ready to deploy• List of contextual factors for simulation and mitigation efforts

Phase 2: Testing

Task	Activities	Deliverables
Develop Simulation Testing Materials	<ul style="list-style-type: none">• Develop simulations (common themes & outliers)• Create reliability, feasibility and usability survey• Recruit participants• Develop training on adapted tool	<ul style="list-style-type: none">• Simulated vignette films or live simulation scenarios• Training materials on adapted tool• Mixed-method survey• Enrolled participants

Deployment of Testing Materials	<ul style="list-style-type: none"> • Deploy simulations & revised tool • Collect survey feedback 	<ul style="list-style-type: none"> • Mixed-method dataset (quantitative & qualitative)
Main Data Analysis	<ul style="list-style-type: none"> • Analyze qualitative & quantitative data 	<ul style="list-style-type: none"> • Report to stakeholders on reliability, feasibility and usability. • Guide for focus groups <p>Identify problem areas to address before moving to Phase 3</p>

Phase 3: Integration

Task	Activities	Deliverables
Focus Groups	<ul style="list-style-type: none"> • Conduct focus groups • Member checking 	<ul style="list-style-type: none"> • Report on themes • Recommendations for response to feedback
Synthesizing Findings	<ul style="list-style-type: none"> • Synthesize main analysis & focus group results 	<ul style="list-style-type: none"> • Comprehensive report with revision recommendations, mitigation strategies for potential barriers to integration.
Improve Tool & Implementation Planning	<ul style="list-style-type: none"> • Revise tool based on analysis and contextual factors • Plan full implementation • Develop follow-up plans for post-implementation 	<ul style="list-style-type: none"> • Final tool • Implementation strategy & training • Post-implementation quality assurance plan