**Attachment 1: Crosswalk Between Contract Evaluation Measures, Existing Data Sources, and Proposed Data Collection for Outcome and Impact Evaluation of CMS QIN-QIO Program for Task C.2. Reducing Healthcare-Acquired Conditions in Nursing Homes**

| Outcome Evaluation Data Needs | Existing Measures/Sources | Proposed New Measures |
|---|---|---|
| To reduce biases affecting outcome analyses by matching nursing homes participating in the QIN-QIO program intervention with facilities not participating | • Percentage of One-Star Category Target Number recruited for Collaborative I[1]/ Deliverable and Data Submission Tool (DDST)<br>• Percentage of Recruitment Target Number recruited for Collaborative I[1]/DDST<br>• Nursing home characteristics (e.g., bed size)/Nursing Home Compare (NHC)<br>• Resident characteristics (e.g., age, number of comorbidities)/ Master Beneficiary Summary File (MBSF) | None |
| To understand the drivers and barriers to participating in the QIN-QIO program for nursing homes | None | • Open ended questions/ Interviews or focus groups with QIN-QIO Task Leads |
| To gain insight into findings from analysis of claims data | None | • Open-ended questions/Interviews or focus groups with QIN-QIO Task Leads |

| Outcome Evaluation Data Needs | Existing Measures/Sources | Proposed New Measures |
|---|---|---|
| To understand the usefulness of tools and activities in the National Nursing Home Quality Care Collaborative (NNHQCC) program to help nursing homes meet Quality Assurance and Performance Improvement (QAPI) requirements and/or tools in need of improvement (e.g., Composite score, Learning Action Networks (LANs), webinars, etc.) | • Records of use/quarterly reports | • Perceived usefulness from QIN-QIO Task Leads/Interviews or focus groups<br>• Perceived usefulness from nursing home administrators/ Nursing home administrator interviews<br>• Nursing home administrators' awareness of resources/ Nursing home administrator survey<br>• Peer coach perceptions of effectiveness/Peer coach interviews |
| To ascertain nursing homes' uptake of major QAPI strategies and activities (e.g. performing root cause analysis, plan-do-study-act cycles, etc.) | • None | • Perceived use of QAPI-related resources by QIN-QIO Task Leads/Interviews or focus groups<br>• Nursing home use of QAPI-related resources / Nursing home administrator survey<br>• Nursing home awareness of QAPI and use of resources/ Nursing home administrator interviews |
| To assess whether Medicare spending is associated with antipsychotic use | • Antipsychotic use/Minimum Data Set (MDS) 3<br>• Medicare program spending/CMS | None |
| To access associations between the NNHQCC composite score and health status and Medicare spending | • NNHQCC Quality Composite Measure Score[1]/DDST<br>• Health proxies (Emergency department (ED) visits, observations, number of hospitalizations)/Claims Parts A & B<br>• Medicare spending/Claims Parts A & B | None |

| Outcome Evaluation Data Needs | Existing Measures/Sources | Proposed New Measures |
|---|---|---|
| To analyze trends in HACs and clinical outcomes among nursing home residents in QIO and non-QIO facilities during the 11th SOW | • Percentage of residents who received antipsychotic medications[1]/MDS 3<br>• Percentage of residents who were physically restrained/ MDS 3<br>• Percentage of residents who had worsening pressure ulcers/MDS 3<br>• Number of residents infected by *C. diff* /NHSN<br>• Percentage of residents who required ED visits, observations, or hospitalization/Claims Parts A & B | None |
| To calculate the proportion of the effect size estimates found following the analyses performed in addressing the quality measure and clinical outcomes that can be directly attributed the QIN-QIO program | None | • Nursing home administrators' perceived proportion of influence/ Nursing home administrator survey and interviews |
| To calculate the return on investment for CMS from the Collaborative program | • Claims Parts A, B & D for beneficiary spending<br>• CMS program officers for program spending | None |

[1]Data collected as part of contract evaluation