

| Primary Coach | Maturity Model Components | | Activity |
|---------------|---------------------------|----------|---|
| | | | Stage 1: Planning for Design |
| | | 0 | Learning Network Community Conference: Grant Kick off |
| IA | Network Mgt | 1 | List of requirements project should meet |
| IA | Network Mgt | 2 | Preliminary list of measures of system success |
| QI | QI | 3 | Preliminary list of measurable goals for improvement in outcomes |
| QI/IA | Leadership | 4 | Charter for system |
| QI | Leadership | 4.1 | <i>Develop charter (aims, measures, requirements)</i> |
| IA | Leadership | 4.2 | <i>Define project leadership and structure</i> |
| IA | Leadership | 4.2.1 | Design orientation process |
| IA | Leadership | 4.2.2 | Identify core design team |
| IA | Leadership | 4.2.3 | Identify leadership and coordination structure |
| IA | Leadership | 4.2.4 | Identify content faculty group (chair, subject matter experts, QIC, IA, project staff) |
| IA | Leadership | 4.2.5 | Identify people to fill the roles |
| PM | Leadership | 4.2.6 | Coaching meetings set up including leadership/strategic meetings scheduled |
| ALL | Network Mgt | 4.2.7 | Coaching meeting attendance |
| PM | Governance | 4.2.8 | Identify working groups (QI collaborative, Engagement, IT, DM/Analytics, Research/Innovation, Project Management) |
| PM | Governance | 4.2.9 | Attend AP calls and complete pre-work |
| QI | Leadership | 5 | Workgroup/team lead(s) orientation |
| QI | Leadership | 5.1 | <i>Kick off meeting with leads and teams scheduled</i> |
| QI | Leadership | 5.2 | <i>Refine charter</i> |
| PM | Leadership | 5.3 | <i>Revise project team roles</i> |
| PM | Network Mgt | 6 | Establish network management team and reporting structure |
| PM | Network Mgt | 6.1 | <i>Create workplan, workgroup scopes of work, Management Plan</i> |
| PM | Network Mgt | 6.1.1 | Identifying reading materials |
| PM | Network Mgt | 6.1.2 | Co-Design scopes of work |
| PM | Network Mgt | 6.1.3 | Create Management Plan |
| PM | Network Mgt | 7 | Develop plan for communication across network team and participants |
| PM | Network Mgt | 7.1.1 | <i>Establish Sharepoint website for sharing info with PPRN</i> |
| PM | Network Mgt | 7.1.2 | <i>Establish Social Media/LinkedIn for collaboration and article sharing (Twitter, Facebook)</i> |
| PM | Network Mgt | 7.1.3 | <i>Establish Communication Plans, toolkits/platform to communicate within PPRN (core team, workgroups, participating centers)</i> |

| | | | |
|---------|-------------|-------------|--|
| ALL | | 8 | Results of assessment and understanding of the current Care system |
| ALL | | <i>8.1</i> | <i>Assess current Care system</i> |
| QI | QI | 8.1.1 | Outcome performance assessment |
| Engage. | Engagement | 8.1.2 | Stakeholders analysis completed |
| Engage. | Engagement | 8.1.3 | Ensure design process includes patient and parents participants |
| IA | Science | 8.1.4 | Understand gap between current outcome and desired |
| IA | Science | 8.1.5 | Identify priority research topics and compare with priority outcomes |
| ALL | Leadership | 8.1.6 | Maturity Model ranking |
| ALL | | <i>8.2</i> | <i>Current infrastructure assessment</i> |
| QI | QI | 8.2.1 | Assess current QI infrastructure |
| IT/Data | Registry | 8.2.2 | Asses current IT/DM infrastructure |
| IT/Data | Registry | 8.2.3 | Orient PPRN to LHS registry (specs, functionalities) |
| PM | Network Mgt | <i>8.3</i> | <i>Identify other related projects for learning to be explored (tap into other PPRNs and existing LNs for best practices, lessons learned)</i> |
| ALL | Network Mgt | <i>8.4</i> | <i>Identify Design Resources (CCHMC Innovation Labs/VBBS used for past Design projects)</i> |
| QI | QI | 9 | Begin QI capability building Activities (courses, reading, etc.) |
| QI | QI | <i>9.1</i> | <i>IHI Open School web based training support</i> |
| QI | QI | <i>9.1</i> | <i>Other training as necessary</i> |
| QI | QI | <i>9.1</i> | <i>Describe QI team for participating care centers</i> |
| Engage. | Engagement | | Planning Empathy |
| Engage. | Engagement | | <i>Develop a plan for building empathy building activities into design process</i> |
| Engage. | Engagement | | <i>Develop norms from working with volunteers</i> |
| | | | Stage 2: Design New Sys |
| IT/Data | Registry | 10 | High level IT recommendations and strategy based on gap analysis |
| IT/Data | Registry | <i>10.1</i> | <i>PPRN infrastructure assessment (cont.)</i> |
| IT/Data | Registry | 10.1.2 | Design meeting to review recommendations |
| IT/Data | Registry | 10.1.3 | Finalize recommendations and requirements |
| ALL | | 11 | Prep for first Expert Meeting |
| ALL | | <i>11.1</i> | <i>Prepare for Expert Meeting (Chicago)</i> |
| QI/IA | QI | 11.1.1 | Set up weekly planning meetings |
| QI/IA | QI | 11.1.2 | Develop agenda |
| QI/IA | QI | 11.1.3 | Summarize User Ecology model and new ideas |
| QI/IA | QI | 11.1.4 | Summarize current care center context |
| PM | Network Mgt | 11.1.5 | Identify and invite participants |
| PM | Network Mgt | 11.1.6 | Gather biosketches |
| PM | Network Mgt | 11.1.7 | Logistics |
| QI | QI | 11.1.9 | Draft Change package |

| | | | |
|-------|-------------|----------|--|
| QI | QI | 11.1.10 | Develop charter (mission, measures, changes) for PPRN system |
| QI | QI | 11.1.11 | Develop List of Desired Program Characteristics |
| QI | QI | 11.1.12 | Develop draft system/key driver diagram |
| PM | Network Mgt | 11.1.13 | Develop Team Action Plan document for completion at expert meeting |
| IT/D | Registry | 11.2 | <i>Identify measures</i> |
| IA | Leadership | 11.2.1 | Initiate network measurement strategy |
| PM | Network Mgt | 11.2.2 | Develop policies (IRB protocol, legal agreements, Data governance) to support registry data collection/reporting |
| IT/D | Registry | 11.2.3 | Create Measures table column 1 only |
| IT/D | Registry | 11.3 | <i>Define Measures calculation</i> |
| ALL | Governance | 11.4 | <i>Begin to develop methods to demonstrate network's value</i> |
| PM | Network Mgt | 11.4.1 | Develop communications and recruitment materials for centers (draft care center application and recruitment strategy for review at expert meeting) |
| PM | Network Mgt | 11.4.2 | Gather initial inputs for budget development |
| PM | Network Mgt | 11.4.3 | identify pros/cons/potential barriers to site participation fees |
| PM | Network Mgt | 11.4.4 | Identify potential funding sources for short and long term (philanthropic, corporate) |
| PM | Leadership | 11.4.5 | Start recruiting centers |
| QI/IA | QI | 11.5 | <i>Generate Draft Reports</i> |
| QI/IA | QI | 11.5.1 | Identify Chart Types |
| QI/IA | QI | 11.5.2 | Dummy Charts/Reports |
| ALL | | 9 | First face-to-face Expert Meeting |
| QI | | 9.1 | <i>Orient to design process</i> |
| QI | Leadership | 9.2 | <i>Refine vision, purpose, values and principles, and metrics</i> |
| ALL | Registry | 9.2.1 | Review goals/needs |
| QI | QI | 9.2.2 | Review successful sites and individuals (outcomes) |
| | | | Review key changes and tools |
| QI | Registry | 9.2.3 | |
| QI/IA | Leadership | 9.2.4 | Elaborate a proposed initial system design |
| | | 9.3 | <i>Learning health system key driver diagram</i> |
| | | | Review KDD and draft measures |
| ALL | QI | 9.3.1 | |

| | | | |
|-------------|-----------------|-----------|--|
| QI/IA | QI | 9.4 | <i>Screen and prioritize new system design ideas</i> |
| Engage. | Engagement | 9.4.1 | Identify and prioritize existing patient facing prototypes |
| Engage. | Engagement | 9.4.2 | Finalize list of specific changes in care delivery associated with better outcomes including ranking the evidence/theory for each change |
| Engage. | Engagement | 9.4.3 | Identify, prioritize and sequence care center changes |
| QI | QI | 10 | Care center key driver diagram describing changes to improve chronic care |
| QI | QI | 10.1 | <i>Develop care center KDD</i> |
| Data | Registry | 11 | Data/Measures Committee Meetings (DCC) |
| | | 11.1 | <i>DMC Team Kick Off</i> |
| Data | Registry | 11.1.2 | Finalize Measures Table columns x-y |
| Data | Registry | 11.1.3 | Create DMC Charter Documents |
| | | 12 | Define Data / Measurement Strategy |
| | | | <i>Develop measure programing specs</i> |
| Data | Registry | 12.1 | |
| Data | Registry | 12.2 | <i>Identify Data Domains</i> |
| Data | Registry | 12.3 | <i>Identify external Data Systems</i> |
| | | 13 | Plan Data Flow |
| Data | Registry | 13.1 | <i>Draft Data flow diagram</i> |
| Data | Registry | 13.2 | <i>Measures tabe updated</i> |
| PM/IA | Network Mgt | 13.3 | <i>Final protocol/Data Use Agreement</i> |
| | | 14 | Develop/Collect Data instruments |
| Data | Registry | 14.1 | <i>Draft Paper Case Reports Forms (CRFs)</i> |
| Data | Registry | 14.2 | <i>Identify External System Data Fields</i> |
| Data | Registry | 14.3 | <i>Draft Registry CRF Specs</i> |
| | | 15 | Data Review: Measurement variables found in instruments |
| Data | Registry | 15.1 | <i>Measures Table updates</i> |
| Data | Registry | 15.2 | <i>Measures programing Specs updated</i> |
| PM | Network Mgt | 15.3 | <i>Pilot sites identified; agreements submitted</i> |
| | | 16 | Measurement Strategy Complete |
| | | | <i>Final Data Flow Diagram completed</i> |
| Data | Registry | 16.1 | |
| Data | Registry | 16.2 | <i>Measures Table Final</i> |
| Data | Registry | 16.3 | <i>Final CRFs</i> |
| | | | <i>Registry Implementation Plan</i> |
| Data | Registry | 16.4 | |
| | | 17 | Paper Data Collection Pilot (2-3 centers) |
| Data | Registry | 17.1 | <i>Amend CRFs</i> |
| Data | Registry | 17.2 | <i>Final Registry CRFs</i> |
| | | | BMI CONFIGURATES LHS REGISTRY |
| | | 18 | Data Collection, Upload, Reports |
| | | 18.1 | <i>Registry Build begins (Data collection, Upload, reports)</i> |
| IT | Registry | 18.1.1 | Registry Programming/Validation |

| | | | |
|----------------|-------------------|-----------|---|
| IT | Registry | 18.1.2 | Data Upload Specs |
| Data | Registry | 18.1.3 | Site Training Materials |
| IT | Registry | 19 | Measure programing |
| IT | Registry | 19.1 | <i>Measure program test and validation</i> |
| | | 20 | Quality Check: Data Collection meets Specifications (User Testing) |
| Data | Registry | 20.1 | <i>system Acceptance</i> |
| IT | Registry | 20.2 | <i>Charts produced</i> |
| | | 21 | Generate reports with test data |
| | | 22 | Quality Check: Reports meet Specs |
| Data | Registry | 22.1 | <i>Measures Acceptance</i> |
| IT | Registry | 23 | Registry Live |
| PM | Network Mgt | 23.1 | <i>IRB and Legal signed at participating centers</i> |
| Data | Registry | 24 | Registry Center Training |
| IT | Registry | 24.1 | <i>Center Configured</i> |
| IT | Registry | 24.2 | <i>user Accounts created</i> |
| IT | Registry | 24.3 | <i>First Data entered/uploaded</i> |
| IT | Registry | 24.4 | <i>Reports/Charts Produced</i> |
| Data | Registry | 25 | Additional Registry Center Training |
| Data | Registry | 26 | Continued Data entry reporting |
| QI | QI | | Attend 1st Learning Session |
| Data | Registry | 27 | Additional measures |
| | | | Stage 3: Document Design |
| QI | Leadership | 28 | Final charter for learning health system and care centers participating in improvement network |
| QI | Leadership | 28.1 | <i>Finalize charter, system diagram, change concepts & measures</i> |
| QI | Leadership | 28.2 | <i>Plan Improvement Network Leadership</i> |
| QI | Leadership | 28.2.1 | Identify and orient appropriate improvement network leadership role and responsibility |
| QI | QI | 29 | "Change Package" and Test Strategy for care centers |
| QI | QI | 29.1 | <i>Revise Change Package</i> |
| QI | QI | 29.2 | <i>Final change package review & edits</i> |
| QI | QI | 29.3 | <i>Distribute/post tools and materials</i> |
| QI | QI | 29.4 | <i>Refine network system/key driver diagram</i> |
| IT/Data | Registry | 17 | Develop and specify reports for measurement system including performance measures and reports |
| IT/Data | Registry | 17.1 | <i>Summarize feedback on reports & measurement strategy</i> |
| IT/Data | Registry | 17.2 | <i>Prioritize changes and edits</i> |
| IT/Data | Registry | 18 | Determine the extent to which automation of chronic care processes will be pursued |
| PM | Network Mgt | 19 | Ongoing Project Management Activities |
| PM | Network Mgt | 19.1 | <i>Meeting set up</i> |
| PM | Network Mgt | 19.2 | <i>Fortnightly collaborator newsletter</i> |

| | | | |
|---------|-------------------|-----------|---|
| PM | Network Mgt | 19.3 | <i>Collaboration site management / curation</i> |
| PM | Network Mgt | 19.4 | <i>budget oversight and payments</i> |
| PM | Network Mgt | 19.5 | <i>Workgroup meeting set up (assume 5)</i> |
| PM | Network Mgt | 19.6 | <i>Work group attendance</i> |
| PM | Network Mgt | 19.7 | <i>weekly design team meetings</i> |
| PM | Network Mgt | 19.8 | <i>weekly operations meetings</i> |
| PM | Network Mgt | 19.10 | <i>External website development, maintenance</i> |
| PM | Network Mgt | 19.11 | <i>Project staff oversight, management</i> |
| PM | Network Mgt | 19.12 | <i>Risk/issue monitoring and mitigation</i> |
| PM | Network Mgt | 19.13 | <i>Miscellaneous logistics, administration (rescheduling recurring meetings, coordinating travel, etc.)</i> |
| All | | | Develop database of network research and QI projects |
| Engage. | Engagement | 21 | Identify engagement approaches and tools to be tested |
| Engage. | Engagement | 27.1 | <i>Refine Changes and Tools</i> |
| Engage. | Engagement | 27.1.1 | Select tools, materials for inclusion in change package |
| Engage. | Engagement | 27.1.2 | Prepare draft toolkit/change package (including data tools) for network review |

| Deadline | Faculty Lead | Operational Lead | Deliverables | Support Group |
|---------------------|--------------|------------------|------------------------------|---------------|
| sign Process | | | | |
| | | | | |
| Jun-18 | | | Charter | |
| Jun-18 | | | Charter | |
| Jun-18 | | | Charter | |
| Jun-18 | | | Charter | |
| | | | | |
| | | | | |
| | | | Kick-off meeting | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | Org Structure | |
| | | | | |
| Mar-18 | | | Kick Off meeting | |
| | | | | |
| | | | | |
| | | | | |
| Mar-18 | | | | |
| | | | Workplan, Management plan | |
| | | | | |
| | | | | |
| | | | | |
| Mar-18 | | | | |
| | | | Communication plan | |
| | | | | |
| | | | | |

| | | | | |
|--------|--|--|--|--|
| | | | Revised Charter | |
| | | | Draft Change Package | |
| | | | System Key Driver Diagram | |
| | | | Team Action Plan | |
| | | | | |
| | | | | |
| | | | Draft protocol, Draft DUA/BAA | |
| | | | Draft Measures Table (column 1) | |
| | | | Draft Measures Table (column 2) | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | Clinical sites recruitment plan | |
| | | | Measures Tables x-y | |
| | | | Draft Charts | |
| | | | Dummy Charts/reports | |
| Jun-18 | | | | |
| | | | | |
| | | | Final Charter | |
| | | | Revised Measures Table | |
| | | | | |
| | | | Revised Chart Types + Dummy Charts/reports | |
| | | | | |
| | | | | |
| | | | Final KDD + prioritized list of Measures | |

| | | | | |
|----------------|--|--|-----------------------------------|--|
| | | | | |
| | | | Prototypes | |
| | | | | |
| | | | Prioritized List of Interventions | |
| Jul-18 | | | | |
| | | | Care Center KDD | |
| Jul-18 | | | | |
| 6/29/2018 | | | | |
| 7/10/2018 | | | | |
| 7/13/2018 | | | DMC Charter | |
| Jul-18 | | | | |
| 7/20/2018 | | | Measures prog. Specs | |
| 7/27/2018 | | | | |
| 7/27/2018 | | | | |
| Aug-18 | | | | |
| 8/3/2018 | | | | |
| 8/3/2018 | | | | |
| 8/1/2018 | | | | |
| Aug-18 | | | | |
| 8/10/2018 | | | Draft CRFs | |
| 8/10/2018 | | | | |
| 8/17/2018 | | | | |
| Aug-18 | | | | |
| 8/17/2018 | | | | |
| 8/17/2018 | | | | |
| 8/1/2018 | | | | |
| Aug-18 | | | | |
| 8/24/2018 | | | Final Measures table | |
| 8/24/2018 | | | | |
| 8/14/2018 | | | CRFs | |
| 8/31/2018 | | | Registry Implementation Plan | |
| 8/10-8/24/2018 | | | | |
| 8/31/2018 | | | | |
| 8/31/2018 | | | Final CRFs | |
| Sept-November | | | | |
| Nov-18 | | | | |
| | | | | |
| 11/1/2018 | | | | |

| | | | | |
|------------|--|--|--------------------|--|
| 10/15/2018 | | | | |
| 11/1/2018 | | | Training Materials | |
| Nov-18 | | | | |
| 11/16/2018 | | | | |
| Nov-18 | | | | |
| 11/6/2018 | | | | |
| 11/26/2018 | | | Charts | |
| Nov-18 | | | | |
| Nov-18 | | | | |
| 11/26/2018 | | | | |
| Dec-18 | | | | |
| 12/1/2018 | | | | |
| Dec-18 | | | | |
| 12/7/2018 | | | | |
| 12/7/2018 | | | | |
| 12/14/2018 | | | | |
| 1/1/2019 | | | Centers Reports | |
| Dec-18 | | | | |
| Jan-19 | | | | |
| Jan-19 | | | | |
| Mar-19 | | | New Measures | |

gn and Improvement Network Set up

| | | | | |
|--------|--|--|--|--|
| Jan-19 | | | | |
| | | | | |
| | | | | |
| | | | | |
| Jan-19 | | | | |
| | | | | |
| | | | | |
| | | | | |
| Jan-19 | | | | |
| | | | | |
| | | | | |
| Jan-19 | | | | |
| | | | | |
| | | | | |
| | | | | |

| | | | | | | |
|--|--------------------|--|--|--|--|--|
| | <i>not started</i> | | | | | |
| | <i>not started</i> | | | | | |
| | <i>not started</i> | | | | | |
| | <i>not started</i> | | | | | |
| | <i>not started</i> | | | | | |
| | <i>not started</i> | | | | | |
| | <i>not started</i> | | | | | |
| | <i>not started</i> | | | | | |
| | <i>not started</i> | | | | | |
| | <i>not started</i> | | | | | |
| | <i>not started</i> | | | | | |
| | <i>not started</i> | | | | | |
| | <i>not started</i> | | | | | |
| | <i>not started</i> | | | | | |
| | <i>not started</i> | | | | | |
| | <i>not started</i> | | | | | |
| | <i>not started</i> | | | | | |
| | <i>not started</i> | | | | | |
| | <i>not started</i> | | | | | |
| | <i>not started</i> | | | | | |
| | <i>not started</i> | | | | | |
| | | | | | | |
| | <i>not started</i> | | | | | |



| | | | | | | |
|--|--------------------|--|--|--|--|--|
| | <i>Not started</i> | | | | | |
| | <i>Not started</i> | | | | | |
| | <i>Not started</i> | | | | | |
| | <i>Not started</i> | | | | | |
| | <i>Not started</i> | | | | | |
| | <i>Not started</i> | | | | | |
| | <i>Not started</i> | | | | | |
| | <i>Not started</i> | | | | | |
| | <i>Not started</i> | | | | | |
| | <i>Not started</i> | | | | | |
| | <i>Not started</i> | | | | | |
| | <i>Not started</i> | | | | | |
| | <i>Not started</i> | | | | | |
| | <i>Not started</i> | | | | | |
| | <i>Not started</i> | | | | | |
| | <i>Not started</i> | | | | | |
| | <i>Not started</i> | | | | | |
| | <i>Not started</i> | | | | | |
| | <i>Not started</i> | | | | | |

| | | | | | | |
|--|--------------------|--|--|--|--|--|
| | <i>Not started</i> | | | | | |
| | <i>Not started</i> | | | | | |
| | <i>Not started</i> | | | | | |
| | <i>Not started</i> | | | | | |
| | <i>Not started</i> | | | | | |
| | <i>Not started</i> | | | | | |
| | <i>Not started</i> | | | | | |
| | <i>Not started</i> | | | | | |
| | <i>Not started</i> | | | | | |
| | <i>Not started</i> | | | | | |
| | <i>Not started</i> | | | | | |
| | <i>Not started</i> | | | | | |
| | <i>Not started</i> | | | | | |
| | <i>Not started</i> | | | | | |
| | <i>Not started</i> | | | | | |
| | <i>Not started</i> | | | | | |
| | <i>Not started</i> | | | | | |

[illegible]

44

26

22

26

Hours accounted in rows 49-51



