



Readiness Assessment Maturity Model RAMM

An OMG Managed Community



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Our Community

The BPM+ Health™ community of practice is an open ecosystem devoted to improving national and international health. We advance evidence-based medical practices and knowledge across the health sector by capturing and communicating best practices and clinical expertise.

The community enables health organizations, professional societies, and vendors to document their care pathways and workflows using open, standards-based notations. This approach allows practitioners to discover and share care pathways and workflows accurately and consistently.

Learn more at www.bpm-plus.org



What is the RAMM?

The Adoption Readiness Assessment and Maturity Model (RAMM) for sharable clinical pathways are intended to evaluate the maturity of an organization's capacity to adopt clinical guidelines, not the maturity of its clinical practice. Based upon the broadly accepted 5-level maturity model construct, the RAMM fosters and supports organizational transformation by improving readiness to adopt clinical pathways, proven workflows, and best practices and addressing human and technical considerations needed to achieve a Learning Health System.

Why did we create the RAMM?

The RAMM was created to help organizations determine how well-positioned they are to support these needs. This model focuses on what have been identified as key critical-path measures and indicators, allowing for an objective assessment of an organization and its ability to embrace change. More importantly, it allows for the identification of improvement opportunities to allow for more effective adoption and organizational change management by identifying specific skillsets, actions, or activities that can be undertaken to address identified concern areas.

How do I use the RAMM?

The RAMM is a foundational tool that can be leveraged to both assess the current capability state of an organization and to facilitate an evolution toward desired capabilities. Elaboration of how the RAMM can be applied to achieve these goals is coming soon in the Adoption Playbook (expected late 2021). Note that while the artifact is targeted toward clinically oriented organizations, it can be leveraged for other healthcare and non-clinical situations with little adaptation. Those involved in IT modernization efforts, in particular, should find this artifact useful.

BPM+ Clinical Practice Guideline Adoption
Readiness Assessment and Maturity Model: BPM+ Adoption

| | Level 1 <i>Initial/ Inconsistent</i> | Level 2 <i>Repeatable / Stabilized</i> | Level 3 <i>Defined / Standardized</i> | Level 4 <i>Quantitatively Managed</i> | Level 5 <i>Learning Health System</i> |
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| Description | Ad Hoc Adoption of clinical pathways is inconsistent. | Regular pattern Adoption processes are repeatable within a organizational unit (ward, lab, etc.) No consistent process across the organization | Process, adoption approach defined & documented; standardized across the organization; foundation to achieve process goals Adoption support (training, change management, conformance discipline, and governance), is provided to work units. Organizational consistency in approach toward processes (configure/adapt to specific needs, adoption, assurance) | Measured, monitored and controlled Adoption process is measured and analyzed for efficiencies and efficacy | Continuous process improvement Metrics-based Pervasive understanding, use of BPM+ When established adoption processes do not meet objectives, innovative practices are employed. |
| Institutional Standards/ Guidelines / Policies | Reactive vs proactive Limited or no structured advocacy Where there is advocacy, it is driven by “champions” and not institutional commitment | Organizational unit buy-in toward pathway adoption; sporadic recognized need for clinical guidelines in certain situations Inconsistent implementation across the organization Beginnings of institutional priorities around pathway adoption (emerging policies, funding change management, executive commitment) | Institutional authorities use a documented, standardized, consistent approach for evaluation and acceptance of clinical guidelines Policies in place addressing change management, knowledge management, metrics, organization-wide training, security, and measurement as related to guidelines and their adoption Funding and executive support in place for necessary resources to address institutional adoption, compliance, and governance Adoption is audited to ensure compliance with adoption policies | Metrics used to drive and continuously improve processes and adoption outcomes Systemic governance oversees virtuous cycle of deployment, measurement, feedback, and improvement (processes, systems, training), building organizational trust. | Ability to easily and appropriately adjust guidelines to incorporate emerging best-practices with a focus on quality, efficiency, consistency Organizational support for identifying and evaluating innovative adoption techniques. Infrastructure in place to capturing innovation ideas |
| Stakeholder Management (patient/caregiver(s), clinical) | Limited understanding of stakeholders needs and goals | Understanding of stakeholders needs, interactions, and roles vary by department, program, or project. Organizational units recognize patients/ caregivers as stakeholders Inconsistent inclusion of patient priorities in process design and decision planning Growing organizational awareness of the need and value of stakeholder management | Iteratively identify, document, and implement change management consistently incorporating stakeholders into pathway processes Establish accountability with authority to oversee and apply stakeholder management across the Enterprise Patient needs explicitly included in the process design and patient-facing tools; direct and consistent patient advocacy participation Standard approach to measurement of stakeholder engagement | Expansion of standardization tools, templates and processes to new domains and stakeholder groups Constant monitoring, analysis, and improvement cycle. Stakeholders proactively engage with pathway adoption to continuously improve process Impact on patient experience and outcome efficacy consistently considered | When established stakeholder involvement methods do not meet objectives, innovative practices are employed Self-organizing communities of practice meet regularly and inform a learning health system |
| Adoption Processes | Patchy and inconsistent adoption processes across the organization Implementation approaches vary by organizational unit; limited documentation | Adoption processes have limited rigor, vary across organizational units; limited repeatability within organizational units Staff, resources, and time committed but insufficient for consistent organizational adoption; ability to support work commitments. | Standardized, centralized, documented approach to adoption processes across the enterprise; Repeatable, documented methods to localize guidelines to meet project-specific quality, efficiency, efficacy needs. Includes mapping of relevant data and workflows; routine review & update of pathways Staff, resources, and time committed and sufficient for consistent organizational adoption; ability to support work commitments. | Quantitative measurement and analysis of adoption processes to drive improvement. Designated organizational responsibility to evaluate pathway implementation and use Automation is continually improved to support the end to end patient care process. | Successful innovations are identified and promulgated to advance and improve adoption impact Optimize use of tools, training, and system improvements to further adoption success, build organizational trust, foster accountability. |

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| Privacy, Security, Confidentiality | Has no plan or action in place to prevent compromise resulting in loss, disclosure or corruption of information, assets and processes. Gaps exist in the protection of confidential information | Each work unit identifies the information under its control that must be protected. Each work unit applies organizational information security policies independently | Implementation of pathways consistently considers and incorporates security, privacy, and access permissions as required by policy Assign access to physical and logical assets and associated facilities to enable and support the requirements of the pathway Access/permissions will support the adoption processes including but not limited to localization. | Optimized sharing of data across organizations needed to implement pathways Management of permissions allowing visibility into patient care processes to realize effective collaboration and care transitions. Evaluation the impact of pathway adoption on security KPIs, cybersecurity training. | Innovative techniques such as machine learning/advance analytics are used to identify novel security threats and (e.g. combining of data fields/sources) Apply predictive techniques to determine emerging vulnerabilities with pathway adoption; corresponding remediations. |
| Skills and Expertise (education component) | Ability to hire people with knowledge of BPM; no formal plan is in place Interview and onboarding procedures are inconsistent | Understand and document requirements and tools needed to support BPM adoption Ability to interview and hire personnel qualified to support organizational adoption short-term goals Hiring and training reflect job skills needed for adopting clinical pathways in operational settings. Work units develop methods to determine the skillset requirement to deploy pathway in operational setting. | Standardized approach for skill assessment, development, training, career pathway considering operational and pathway support requirements (e.g., care teams) Hire/support personnel supporting organizational change management and adoption processes, BPM+. Support for continuous assessment, skillset advancement, succession planning, human resource planning Ability to respond to new skills needed for successful integration, adoption, proactive use, and evaluation | Quantitative evaluation of hiring processes, skills development, succession planning, and other workforce practices. Support workforce development around formal use and adoption of care pathways (BPM+ skills, change management, etc.) Personnel accountable for identification of improvement opportunities, resource allocation, and planning. | Identify and evaluate and if effective deploy innovative methods to improve training and ability to embrace organizational change. Recognition of the need to develop and support technical and clinical skill set changes to meet the needs of future advances in medical practice |
| Knowledge Assets, Tools and Automation | Institutional knowledge is informally expressed, limited sharing Uncoordinated and inconsistent use of tooling | Knowledge captured, documented within organizational units; (checklists, order sets, quick guides) Emergence of enterprise strategy to advance institutional knowledge sharing Institutionally identified common tools; heterogeneous toolset common and endorsed; Use, customization vary by org unit; gaps in tool portfolio are common | Knowledge captured, managed, and consumed as a first-order asset across the enterprise (pathways, CDS rules, terminologies) Multidisciplinary organizational structure exists for managing knowledge assets, tools and information Established cohesive tool set endorsed, available, and supported by workforce training; tool role, purpose, intended use understood. Clinical decision support available at the point of care, supportive of workflow and human-centered design | Knowledge is managed, coordinated, transparent, pervasive, and consumed via use of automation, standardized representations and metadata Capture and use of knowledge is evaluated quantitatively and improvements are identified. Consistent, standardized tool suite leveraging knowledge delivered across care settings | Applied use of human-centered design principles to discover and advance gaps in institutional knowledge and tooling Monitoring, assessment, and knowledge maturation based upon applied use and outcomes |
| Goals and Measurement (adoption of clinical) | Goals and/or metrics not identified Inconsistent or no measurement of adoption process and goals | Deployment goals are established, promulgated, and measured with inconsistent results across the enterprise. Approach for measuring is inconsistent and may vary across organizational units Routine adjustment of processes to advance outcomes focused within organizational units | Adoption of quality measures, dashboards, goals and quality reporting deployed consistently across the enterprise, including points-of-care; Use of these at POC (appropriate use of tools) Institutional tracking of use of common processes, pathways, adherence metrics, enterprise visibility; established enterprise accountability. (Note that this is tracking organizational adoption and compliance, not pathway efficacy) Defined key process indicators (KPIs) driving consistent measuring and reporting of progress, and improvement feedback | Pathway adoption and compliance measured and monitored by supporting tools, practices Monitoring guideline use to provide feedback and improve pathway efficacy. Enterprise has established processes that are used for impact, predictive risk assessment and management | Consistent review of efficacy of processes in impacting goals; Routine adjustment of processes to improve outcomes Assessing KPIs and measures to advance and improve performance and outcomes |