



# Workforce Competencies for Patient-Centered Health Care Delivery through Health IT: A Framework for Practice Transformation

\* This project supported in whole or in part by ARRA HIT Grant # 90CC0079/02-04 awarded to the Cuyahoga Community College by the Federal HHS Office of the National Coordinator.

## Curricula Resources: Population Management

Population Management Detailed Competency	LO#	Population Management Learning Objectives	Resources/Recommendations
<b>Definitions &amp; Principles</b>			
Describe what Population Management is	1a.1	Describe Population Management	<ul style="list-style-type: none"> <li>• <a href="http://www.hhnmag.com/hhnmag/jsp/articledisplay.jsp?dcrpath=HHNMAG/Article/data/10OCT2010/1010HHN_Coverstory&amp;domain=HHNMAG">http://www.hhnmag.com/hhnmag/jsp/articledisplay.jsp?dcrpath=HHNMAG/Article/data/10OCT2010/1010HHN_Coverstory&amp;domain=HHNMAG</a> <b>Managing Population Health.</b> General overview article from Hospitals and Health Networks</li> <li>• <a href="http://ihealthtran.com/pdf/PHMReport.pdf">http://ihealthtran.com/pdf/PHMReport.pdf</a> <b>Population Health Management: A Roadmap for Provider-Based Automation in a New Era of Healthcare.</b> Report by the Institute for Health Technology Transformation (IHT<sup>2</sup>) providing principles and best practices of population management. Topics include:               <ul style="list-style-type: none"> <li>• Definition of population health management</li> <li>• Planning for population health</li> <li>• Data collection, storage, and management</li> <li>• Population monitoring and stratification</li> <li>• Patient engagement</li> <li>• Team-based interventions</li> <li>• Outcomes measurement</li> </ul> </li> <li>• <a href="http://www.urmc.rochester.edu/news/publications/pulse/oct-nov-2012/story1.cfm">http://www.urmc.rochester.edu/news/publications/pulse/oct-nov-2012/story1.cfm</a> <b>From Intervention to Prevention: Demystifying Population Health Management.</b> Article published by the University of Rochester Medical Center. Provides an overview of Population Management concepts and benefits to the health care population.</li> </ul>



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	1a.2	Describe how Population Management contributes to the success of the Triple Aim	<ul style="list-style-type: none"> <li>• <a href="http://www.improvingpopulationhealth.org/blog/2011/01/unpacking_triple_aim.html">http://www.improvingpopulationhealth.org/blog/2011/01/unpacking_triple_aim.html</a> <b>Unpacking the Triple Aim Model.</b> This is a blog post written by Dr. David A. Kindig, MD, PhD, published through the University of Wisconsin School of Medicine and Public Health. The post emphasizes the contribution made by the Population Management component of the Triple Aim.</li> </ul>
	1a.3	Analyze the paradigm change of approaching health care from a population health perspective	<ul style="list-style-type: none"> <li>• <a href="http://content.healthaffairs.org/content/28/2/454.full">http://content.healthaffairs.org/content/28/2/454.full</a> <b>Collecting and Sharing Data for Population Health: a New Paradigm.</b> This HealthAffairs article explores the advantages of a networked model for analyzing population health information.</li> <li>• <a href="http://www.amga.org/AboutAMGA/ACO/Articles/CaseStudy_final.pdf">http://www.amga.org/AboutAMGA/ACO/Articles/CaseStudy_final.pdf</a> <b>The Triple Aim: Care, Health, and Cost.</b> An article published by the Institute for Healthcare Improvement (IHI) provides a description of the Triple Aim, and discusses some of the obstacles to its achievement.</li> </ul>
Describe why Population Management is necessary	1b.1	Explain the rationale for using a population health management model as opposed to not using this model	<ul style="list-style-type: none"> <li>• <a href="http://www.amga.org/AboutAMGA/ACO/Articles/CaseStudy_final.pdf">http://www.amga.org/AboutAMGA/ACO/Articles/CaseStudy_final.pdf</a> <b>ACOs and Population Health Management.</b> This is a case study published by the American Medical Group Association (AMGA) that demonstrates some of the incentives and benefits of adopting a population health management model.</li> <li>• <a href="http://www.urmc.rochester.edu/news/publications/pulse/oct-nov-2012/story1.cfm">http://www.urmc.rochester.edu/news/publications/pulse/oct-nov-2012/story1.cfm</a> <b>From Intervention to Prevention: Demystifying Population Health Management.</b> Article published by the University of Rochester Medical Center. Provides an overview of Population Management Concepts and benefits to the health care population.</li> </ul>



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	1b.2	Discuss the benefits of implementing Population Management	<ul style="list-style-type: none"> <li>• <a href="http://www.amga.org/AboutAMGA/ACO/Articles/CaseStudy_final.pdf">http://www.amga.org/AboutAMGA/ACO/Articles/CaseStudy_final.pdf</a> <b>ACOs and Population Health Management.</b> This is a case study published by the American Medical Group Association (AMGA) that demonstrates some of the incentives and benefits of adopting a population health management model.</li> <li>• <a href="http://www.urmc.rochester.edu/news/publications/pulse/oct-nov-2012/story1.cfm">http://www.urmc.rochester.edu/news/publications/pulse/oct-nov-2012/story1.cfm</a> <b>From Intervention to Prevention: Demystifying Population Health Management.</b> Article published by the University of Rochester Medical Center. Provides an overview of Population Management Concepts and benefits to the health care population.</li> </ul>
Describe the process of implementing Population Management	1c.1	Describe the population management model (e.g. Define Population > Identify Care Gaps > Stratify Risks > Engage Patients > Manage Care > Measure Outcomes > Define Population etc.)	<ul style="list-style-type: none"> <li>• <a href="http://ihealthtran.com/pdf/PHMReport.pdf">http://ihealthtran.com/pdf/PHMReport.pdf</a> <b>Population Health Management: A Roadmap for Provider-Based Automation in a New Era of Healthcare.</b> Report by the Institute for Health Technology Transformation (IHT<sup>2</sup>) providing principles and best practices of population management. Topics include:               <ul style="list-style-type: none"> <li>• Definition of population health management</li> <li>• Planning for population health</li> <li>• Data collection, storage, and management</li> <li>• Population monitoring and stratification</li> <li>• Patient engagement</li> <li>• Team-based interventions</li> <li>• Outcomes measurement</li> </ul> </li> </ul>
Describe the intersects between	1d.1	Articulate the intersects between Population Management, HIE and MU, and how all three impact PCMH	<a href="http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Downloads/Stage1vsStage2CompTablesforEP.pdf">http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Downloads/Stage1vsStage2CompTablesforEP.pdf</a> Comparison table for professionals



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Population Management, HIE and MU, and how they impact PCMH	1d.2	List the core objectives for meaningful use that relate to population management	<a href="http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Downloads/Stage1vsStage2CompTablesforEP.pdf">http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Downloads/Stage1vsStage2CompTablesforEP.pdf</a> Comparison table for professionals
Determine what data is needed, where it is located, and who has access to it	2a.1	Compile data from various sources for a given population	<ul style="list-style-type: none"> <li>• <a href="http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1447747/">http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1447747/</a>  <b>What is Population Health?</b> Article from the American Journal of Public Health, available through PubMed. In this article it is argued that the field of population health includes health outcomes, patterns of health determinants, and policies and interventions that link these two.</li> <li>• <a href="http://www.youtube.com/watch?v=IcxMNBzbwgl">http://www.youtube.com/watch?v=IcxMNBzbwgl</a>  <b>Using Population Health Management Tools to Take Better Care of Patients.</b> This is a short video focused on the importance of using data to create population health interventions. Produced by Catholic Health Partners.</li> <li>• <a href="http://content.healthaffairs.org/content/28/2/454.full">http://content.healthaffairs.org/content/28/2/454.full</a>  <b>Collecting and Sharing Data for Population Health: a New Paradigm.</b> This HealthAffairs article explores the advantages of a networked model for analyzing population health information.</li> </ul>
	2a.2	Propose solutions to the challenges involved in gathering data	<ul style="list-style-type: none"> <li>• <a href="http://ihealthtran.com/pdf/PHMReport.pdf">http://ihealthtran.com/pdf/PHMReport.pdf</a>  <b>Population Health Management: A Roadmap for Provider-Based Automation in a New Era of Healthcare.</b> Report by the Institute for Health Technology Transformation (IHT<sup>2</sup>) providing principles and best practices of population management. See section “Data Collection, Storage, and Management”</li> </ul>
	2a.3	Map tools and systems used in the health care setting to the roles that are authorized to access them	<b>Recommendation</b> <ul style="list-style-type: none"> <li>• Develop a toolkit to aid health care practices in listing tools and systems used in the practice, mapping the interoperability among tools, and finally, associating users or roles to the use of each tool.</li> <li>• Include a brief eLearning module to support the users in implementing the toolkit.</li> </ul>



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Define populations for internal interventions and external reporting	2b.1	Define and track populations in order to meet MU reporting requirements or other reporting requirements	<ul style="list-style-type: none"> <li><a href="http://ihealthtran.com/pdf/PHMReport.pdf">http://ihealthtran.com/pdf/PHMReport.pdf</a> <b>Population Health Management: A Roadmap for Provider-Based Automation in a New Era of Healthcare.</b> Report by the Institute for Health Technology Transformation (IHT<sup>2</sup>) providing principles and best practices of population management. See section "Population Monitoring and Stratification"</li> </ul>
	2b.2	Define populations for whom the health care setting will implement and track interventions (e.g. populations based on preventive services vs. chronic services)	<ul style="list-style-type: none"> <li><a href="http://ihealthtran.com/pdf/PHMReport.pdf">http://ihealthtran.com/pdf/PHMReport.pdf</a> <b>Population Health Management: A Roadmap for Provider-Based Automation in a New Era of Healthcare.</b> Report by the Institute for Health Technology Transformation (IHT<sup>2</sup>) providing principles and best practices of population management. See sections "Patient Engagement" and "Team-Based Interventions"</li> </ul>
Embrace the importance of accurate and complete data entry	2c.1	Apply best practices in technology usage to a "real-life" Population Management scenario related to MU (e.g. immunizations), emphasizing data accuracy and how the location of data inputs effects reporting	<ul style="list-style-type: none"> <li><a href="http://pcmh.ahrq.gov/portal/server.pt/gateway/PTARGS_0_11787_945869_0_0_18/">http://pcmh.ahrq.gov/portal/server.pt/gateway/PTARGS_0_11787_945869_0_0_18/</a> <b>Practice Based Population Health: Information Technology to Support Transformation to Proactive Primary Care.</b> This is a paper prepared by the University of Chicago for the Agency for Healthcare Research and Quality, part of the US Department of Health and Human Services. It discusses the implementation of a Practice-based Population Health (PBPH) approach to population management.</li> </ul>
Describe data quality responsibilities for the various roles in a health	3b.1	Summarize the data process flow from role to role, throughout the health care setting in regard to Population Management	<ul style="list-style-type: none"> <li><a href="http://pcmh.ahrq.gov/portal/server.pt/gateway/PTARGS_0_11787_945869_0_0_18/">http://pcmh.ahrq.gov/portal/server.pt/gateway/PTARGS_0_11787_945869_0_0_18/</a> <b>Practice Based Population Health: Information Technology to Support Transformation to Proactive Primary Care.</b> This is a paper prepared by the University of Chicago for the Agency for Healthcare Research and Quality, part of the US Department of Health and Human Services. It discusses the implementation of a Practice-based Population Health (PBPH) approach to population management.</li> </ul>



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care setting	3b.2	Apply role-specific best practices for emphasizing the importance of data quality	<ul style="list-style-type: none"> <li><a href="http://library.ahima.org/xpedio/idcplg?IdcService=GET_HIGHLIGHT_INFO&amp;QueryText=%28data+quality%29%3cand%3e%28xPublishSite%3csubstring%3e%60BoK%60%29&amp;SortField=xPubDate&amp;SortOrder=Desc&amp;dDocName=book1_050085&amp;HighlightType=HtmlHighlight&amp;dWebExtension=hcssp">http://library.ahima.org/xpedio/idcplg?IdcService=GET_HIGHLIGHT_INFO&amp;QueryText=%28data+quality%29%3cand%3e%28xPublishSite%3csubstring%3e%60BoK%60%29&amp;SortField=xPubDate&amp;SortOrder=Desc&amp;dDocName=book1_050085&amp;HighlightType=HtmlHighlight&amp;dWebExtension=hcssp</a>  <b>Assessing and Improving EHR Data Quality (Updated).</b> Article published by American Health Information Management Association (AHIMA) outlining the importance of data quality.</li> </ul>
Use decision support tools embedded in the EHR to support patient care	4a.1	Explain the rationale for using a CCHIT-certified EHR product to meet meaningful use requirements	<ul style="list-style-type: none"> <li><a href="http://www.providersedge.com/ehdocs/ehr_articles/Supporting_Care_Management-the_Role_of_EHR_Systems.pdf">http://www.providersedge.com/ehdocs/ehr_articles/Supporting_Care_Management-the_Role_of_EHR_Systems.pdf</a>  <b>Supporting Care Management: The Role of Electronic Health Record (EHR) Systems.</b> Overview, put out by Doctors Office Quality – Information Technology (DOQ-IT), of how EHR Systems can be used to support physicians and other healthcare professionals in the delivery of care management services.</li> </ul>
	4a.2	Explain the importance of using the decision support tools embedded in the EHR	<ul style="list-style-type: none"> <li><a href="http://www.providersedge.com/ehdocs/ehr_articles/Supporting_Care_Management-the_Role_of_EHR_Systems.pdf">http://www.providersedge.com/ehdocs/ehr_articles/Supporting_Care_Management-the_Role_of_EHR_Systems.pdf</a>  <b>Supporting Care Management: The Role of Electronic Health Record (EHR) Systems.</b> Overview, put out by Doctors Office Quality – Information Technology (DOQ-IT), of how EHR Systems can be used to support physicians and other healthcare professionals in the delivery of care management services.</li> </ul>
	4a.3	Explain the correlation between accurate data entry and output of useful decision support alerts in the EHR	<ul style="list-style-type: none"> <li><a href="http://www.providersedge.com/ehdocs/ehr_articles/Supporting_Care_Management-the_Role_of_EHR_Systems.pdf">http://www.providersedge.com/ehdocs/ehr_articles/Supporting_Care_Management-the_Role_of_EHR_Systems.pdf</a>  <b>Supporting Care Management: The Role of Electronic Health Record (EHR) Systems.</b> Overview, put out by Doctors Office Quality – Information Technology (DOQ-IT), of how EHR Systems can be used to support physicians and other healthcare professionals in the delivery of care management services.</li> </ul>



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<b>Data &amp; Documentation</b>			
Create effective workflows for tracking patient data and ensuring that it is correctly entered in the EHR	5a.1	Map current processes used to track and compile patient referrals, labs and other patient services	<p><b>Recommendation</b></p> <ul style="list-style-type: none"> <li>Develop a toolkit to aid health care practices in mapping current processes for gathering and tracking patient referrals, labs, and patient services. Point the way toward next steps.</li> <li>Include a brief eLearning module to support the users in implementing the toolkit.</li> </ul>
	5a.2	Create improved workflows to ensure that accurate and complete records are entered in the EHR	<p><b>Recommendation</b></p> <ul style="list-style-type: none"> <li>Develop a toolkit to aid health care practices in the process of defining and improving workflows to support accurate, timely entry of data in the EHR.</li> <li>Include a brief eLearning module to support the users in implementing the toolkit.</li> </ul>
Utilize patient and health care practice data to improve patient care	6a.1	Use health care practice data to create an intervention to improve care for a patient population.	<p><b>Recommendation</b></p> <ul style="list-style-type: none"> <li>Develop a toolkit to aid health care practices in defining and structuring a patient population intervention.</li> <li>Include a brief eLearning module to support the users in implementing the toolkit.</li> </ul>
	6a.2	List how each role in the health care setting is involved in Population Management-related interventions to improve patient care	<ul style="list-style-type: none"> <li><a href="http://www.hrsa.gov/healthit/toolbox/HealthITAdoptiontoolbox/StaffingandExpertise/specificexpertise.html">http://www.hrsa.gov/healthit/toolbox/HealthITAdoptiontoolbox/StaffingandExpertise/specificexpertise.html</a>  <b>What Specific Expertise Do We Need?</b> This article is part of the US Department of Health and Human Services' (HRSA) Health IT Adoption Toolbox. The article includes related resources on skills assessment, and sample job descriptions.</li> </ul>
	6a.3	List ways that EHR systems support patient self-management	<ul style="list-style-type: none"> <li><a href="http://www.providersedge.com/ehdocs/ehr_articles/Supporting_Care_Management-the_Role_of_EHR_Systems.pdf">http://www.providersedge.com/ehdocs/ehr_articles/Supporting_Care_Management-the_Role_of_EHR_Systems.pdf</a>  <b>Supporting Care Management: The Role of Electronic Health Record (EHR) Systems.</b> Overview, put out by Doctors Office Quality – Information Technology (DOQ-IT), of how EHR Systems can be used to support physicians and other healthcare professionals in the delivery of care management services.</li> </ul>



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	6a.4	Discuss how EHR systems support population care management	<ul style="list-style-type: none"> <li><a href="http://www.providersedge.com/ehdocs/ehr_articles/Supporting_Care_Management-the_Role_of_EHR_Systems.pdf">http://www.providersedge.com/ehdocs/ehr_articles/Supporting_Care_Management-the_Role_of_EHR_Systems.pdf</a>  <b>Supporting Care Management: The Role of Electronic Health Record (EHR) Systems.</b> Overview, put out by Doctors Office Quality – Information Technology (DOQ-IT), of how EHR Systems can be used to support physicians and other healthcare professionals in the delivery of care management services.</li> </ul>
Describe how clinical decision-making is impacted by employing a population health management approach	7a.1	Describe how the Population Management approach impacts clinical decision-making	<ul style="list-style-type: none"> <li><a href="http://www.ncbi.nlm.nih.gov/books/NBK97318/">http://www.ncbi.nlm.nih.gov/books/NBK97318/</a>  <b>Enabling Health Care Decision-making Through Clinical Decision Support and Knowledge Management.</b> Text put out by the Agency for Healthcare Research and Quality that catalogues study designs used to assess the clinical effectiveness of clinical decision support systems (CDSSs) and knowledge management systems (KMSs), to identify features that impact the success of CDSSs/KMSs, to document the impact of CDSSs/KMSs on outcomes, and to identify knowledge types that can be integrated into CDSSs/KMSs.</li> </ul>
	7a.2	Identify challenges to employing a population management approach to clinical decision-making	<ul style="list-style-type: none"> <li><a href="http://www.ncbi.nlm.nih.gov/pubmed/18569855">http://www.ncbi.nlm.nih.gov/pubmed/18569855</a>  <b>Clinical reasoning and population health: decision making for an emerging paradigm of health care.</b> This article is published in the journal Physiotherapy Theory and Practice. It contains a discussion of how to reorient clinical decision making toward a population health management model. Full article is available through PubMed.</li> </ul>
	7a.3	Identify the benefits of employing a population management approach to clinical decision-making	<ul style="list-style-type: none"> <li><a href="http://www.ncbi.nlm.nih.gov/pubmed/18569855">http://www.ncbi.nlm.nih.gov/pubmed/18569855</a>  <b>Clinical reasoning and population health: decision making for an emerging paradigm of health care..</b> This article is published in the journal Physiotherapy Theory and Practice. It contains a discussion of how to reorient clinical decision making toward a population health management model. Full article is available through PubMed.</li> </ul>
	7a.4	List ways that EHR systems support clinical decision-making	<ul style="list-style-type: none"> <li><a href="http://www.providersedge.com/ehdocs/ehr_articles/Supporting_Care_Management-the_Role_of_EHR_Systems.pdf">http://www.providersedge.com/ehdocs/ehr_articles/Supporting_Care_Management-the_Role_of_EHR_Systems.pdf</a>  <b>Supporting Care Management: The Role of Electronic Health Record (EHR) Systems.</b> Overview, put out by Doctors Office Quality – Information Technology (DOQ-IT), of how EHR Systems can be used to support physicians and other healthcare professionals in the delivery of care management services.</li> </ul>





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	7a.5	Apply a Population Management approach to clinical decision-making in a "real-life" scenario	<ul style="list-style-type: none"> <li><a href="http://www.advisory.com/Research/Health-Care-Advisory-Board/Studies/2013/Three-Elements-for-Successful-Population-Health-Management">http://www.advisory.com/Research/Health-Care-Advisory-Board/Studies/2013/Three-Elements-for-Successful-Population-Health-Management</a>  <b>Three Key Elements for Successful Population Health Management.</b> Article published by The Advisory Board Company. It posits that three elements required for successful population health management are:               <ul style="list-style-type: none"> <li>Information-powered clinical decision-making</li> <li>Primary care-led clinical workforce</li> <li>Patient engagement and community integration</li> </ul> </li> </ul>
Utilize registries and other IT tools to identify and manage populations of patients	8a.1	Determine data and reporting requirements for patient population management or for implementing Population Management interventions (e.g. creation of an immunization registry)	<ul style="list-style-type: none"> <li><a href="http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Downloads/Stage1vsStage2CompTablesforEP.pdf">http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/Downloads/Stage1vsStage2CompTablesforEP.pdf</a>  <b>Stage 1 v. Stage 2 Comparison Table for Eligible Professionals.</b> Table published by Centers for Medicare and Medicaid Services (CMS) outlining comparisons between stage one and stage two. Specific regulations on page five.</li> </ul>
	8a.2	Identify appropriate tools and registries to identify and manage patient populations, in collaboration with I.T.	<ul style="list-style-type: none"> <li><a href="http://www.chcf.org/publications/2004/02/using-computerized-registries-in-chronic-disease-care">http://www.chcf.org/publications/2004/02/using-computerized-registries-in-chronic-disease-care</a>  <b>Using Computerized Registries in Chronic Disease Care.</b> Report put out by California Healthcare Foundation (CFHC) provides an overview of the function and use of computerized disease registries and outlines issues for consideration in obtaining registry software and integrating registry products into the routine work of the physician practice.</li> </ul>
Improve interoperability among tools and systems	8b.1	Describe the challenges and potential solutions of working with disparate systems and of creating interoperability between tools	<ul style="list-style-type: none"> <li><a href="http://www.healthit.gov/providers-professionals/interoperability-training-courses">http://www.healthit.gov/providers-professionals/interoperability-training-courses</a>  <b>Interoperability Training Courses.</b> This is a series of five eLearning modules on systems interoperability developed by the Office of the National Coordinator.</li> </ul>
	8b.2	Apply solutions to improve interoperability between disparate systems	<ul style="list-style-type: none"> <li><a href="http://www.healthit.gov/providers-professionals/interoperability-training-courses">http://www.healthit.gov/providers-professionals/interoperability-training-courses</a>  <b>Interoperability Training Courses.</b> This is a series of five eLearning modules on systems interoperability developed by the Office of the National Coordinator.</li> </ul>



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Describe how data is used to select and implement clinical interventions	9a.1	Use data to develop a population intervention	<ul style="list-style-type: none"> <li><a href="http://ihealthtran.com/pdf/PHMReport.pdf">http://ihealthtran.com/pdf/PHMReport.pdf</a> <b>Population Health Management: A Roadmap for Provider-Based Automation in a New Era of Healthcare.</b> Report by the Institute for Health Technology Transformation (IHT<sup>2</sup>) providing principles and best practices of population management.</li> </ul>
	9a.2	Analyze data during the implementation of a clinical intervention and determine next steps	<ul style="list-style-type: none"> <li><a href="http://ihealthtran.com/pdf/PHMReport.pdf">http://ihealthtran.com/pdf/PHMReport.pdf</a> <b>Population Health Management: A Roadmap for Provider-Based Automation in a New Era of Healthcare.</b> Report by the Institute for Health Technology Transformation (IHT<sup>2</sup>) providing principles and best practices of population management.</li> </ul>
Interpret the data effectively to determine effective population interventions	9b.1	Analyze data for patterns that indicate a need for clinical intervention	<ul style="list-style-type: none"> <li><a href="http://ihealthtran.com/pdf/PHMReport.pdf">http://ihealthtran.com/pdf/PHMReport.pdf</a> <b>Population Health Management: A Roadmap for Provider-Based Automation in a New Era of Healthcare.</b> Report by the Institute for Health Technology Transformation (IHT<sup>2</sup>) providing principles and best practices of population management.</li> </ul>
	9b.2	Verify the assumptions made when defining needs for clinical interventions (e.g. what do I think is the cause of the problem I've observed, and how can I verify that I am right?)	<p><b><u>Recommendation</u></b></p> <ul style="list-style-type: none"> <li>Scenario-based eLearning module. This might include a scenario in which a population health “need” has been determined by a team member in the practice, and a series of information that the user might use to determine whether this need is a) valid, and b) of sufficient priority to warrant investment of the team’s time and resources.</li> </ul>



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Describe internal and external reporting requirements	10a.1	Describe the reporting required by the State, Health Department, and other external parties	<ul style="list-style-type: none"> <li>• <a href="http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/2014_ClinicalQualityMeasures.html">http://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms/2014_ClinicalQualityMeasures.html</a> <b>2014 Clinical Quality Measures.</b> This resource is published by the Centers for Medicare &amp; Medicaid Services (CMS). It outlines the changing requirements for Clinical Quality Measures (CQM) reporting for 2014 and provides a series of links to additional information.</li> <li>• <a href="http://www.cdc.gov/ehrmeaningfuluse/">http://www.cdc.gov/ehrmeaningfuluse/</a> <b>Meaningful Use.</b> The Centers for Disease Control and Prevention website outlines the requirements for MU and EHR reporting.</li> <li>• <a href="http://www.healthit.gov/policy-researchers-implementers/health-it-rules-regulations">http://www.healthit.gov/policy-researchers-implementers/health-it-rules-regulations</a> <b>Health IT Rules &amp; Regulations.</b> Website published by the Office of the National Coordinator for Health Information Technology describing the standards, implementation specifications, and certification requirements for HER technology.</li> </ul>
	10a.2	Determine internal reporting requirements to support a given population health intervention (e.g. What reports are necessary? Who receives them? Who prepares them?)	<ul style="list-style-type: none"> <li>• <a href="http://ihealthtran.com/pdf/PHMReport.pdf">http://ihealthtran.com/pdf/PHMReport.pdf</a> <b>Population Health Management: A Roadmap for Provider-Based Automation in a New Era of Healthcare.</b> Report by the Institute for Health Technology Transformation (IHT<sup>2</sup>) providing principles and best practices of population management.</li> </ul>
Describe the flow of data inputs and outputs in the EHR	10b.1	Describe the data flow process through the EHR from input to reporting	<ul style="list-style-type: none"> <li>• <a href="http://www.providersedge.com/ehdocs/ehr_articles/Supporting_Care_Management-the_Role_of_EHR_Systems.pdf">http://www.providersedge.com/ehdocs/ehr_articles/Supporting_Care_Management-the_Role_of_EHR_Systems.pdf</a> <b>Supporting Care Management: The Role of Electronic Health Record (EHR) Systems.</b> Overview, put out by Doctors Office Quality – Information Technology (DOQ-IT), of how EHR Systems can be used to support physicians and other healthcare professionals in the delivery of care management services.</li> </ul>



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	10b.2	Enter data correctly into the EHR in order to create accurate reporting according to given scenarios (e.g. ensure that the right data is entered in the right fields so that it carries over to the correct screens and reports).	<ul style="list-style-type: none"> <li><a href="http://www.providersedge.com/ehdocs/ehr_articles/Supporting_Care_Management-the_Role_of_EHR_Systems.pdf">http://www.providersedge.com/ehdocs/ehr_articles/Supporting_Care_Management-the_Role_of_EHR_Systems.pdf</a>  <b>Supporting Care Management: The Role of Electronic Health Record (EHR) Systems.</b> Overview, put out by Doctors Office Quality – Information Technology (DOQ-IT), of how EHR Systems can be used to support physicians and other healthcare professionals in the delivery of care management services.</li> </ul>
<b>Turning Data into Action</b>			
Determine what improvements should be made to the practice based on data analysis	11a.1	Review data and determine appropriate Population Management interventions for a health care setting	<p><b>Recommendation</b></p> <ul style="list-style-type: none"> <li>Develop a case study for use by an individual or group to train the user for analyzing data to determine appropriate interventions. This might be done through creating a scenario-based elearning module, or by developing a learning activity that can be downloaded and used in a conference room or meeting setting in the health care practice.</li> </ul>
	11a.2	Define milestones and data measurements that determine what constitutes success in achieving outcomes (i.e. How do we know we've succeeded with this intervention? How do we know we're finished?)	<ul style="list-style-type: none"> <li><a href="http://www.ihl.org/knowledge/Pages/HowtoImprove/default.aspx">http://www.ihl.org/knowledge/Pages/HowtoImprove/default.aspx</a>  <b>How to Improve.</b> An article published by the Institute for Healthcare Improvement (IHI), which explains the fundamentals of the Model for Improvement, developed by Associates in Process Improvement.</li> </ul>



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Enact a continuous quality improvement model	11b.1	Use the data collected during the process of measuring the success of an intervention to redirect change, or to ramp up the next logical change to be undertaken.	<ul style="list-style-type: none"> <li>• <a href="http://www.ncbi.nlm.nih.gov/pubmed/22892651">http://www.ncbi.nlm.nih.gov/pubmed/22892651</a> <b>Measuring success for health care quality improvement interventions.</b> A study published in the journal Medical Care, and available on PubMed. It focuses on how self-reported measures of QI success differ from externally rated measures, and suggests a methodology and criteria to externally rate measures of QI success.</li> <li>• <a href="http://www.ihl.org/offerings/Initiatives/Improvemaphospitals/Pages/default.aspx">http://www.ihl.org/offerings/Initiatives/Improvemaphospitals/Pages/default.aspx</a> <b>The IHI Improvement Map.</b> This is a tool designed by the Institute for Healthcare Improvement (IHI), to provide targeted information to users in health care settings on key process improvements to positively impact patient care. The page <b>L2 Foundation: Build Capacity for Execution &amp; Improvement</b> [<a href="http://app.ihl.org/imap/tool/#Process=eec4d58-0c9d-48f8-ba37-9588f5140362">http://app.ihl.org/imap/tool/#Process=eec4d58-0c9d-48f8-ba37-9588f5140362</a>] focuses on ensuring improvement expertise throughout the health care practice.</li> </ul>
	11b.2	Determine appropriate responses to address problems that arise during the intervention process	<ul style="list-style-type: none"> <li>• <a href="http://www.redequip.com.au/articles/is-change-management-more-than-problem-solving/">http://www.redequip.com.au/articles/is-change-management-more-than-problem-solving/</a> <b>Is Change Management More than Problem Solving?</b> This article is published by RedEquip, a change management consulting firm. While it is not strictly a health-related article, the principles it addresses provide a framework within which team members can think about potential problems that might arise while implementing an intervention, and how to respond.</li> <li>• <a href="http://www.mindtools.com/pages/article/newTMC_00.htm">http://www.mindtools.com/pages/article/newTMC_00.htm</a> <b>Problem-solving Skills – Start Here!</b> This article provides a broad overview of various problem-solving skills and techniques that could be used to frame a session on problem-solving within a health care setting.</li> </ul>
Assess the practice's readiness for change	12a.1	Describe the key players and their roles in supporting workflow redesign	<ul style="list-style-type: none"> <li>• <a href="http://www.ahrq.gov/news/events/conference/2011/dorr/index.html">http://www.ahrq.gov/news/events/conference/2011/dorr/index.html</a> <b>Integrated Care Coordination Information System: Primary Care Redesign.</b> Slide presentation and notes, available through the Agency for Healthcare Research and Quality. It outlines a redesign project and suggests the way toward building “a better system of care for your most at-risk primary care patients.”</li> </ul>



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	12a.2	Perform change readiness assessments to address "pain points" of moving to a population health management model (e.g. team readiness, workflow and infrastructural concerns, barriers to implementing change)	<ul style="list-style-type: none"> <li>• <a href="http://www.amga.org/AboutAMGA/ACO/Articles/CaseStudy_final.pdf">http://www.amga.org/AboutAMGA/ACO/Articles/CaseStudy_final.pdf</a> <b>ACOs and Population Health Management.</b> This is a case study published by the American Medical Group Association (AMGA) that demonstrates some of the incentives and benefits of adopting a population health management model. Refer to the following sections:               <ul style="list-style-type: none"> <li>• <i>Gaps in Readiness for the New Model</i></li> <li>• <i>Reengineering the Primary Care Practice</i></li> </ul> </li> </ul>
	12a.3	Develop a change plan for introducing a Population Management model of health care to the practice	<ul style="list-style-type: none"> <li>• <a href="http://www.hrsa.gov/healthit/toolbox/HealthITAdoptiontoolbox/StaffingandExpertise/staffingexpertise.html">http://www.hrsa.gov/healthit/toolbox/HealthITAdoptiontoolbox/StaffingandExpertise/staffingexpertise.html</a> <b>Staffing and Expertise.</b> This is part of the HRSA Health IT Adoption Toolbox. Topics include:               <ul style="list-style-type: none"> <li>• Defining Key Stakeholders</li> <li>• Determining Needed Expertise</li> <li>• Project Planning</li> <li>• Project Management</li> <li>• Project Team</li> <li>• Project Management Tools</li> <li>• Engaging a Consultant</li> </ul> </li> </ul>



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Apply the workflow redesign model to Population Management interventions	12b.1	Describe how practice workflow and staff roles will change to implement a Population Management model	<ul style="list-style-type: none"> <li>• <a href="http://www.hrsa.gov/healthit/toolbox/HealthITAdoptiontoolbox/StaffingandExpertise/staffingexpertise.html">http://www.hrsa.gov/healthit/toolbox/HealthITAdoptiontoolbox/StaffingandExpertise/staffingexpertise.html</a> <b>Staffing and Expertise.</b> This is part of the HRSA Health IT Adoption Toolbox. Topics include:               <ul style="list-style-type: none"> <li>• Defining Key Stakeholders</li> <li>• Determining Needed Expertise</li> <li>• Project Planning</li> <li>• Project Management</li> <li>• Project Team</li> <li>• Project Management Tools</li> <li>• Engaging a Consultant</li> </ul> </li> <li>• <a href="http://www.ama-cmeonline.com/health_it_workflow/">http://www.ama-cmeonline.com/health_it_workflow/</a> <b>Health Information Technology - Workflow Analysis Tutorial.</b> The American Medical Association has developed an online tutorial to provide instruction on analyzing workflow and demonstrating how to better use health information technology.</li> </ul>
	12b.2	Determine the goals of a workflow redesign for Population Management	<ul style="list-style-type: none"> <li>• <a href="http://www.ama-cmeonline.com/health_it_workflow/">http://www.ama-cmeonline.com/health_it_workflow/</a> <b>Health Information Technology - Workflow Analysis Tutorial.</b> The American Medical Association has developed an online tutorial to provide instruction on analyzing workflow and demonstrating how to better use health information technology.</li> </ul>
	12b.3	Determine the impacts the workflow redesign will have on staff, on practice structure, on reporting, etc.	<ul style="list-style-type: none"> <li>• <a href="http://www.ama-cmeonline.com/health_it_workflow/">http://www.ama-cmeonline.com/health_it_workflow/</a> <b>Health Information Technology - Workflow Analysis Tutorial.</b> The American Medical Association has developed an online tutorial to provide instruction on analyzing workflow and demonstrating how to better use health information technology.</li> </ul>



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	12b.4	Enumerate the steps in a workflow redesign for Population Management	<ul style="list-style-type: none"> <li>• <a href="http://www.google.com/search?q=Enumerate+the+steps+in+a+workflow+redesign+for+Population+Management&amp;rls=com.microsoft:en-us&amp;ie=UTF-8&amp;oe=UTF-8&amp;startIndex=&amp;startPage=1">http://www.google.com/search?q=Enumerate+the+steps+in+a+workflow+redesign+for+Population+Management&amp;rls=com.microsoft:en-us&amp;ie=UTF-8&amp;oe=UTF-8&amp;startIndex=&amp;startPage=1</a>  <b>Practice and Workflow Redesign Community of Practice.</b> This is a Google Search page including several tools that would be useful to develop a workflow redesign to incorporate a Population Management approach.</li> <li>• <a href="http://www.ama-cmeonline.com/health_it_workflow/">http://www.ama-cmeonline.com/health_it_workflow/</a>  <b>Health Information Technology - Workflow Analysis Tutorial.</b> The American Medical Association has developed an online tutorial to provide instruction on analyzing workflow and demonstrating how to better use health information technology.</li> </ul>
	12b.5	Apply workflow redesign to a "real-life" scenario	<ul style="list-style-type: none"> <li>• <a href="http://www3.phytel.com/expertise/healthcare-webinars-population-health/beyond-analytics-infrastructure-to-support-population-health-management-with-care-redesign-and-patient-engagement.aspx">http://www3.phytel.com/expertise/healthcare-webinars-population-health/beyond-analytics-infrastructure-to-support-population-health-management-with-care-redesign-and-patient-engagement.aspx</a>  <b>Beyond Analytics: Infrastructure to Support Population Health Management with Care Redesign and Patient Engagement.</b> This webinar, published by Phytel, describes the journey of the Jackson Health Network’s implementation of a population health model.</li> </ul> <p><b>Recommendation</b></p> <ul style="list-style-type: none"> <li>• Provide a series of data that requires an individual or group to determine where a workflow problem exists that impinges on population management, and what interventions could be taken to improve workflow design to address the problem. This could be delivered as an eLearning module or as a “packet” of material that could be downloaded and used in a group setting.</li> </ul>