MODULE 7

# Special Topics of Health Workforce Training Programming

## Overview

Health workforce training grantees focus their enhanced training programs in a range of areas. Some of the most common are interdisciplinary training, integrated behavioral health, addressing social determinants of health, and population health. Some examples of the types of programs and evaluation approaches to each are described here, based on existing funded Primary Care Training Enhancement grantee programs. This module also provides tools and resources within these areas that may be helpful. Finally, this module includes an evaluation checklist to ensure you are ready for your health workforce training evaluation and provides corresponding resources to support your evaluation.

## Enhanced training topics and sample evaluation questions and methods

### Interdisciplinary training

| PROGRAM OBJECTIVE | EVALUATION QUESTIONS | EVALUATION APPROACHES |
|---|---|---|
| To prepare interdisciplinary teams of health professionals to test PCMH program innovations. | To what extent are trainees comfortable with PCMH concepts? | Trainee focus groups or questionnaire evaluations on PCMH core competency topics. |
| | What elements of PCMH do preceptor sites have in place? | Use of a PCMH self-assessment site level tool. |
| | What are the clinical outcomes related to PCMH at the preceptor sites? | Care coordination assessment from patient CG-CAHPS survey. |
| To prepare trainees to practice in high functioning multi-disciplinary teams. | Will trainees show an increased level of knowledge, attitude, and skills in working with team members of other disciplines? | Trainee assessments using a readiness scale for interprofessional learning. |
| | Do patients report higher satisfaction with care from interdisciplinary team? | Care coordination assessment from patient CG-CAHPS survey. |

### Integrated behavioral health

| PROGRAM OBJECTIVE | EVALUATION QUESTIONS | EVALUATION APPROACHES |
|---|---|---|
| Expose trainees to models of integrated behavioral health and primary care. | Do trainees trained in integrated behavioral health models have greater interest in practicing in primary care? | Trainee tracking of post-graduate training and employment through graduate surveys. |
| | Do preceptor sites of trainees advance in their development of integrated care programs? | Organizational level practice/site assessment of the components of integrated health using the MeHAF Site Self-Assessment tool or the Integrated Practice Assessment Tool (IPAT). |
| | Do patients have increased access to integrated care? | Practice level assessments of wait time for behavioral health appointments. |
| | What is the impact of integrated behavioral health on cost? | Data from Medicaid managed care on patient utilization of services. |

ADAPTED FROM: U.S. Department of Health and Human Services Centers for Disease Control and Prevention. Office of the Director, Office of Strategy and Innovation. Introduction to program evaluation for public health programs: A self-study guide. Atlanta, GA: Centers for Disease Control and Prevention, 2011. Available at: http://www.cdc.gov/eval/framework/index.htm

## Addressing social determinants of health

| PROGRAM OBJECTIVE | EVALUATION QUESTIONS | EVALUATION APPROACHES |
|---|---|---|
| To prepare graduates to provide health education at the appropriate educational level. | How skilled are trainees in delivering health education? | Trainee assessment of skills through observation. |
| | | Patient report of their experience in care and trainee skills through use of patient survey such as CG-CAHPS. |
| | | Patient knowledge of medication risks assessed through survey of patients. |
| | | Comparison of emergency department utilization among patients with patient education to those without patient education. |

## Population health and quality improvement

| PROGRAM OBJECTIVE | EVALUATION QUESTIONS | EVALUATION APPROACHES |
|---|---|---|
| Enhance skills of multi-disciplinary trainees in population health and quality improvement. | Do patients who receive care by trainees and graduates of program experience higher levels of quality of care? | Select one to three clinical quality measures to assess at the trainee/preceptor level. |
| | | Track one to three clinical outcomes for graduates that choose to work within the medical center system, and compare their clinical outcomes to non-graduates. |
| | | Compare emergency department and inpatient utilization of patients empaneled with trained graduates compared to non-graduates of the program using Medicaid managed care data. |
| Provide trainees with the knowledge, skills, and professional development required to champion quality improvement and patient safety practices. | Are trainees exposed to and have experience in working in a team based environment that focuses on quality improvement? | Assessment of trainee preceptor environment for team based training using the Teamworks Perceptions Questionnaire. |
| | What improvements in quality are achieved by health workforce training trainee quality improvement projects? | Assessment of progress in trainee projects through selection of clinical measures appropriate to their project and tracking these measures over the quality improvement period. |
| Ensure trainees are trained on tools leveraging health IT to support screening, risk assessment, and use of patient registries. | Are trainees more adept at using population health management tools? | Focus groups with trainees on their experience in leading quality improvement projects. |
| | Are trainees exposed to a preceptor site utilizing data driven population health approaches to care? | Practice level assessment using the Analytics Capacity Assessment. |

## Matrix of interdisciplinary training and evaluation tools

### Interprofessional Education

| TITLE | SOURCE | DESCRIPTION |
|---|---|---|
| **TRAINING TOOLS** | | |
| National Center for Interprofessional Practice and Education | National Center for Interprofessional Practice and Education | The National Center supports evaluation, research, data, and evidence that ignites the field of interprofessional practice and education and leads to better care, added value, and healthier communities. |
| **EVALUATION TOOLS** | | |
| National Center for Interprofessional Practice and Education-Assessment and Evaluation | National Center for Interprofessional Practice and Education | The National Center for Interprofessional Practice and Education has a robust library of resources for evaluation. A few of the resources are highlighted here as examples, but please see their library for more than 35 different instruments. |
| Assessing Health Care Team Performance: A Review of Tools and the Evidence Supporting Their Use | National Center for Interprofessional Practice and Education | A review of tools to assess health team work performance.<br>Authors: Marlow S, Lacerenza C, Iwig C, Salas E. |
| Teamwork Perceptions Questionnaire (T-TPQ) | The Agency for Healthcare Research and Quality | TeamSTEPPS perceptions questionnaire is from the TeamSTEPPS® Instructor manual and assesses team functioning, leadership, situation monitoring, mutual support, and communication. TEAMSTEPPS® is a teamwork system designed for health care professionals to address patient safety and develop an evidenced based teamwork system.<br>Authors: Department of Defense Patient Safety Program in collaboration with the Agency for Healthcare Research and Quality |
| Interprofessional Socialization and Valuing Scale (ISVS-21) | The Agency for Healthcare Research and Quality | The ISVS-21 is a self-report instrument designed to measure interprofessional socialization among students and health practitioners and their readiness to function in interprofessional teams. Items were developed to capture respondent beliefs, attitudes, and behaviors at baseline and at post-intervention time periods.<br>Authors: King G, Orchard C, Khalili H, Avery L. |
| Readiness for Interprofessional Learning Scale (RIPIS) | National Center for Interprofessional Practice and Education | This is a 19-item tool with a five point scale to assess interprofessional students attitudes towards interpofessional learning. It is designed to capture changes in perceptions and attitudes in the domains of teamwork and collaboration, negative and positive professional identity, and roles and responsibilities.<br>Authors: Parsell G, Bligh J. |

## Behavioral Health Integration

| TITLE | SOURCE | DESCRIPTION |
|---|---|---|
| **TRAINING TOOLS** | | |
| SAMHSA –HRSA Center for Integrated Health Solutions | SAMHSA-HRSA Center for Integrated Health Solutions | This center provides a range of resources for the development of integrated primary care and behavioral health (substance use and mental health). This includes information on workflow, Health IT, billing, and screening tools. |
| **EVALUATION TOOLS** | | |
| MeHAF Site Self- Assessment | The Maine Health Access Foundation | This tool was developed to assess levels of integration achieved at the clinic or practice level. It is based on the MacColl Institute ACIC. The tool focuses on two domains: 1) integrated services and patient and family services; and 2) practice/ organization. Each domain has nine characteristics that you rate on a scale of 1 to 10 depending on the level of integration or patient-centered care achieved.<br>Author: Maine Health Access Foundation |
| The Integrated Practice Assessment Tool (IPAT) | SAMHSA-HRSA Center for Integrated Health Solutions | This tool is a practice level assessment of integration based on the SAMHSA/HRSA Integrated Solutions framework "A Standard Framework for Levels of Integrated Healthcare". The assessment uses a decision tree rather than scored assessment metric.<br>Author: Wasmonsky J, Auzier A, Romero PW, and Heath B |

## Population Health

| TITLE | SOURCE | DESCRIPTION |
|---|---|---|
| **TRAINING TOOLS** | | |
| Population Health Management: Concepts for Health Centers | The HITEQ Center | This is a 4-module PowerPoint presentation intended as background to introduce the field of population health management. It provides an overview of population health concepts, and discusses the role of the social determinants and population health management within the general population.<br>Authors: The HITEQ Center |
| Building a Data-Driven Culture | The Center for Care Innovations (CCI) | The Center for Care Innovations (CCI) offers a series of videos to share how to guide the development of a data driven organization, where staff at all levels embrace the use of the data to support providing population health.<br>Authors: The Center for Care Innovations |
| **EVALUATION TOOLS** | | |
| Safety Net Medical Home –Patient Centered Medical Home assessment | The Commonwealth Fund | This publicly available self-assessment tool of PCMH assesses progress at the clinic or practice site level. It includes topics of importance for safety-net providers such as interpretation and covers six domains: Access and Communication, Patient Tracking and Registry, Care Management, Test and Referral Tracking, Quality Improvement, and External Coordination.<br>Authors: University of Chicago and The Commonwealth Fund |
| Analytics Capacity Assessment | The Center for Care Innovations (CCI) | This organizational level assessment helps a practice/clinic understand its current capacity to use data and analytics, a foundation for population health. The tool scores organizations into four domains: reactive, responsive, proactive, and predictive.<br>Authors: Center for Care Innovation (CCI) |
| ACES: Ambulatory Care Experience Survey | The Agency for Healthcare Research and Quality | The ACES survey is distributed to patients and families to assess their experience in care, including experience with primary care provider interactions and organizational features of care. It includes questions on interpersonal communication, creating proactive plan of care, and information transfer across care settings.<br>Authors: Safran D, Karp M, Coltin K, Chang H, Li A, Ogren J, Rogers W. |

TOOL 7.1

# Evaluation Capacity and Readiness checklist

The following checklist will support you in planning and preparing to begin your evaluation work. Please see the related modules for tools, resources, and guidance to support you in each area of evaluation.

| CHECKLIST | | RELATED MODULES AND RESOURCES |
|---|---|---|
| 1. Do you have an evaluator on staff? | | — |
| 2. Do you have dedicated time for evaluation activities? | | — |
| 3. Is a logic model in place and has it been developed and vetted with the evaluation team and other stakeholders? | | Module 1: Engaging Stakeholders for Your Primary Care Training and Enhancement Evaluation<br>Module 2: Describe the Program |
| 4. Have you defined your evaluation questions? | | Module 3: Focus Evaluation Design |
| 5. Have you defined the methods and data sources for each evaluation question? | | Module 4: Gather Credible Evidence |
| 6. Have you confirmed the tools for the assessment of competency at trainee level? Have you identified tools to assess capacity at the organizational level? | | Module 7: Special Topics |
| 7. Have you developed a timeline and assigned team roles and responsibilities for data collection? | | Module 4: Gather Credible Evidence |

Modules 5 and 6 will support you in analysis of your evaluation findings and sharing your results with stakeholders.

## Supplemental Bibliography

The health workforce training Program has assembled a list of peer reviewed journal articles focusing on health professional education and measurement of access, quality and cost.

| PROGRAM AND SOURCE (article author, year) | TRIPLE AIM ELEMENTS EVALUATED | | | TARGET GROUPS & SETTING | FOCUS OF INNOVATION/ INTERVENTION | RESULTS Evaluation/Program Impact Discussed |
|---|---|---|---|---|---|---|
| | Access/ Pt Experience | Quality of Care | Cost/ Utilization | | | |
| NY Hospital Medical Home Program<br>Angelotti, 2015[1] | ✓ | ✓ | | Residents (IM,FM, Peds);<br>156 Outpatient sites statewide; 118 residency programs | PCMH transformation of residency clinics<br>(Plan-Do-Study-Act, coaching, resources, website) via state Medicaid waiver | All sites achieved PCMH recognition; Improved colorectal and breast cancer screening rates; 8/17 clinical measure composite scores significantly improved. |
| I3 POP Collaborative (NC, SC, VA)<br>Donahue, 2015[2] | ✓ | ✓ | ✓ | Residents in 27 PC residency programs | Pragmatic learning collaborative for practice transformation focused on Triple Aim improvements | Baseline data; ability to report core measures was associated with having a patient registry and having faculty involved in data management; variance between health care systems' use of identical software products; reporting very difficult during EMR transitions; little commonality in data acquisition |
| Northwestern U Medical School<br>Henschen, 2015[3] | ✓ | ✓ | | Medical students during clerkship<br>(n=69) | Education-centered Medical Home curriculum | ECMH students had more continuity of care experiences, higher satisfaction, more confidence in QI skills, higher patient-centeredness. |
| Pennsylvania Acad. of Family Physicians Residency Collaborative<br>Losby, 2015[4] | ✓ | ✓ | | Residents of 24 programs over 3 years | PCMH/Chronic Care Model learning collaborative; RCQI , peer-to-peer guidance and TA via faculty mentors | Significant increases in PCMH components, related to number of live learning sessions done; positively attributed collaborative participation to transformation efforts; process measure increases (retinal & foot exams; smoking cessation, self-management) |
| Oregon Health & Science University<br>White, 2014[5] | | | ✓ | Residents and staff in FM clinic | Practice transformation with enhanced care coordination, care managers, readmission reports | Reduced readmission rates in transformed practice (27% to 7%) compared to variable, nonsignificant trend in control practices; interaction between groups showed significant difference. |
| Los Angeles County/U Southern California<br>Hochman, 2013[6] | ✓ | | ✓ | Residents in IM safety net clinic | PCMH intervention designed with patient/ staff input | PCMH clinic had increased patient & resident satisfaction, increased hospital admissions, no difference in ED visits. |

| PROGRAM AND SOURCE (article author, year) | TRIPLE AIM ELEMENTS EVALUATED | | | TARGET GROUPS & SETTING | FOCUS OF INNOVATION/ INTERVENTION | RESULTS Evaluation/Program Impact Discussed |
|---|---|---|---|---|---|---|
| | Access/ Pt Experience | Quality of Care | Cost/ Utilization | | | |
| Northwestern U Medical School<br>O'Neill, 2013[7] | | ✓ | | Medical students (n=202) in 13 clinics | QI curriculum and teams of students in clinics adopting PCMH principles; panels of "high risk" patients | Students improved self-ratings of multiple QI skills; Teams used performance data for QI; Students provided range of PCMH services/roles (phone outreach, care coordination, health behavior coaching, identification of quality measure deficit); Quality performance high for many items; improved for chlamydia screening, diabetic eye exams, asthma care |
| Rockford Rural Medical Education (RMED) Program<br>MacDowell, 2013[8] | ✓ | | | Medical students (13-20/yr) in RMED curriculum | Selected students (from rural areas) trained with rural primary care preceptors and rural-focused curriculum | RMED graduates more likely to provide primary care, choose FM and be practicing in rural location |
| Free Clinics of Henderson County, NC (P4 site)<br>Crane, 2012[9] | | | ✓ | Rural-track FM residents and interprofessional team | Drop in group medical appointments with residents and team for low income, uninsured patients (high ED utilizers) | ED use decreased significantly; hospital charges reduced from $116 to $23 per patient/month. |
| Assessing Care of the Vulnerable Elderly (ACOVE)<br>Holmboe, 2012[10] | | ✓ | | IM & FM residency programs (41); 20 intervention<br>21 control | Multicomponent, web-based QI tool to improve care of older adults; practice improvement module (PIM) of Am Board of IM | Poor baseline levels of elderly care measures;<br>Significant improvement in documenting surrogate decision maker, end of life preferences and fall risk assessment w/ intervention. |
| Preparing the Personal Physician for Practice (P4)<br>Carney, 2011[11] | ✓ | ✓ | | 14 FM residency programs nationwide (334 residents, 24 clinics) | Various residency transformation innovations over 6 years (2007-2012) | Descriptive paper with high level outline of overall P4 Project. (no specific results) Appendix with innovations, hypotheses and study measures listed by site. |
| I3 Collaborative (NC, SC)<br>Newton, 2011[12] | | ✓ | ✓ | Residents (N=252) and faculty (n=92) from 10 FM residency programs | Regional QI collaborative focused on improving diabetes and CHF care | Significant improvement in diabetic foot exams & HbA1c testing; for CHF, significant improvement in beta blocker and ACE use, self-management rates; 38% reduction in hospitalizations resulting in estimated cost reduction of $3.6 million quarterly (156 fewer admissions @ $23K/admission average cost) |

| PROGRAM AND SOURCE (article author, year) | TRIPLE AIM ELEMENTS EVALUATED | | | TARGET GROUPS & SETTING | FOCUS OF INNOVATION/ INTERVENTION | RESULTS Evaluation/Program Impact Discussed |
|---|---|---|---|---|---|---|
| | Access/ Pt Experience | Quality of Care | Cost/ Utilization | | | |
| I3 PCMH Collaborative (NC, SC, VA)<br>Reid, 2011[13] | ✓ | | | Residents & faculty in 25 primary care teaching practices in 3 states | 20-month learning collaborative focused on practice transformation and PCMH recognition | 48% achieved PCMH recognition or submitted applications; overall positive responses concerning role of collaborative in transformation |
| Am. Osteopathic Assoc. Clinical Assessment Program (AOA-CAP)<br>Shubrook, 2011[14] | | ✓ | | Osteopath. FM residents from 52 programs | Standardized database for measurement and performance improvement across residency programs | Composite process of care scores improved with repeated participation but no significant change in intermediate clinical measures |
| National Academic Chronic Care Collaborative (ACCC) and California ACCC (CACCC)<br>Stevens, 2010[15] | | ✓ | | Residents (57 teams) in safety net clinics, 41 were focused on diabetes | Chronic Care Model (CCM) Learning Collaborative and curriculum changes, practice redesign, RCQI involving diabetes, COPD, asthma, HCV | Substantial CCM-related learning; inconsistent improvement in clinical and process measures |
| U of California San Francisco<br>Janson, 2009[16] | | ✓ | ✓ | Residents (120 IM), students (39 NP, 35 pharmacy) | Interprofessional teams, Improving Chronic Illness Care (ICIC) Model for patients with type 2 diabetes, group visits | Intervention patients had more frequent process measures (HbA1c, LDL, BP, microalbumin, smoking, foot exams), more planned GM visits, learners rated themselves higher on ICIC accomplishment, preparation and success. |
| Maine Medical Center Chronic Care Collaborative<br>Greene, 2007[17] | | ✓ | ✓ | Pedi, IM, FM residents (41) | Chronic Care Model (CCM) training for asthma care, supported by RWJ grant | Residents reported access to CCM elements (ED use reduced 43% in CCM pts;<br>47% reduction in pediatric asthma charges; 36% reduction in adult asthma charges |
| Healthy Steps for Young Children<br>Niederman, 2007[18] | ✓ | ✓ | | Pediatric residents | Healthy Steps (HS) practice model; home visits, "specialist" co-practitioner, continuity of care (COC) emphasis | HS had greater COC indices, more health maintenance visits; no difference in duration of care;<br>No difference in quality of preventive services or diagnoses of interest.<br>Trend toward better documentation of diagnoses in HS group. |

| PROGRAM AND SOURCE (article author, year) | TRIPLE AIM ELEMENTS EVALUATED | | | TARGET GROUPS & SETTING | FOCUS OF INNOVATION/ INTERVENTION | RESULTS Evaluation/Program Impact Discussed |
|---|---|---|---|---|---|---|
| | Access/ Pt Experience | Quality of Care | Cost/ Utilization | | | |
| U of Alabama School of Medicine, Birmingham<br>Houston, 2006[19] | | ✓ | | Resident s (130 IM, 78 Peds) in continuity clinics, urban safety net | Public Health Achievable Benchmarks Curriculum (ABC) with multifaceted feedback | IM group: 4/6 measures increased significantly more than controls<br>(pneumovax, screening for CRC, lipids, smoking cessation referral)<br>Peds group: 2/6 measures increased significantly more than controls (parental smoking cessation referral, car restraints) |
| New York Upstate Medical U Rural Medical Education (RMED) Program<br>Smucny, 2005[20] | ✓ | | | Medical students (n=132) who graduated from NY RMED curriculum 1990-2003 | Rural-focused curriculum with 36 week clinical experience in rural communities; community programs & projects involved; local hospitals provide housing; stipends given pre-2001 | RMED graduates were more likely to be in rural location (26% vs. 7% non-RMED) and had significantly higher USMLE step 2 scores. 50% characterized their practice setting as "rural" and 67% were very satisfied there (no plans to move).<br>Hospital administrators identified many benefits of RMED to their facility, staff and community, including recruitment, retention, quality of care advantages. |

1 Angelotti M, Bliss K, Schiffman D, et al. Transforming the Primary Care Training Clinic: New York State's Hospital Medical Home Demonstration Pilot. *J Grad Med Educ.* 2015;7(2):247-252.

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4 Losby JL, House MJ, Osuji T, et al. Initiatives to Enhance Primary Care Delivery: Two Examples from the Field. *Health Serv Res Manag Epidemiol.* 2015;2.

5 White B, Carney PA, Flynn J, Marino M, Fields S. Reducing hospital readmissions through primary care practice transformation. *J Fam Pract.* 2014;63(2):67-73.

6 Hochman ME, Asch S, Jibilian A, et al. Patient-centered medical home intervention at an internal medicine resident safety-net clinic. *JAMA Intern Med.* 2013;173(18):1694-1701.

7 O'Neill SM, Henschen BL, Unger ED, et al. Educating future physicians to track health care quality: feasibility and perceived impact of a health care quality report card for medical students. *Acad Med J Assoc Am Med Coll.* 2013;88(10):1564-1569.

8 MacDowell M, Glasser M, Hunsaker M. A decade of rural physician workforce outcomes for the Rockford Rural Medical Education (RMED) Program, University of Illinois. *Acad Med J Assoc Am Med Coll.* 2013;88(12):1941-1947.

9 Crane S, Collins L, Hall J, Rochester D, Patch S. Reducing utilization by uninsured frequent users of the emergency department: combining case management and drop-in group medical appointments. *J Am Board Fam Med JABFM.* 2012;25(2):184-191.

10 Holmboe ES, Hess BJ, Conforti LN, Lynn LA. Comparative trial of a web-based tool to improve the quality of care provided to older adults in residency clinics: modest success and a tough road ahead. *Acad Med J Assoc Am Med Coll.* 2012;87(5):627-634.

11 Carney PA, Eiff MP, Green LA, et al. Preparing the personal physician for practice (p4): site-specific innovations, hypotheses, and measures at baseline. *Fam Med.* 2011;43(7):464-471.

12 Newton W, Baxley E, Reid A, Stanek M, Robinson M, Weir S. Improving chronic illness care in teaching practices: learnings from the I3 collaborative. *Fam Med.* 2011;43(7):495-502.

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15 Stevens DP, Bowen JL, Johnson JK, et al. A multi-institutional quality improvement initiative to transform education for chronic illness care in resident continuity practices. *J Gen Intern Med.* 2010;25 Suppl 4:S574-S580.

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19 Houston TK, Wall T, Allison JJ, et al. Implementing achievable benchmarks in preventive health: a controlled trial in residency education. *Acad Med J Assoc Am Med Coll.* 2006;81(7):608-616.

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