

TRANSLATE

A Framework for Evaluating Practice Transformation

When Dr. Kevin Peterson, from the University of Minnesota, wanted to implement the chronic care model¹ to improve diabetes care in multiple primary care practices, he did a literature search to see what had been demonstrated to work. From that, he found nine distinct elements in the literature that were shown to improve care when implemented in primary care offices. These nine elements he put together in a framework with the acronym TRANSLATE. He then tested the framework in a large randomized controlled trial sponsored by NIH and showed clinically significant improvement care in multiple measures within one year.² The Upstate New York Practice Based Research Network (UNYNET) utilized the TRANSLATE framework to do a comparative effectiveness pragmatic clinical trial in chronic kidney disease (CKD) comparing point of care computer decision support without facilitation to point of care computer decision support with all nine elements of the TRANSLATE model.³ The model was adapted and a four point evaluation rubric was developed to test which elements were strong and which elements needed to be bolstered to allow the practice to achieve clinical transformation. (See excel spreadsheet)

An explanation of each of the elements of the acronym, it's expanded definition, and its implication for practice are presented in the table below with appropriate literature references that define the evidence base.

Element (References with Evidence)	Expanded definition	Implications for practice
Target ^{4,5}	Goal setting. They need to be evidence-based, clear, measurable and feasible	Practices often set too many goals or none at all. Set at the ABCS for this study ⁶
Reminders ⁷	Having actionable information at the point of care for all team members.	3 types: <ul style="list-style-type: none">• Patient Reminders^{8,9}• Point of Care Reminders¹⁰• Automated Reminders (Standing orders)
Administrative buy-in ¹¹	Resource Allocation	Without this, the project does not move forward. It a necessary but not sufficient factor.
Networked Information Systems	Registries ^{5,12}	Necessary for population health

		and case management
Site Coordinator ^{2,13}	Local accountability	Need a point person, other than the doctor, at the practice who will make sure the project moves forward.
Local Clinician Champion ¹⁴	Thought leadership	The Physician needs to “bless” the project. Others can accomplish the work. ¹⁵
Audit and Feedback ¹⁶	Done on a regular basis. Can show longitudinal change or benchmark against other practices cross-sectionally	Provides data for PDSA cycles according to the Model for Improvement ¹⁷
Team Approach ¹⁸	Based on success of Toyota quality circles ¹⁹	Preferably non-hierarchical ²⁰
Education	Training in all its forms	CME, academic detailing, ²¹ collaborative learning groups, ²² in-service training etc.

1. Bodenheimer T, Wagner EH, Grumbach K. Improving primary care for patients with chronic illness: the chronic care model, Part 2. *Jama*. Oct 16 2002;288(15):1909-1914.
2. Peterson KA, Radosevich DM, O'Connor PJ, et al. Improving Diabetes Care in Practice Findings from the TRANSLATE trial. *Diabetes Care*. 2008;31(12):2238-2243.
3. Fox CH, Vest BM, Kahn LS, et al. Improving evidence-based primary care for chronic kidney disease: study protocol for a cluster randomized control trial for translating evidence into practice (TRANSLATE CKD). *Implementation science : IS*. 2013;8:88.
4. Latham GP, Yukl GA. A review of research on the application of goal setting in organizations. *Academy of management journal*. 1975;18(4):824-845.
5. Wagner EH, Austin BT, Davis C, Hindmarsh M, Schaefer J, Bonomi A. Improving chronic illness care: translating evidence into action. *Health affairs*. 2001;20(6):64-78.
6. Frieden TR, Berwick DM. The “Million Hearts” initiative—preventing heart attacks and strokes. *New England Journal of Medicine*. 2011;365(13).
7. Gill JM, Mainous AG, Koopman RJ, et al. Impact of EHR-based clinical decision support on adherence to guidelines for patients on NSAIDs: a randomized controlled trial. *The Annals of Family Medicine*. 2011;9(1):22-30.
8. Dexter PR, Perkins SM, Maharry KS, Jones K, McDonald CJ. Inpatient computer-based standing orders vs physician reminders to increase influenza and pneumococcal vaccination rates: a randomized trial. *JAMA*. Nov 17 2004;292(19):2366-2371.
9. Gill JM, Saldarriaga AM. The impact of a computerized physician reminder and a mailed patient reminder on influenza immunizations for older patients. *Delaware medical journal*. Oct 2000;72(10):425-430.

10. Dexter PR, Perkins S, Overhage JM, Maharry K, Kohler RB, McDonald CJ. A computerized reminder system to increase the use of preventive care for hospitalized patients. *N Engl J Med*. Sep 27 2001;345(13):965-970.
11. Willcocks S. Developing the effectiveness of primary care organisations in the UK National Health Service. A case study. *Journal of health organization and management*. 2003;17(3):194-209.
12. Fonarow GC, Albert NM, Curtis AB, et al. Improving evidence-based care for heart failure in outpatient cardiology practices primary results of the registry to Improve the Use of Evidence-Based Heart Failure Therapies in the Outpatient Setting (IMPROVE HF). *Circulation*. 2010;122(6):585-596.
13. Araya R, Rojas G, Fritsch R, et al. Treating depression in primary care in low-income women in Santiago, Chile: a randomised controlled trial. *The Lancet*. 2003;361(9362):995-1000.
14. Earls MF, Hay SS. Setting the stage for success: implementation of developmental and behavioral screening and surveillance in primary care practice—the North Carolina Assuring Better Child Health and Development (ABCD) Project. *Pediatrics*. 2006;118(1):e183-e188.
15. Wang A, Wolf M, Carlyle R, Wilkerson J, Porterfield D, Reaves J. The North Carolina experience with the diabetes health disparities collaboratives. *Jt Comm J Qual Saf*. Jul 2004;30(7):396-404.
16. Fox CH, Mahoney MC. Improving diabetes preventive care in a family practice residency program: a case study in continuous quality improvement. *FAMILY MEDICINE-KANSAS CITY*. 1998;30:441-445.
17. Gubernick RS. Model for Improvement. 2013.
18. Carter BL, Rogers M, Daly J, Zheng S, James PA. The potency of team-based care interventions for hypertension: a meta-analysis. *Archives of internal medicine*. 2009;169(19):1748-1755.
19. Flynn BB, Schroeder RG, Sakakibara S. A framework for quality management research and an associated measurement instrument. *Journal of Operations management*. 1994;11(4):339-366.
20. Singh R, Naughton B, Taylor JS, et al. A comprehensive collaborative patient safety residency curriculum to address the ACGME core competencies. *Medical Education*. 2005;39(12):1195-1204.
21. Solomon DH, Van Houten L, Glynn RJ, et al. Academic detailing to improve use of broad-spectrum antibiotics at an academic medical center. *Archives of Internal Medicine*. 2001;161(15):1897-1902.
22. Mold JW, Peterson KA. Primary care practice-based research networks: working at the interface between research and quality improvement. *The Annals of Family Medicine*. 2005;3(suppl 1):S12-S20.