

Nurse Development Innovation: Alliance for Clinical Transition

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Abstract: The Clinical Transition Framework (CTF) was established by Vermont Organization of Nurse Leaders (VONL) and has experienced more than a decade of development, implementation, revisions, and outcomes research. VONL's initial work created the Vermont Nurse Internship Project to support new graduate transition to practice. Further work moved the new graduate model into the CTF - a systematic, evidence-based, competency development framework suitable for the full range of readiness for practice!

The CTF transforms patient care by ensuring that transition into the first nurse position and transition into each new specialty is accomplished within an evidence-based, systematic, supportive, competency-based framework. Standardized clinical coaching plans provide a unique tool to guide the precepting/ learning process. ***The framework and tools are accessible via a unique 'shared ownership model'. Alliance for Clinical Transition Support (Alliance) membership engages users in framework utilization, research, edits, and renewal.***

The CTF delivers:

1. evidence-based preceptor development/ support systems
2. a universal set of nurse competency tools
3. standardized clinical coaching plans that guide the preceptor/ orientee
4. a shared ownership model for program implementation, improvement and dissemination
5. resources customized for varied specialties, capability levels, and practice settings that include the full continuum of care

The model establishes evidence-based resources for developing nurses. ***When the Alliance shares these resources, member agencies focus more on helping new nurses gain clinical competency and less on creating programs, resources and tools.*** Program outcomes show reduced patient errors/ near misses and orientation costs; along with improved nurse retention, satisfaction, and workplace culture.

Healthcare problem: Healthcare efficacy is greatly impacted by new graduate preparation for practice. Del Bueno (2005) reported that new graduate nurses meet entry level expectations only 35% of the time. A follow-up study by Kavanaugh (2017) revealed a drop to 28% meeting expectations within the increased complexity of healthcare environments. Benner, et al (2005) called for a radical transformation of nursing education. Their research concluded that all practice professions require both cognitive and practice apprenticeships to establish theoretical knowledge and then develop the 'skilled know-how' that teaches one how to reason across time. The practice apprenticeship develops ability to reflect on changes in the patient situation, condition, problems and/or concerns as they arise. These and other articles show the importance of teaching nurses how to think like a nurse (Caputi, 2018), a core function of the CTF.

Preceptors are the clinical instructors for new staff/students and there are no textbooks of teaching tools to guide them in this important role. This fact highlights the need for preceptor development and supporting tools for working with learners to ensure competent patient care delivery. These abilities are essential to safe, effective patient care management.

Along with preceptor development, transitional support systems are needed to deal with the high acuity health care challenges that experienced staff face as they transition into each new practice setting. "In increasingly complex clinical settings, the consistent performance of nurses and all health care professionals is essential for patient safety" (Kavanagh & Szveda, 2017, p. 57).

Improving health or care delivery: Lenburg's (1999) seminal work - Competence Outcomes Performance Assessment (COPA) Model triggered a significant breakthrough for the project team. The COPA model prioritizes critical thinking and nursing judgement within clinical practice. Understanding the COPA model, helped the team appreciate the importance of defining critical thinking, how to talk about it, identify it, and how preceptors develop it within the clinical practice of learners. Application of the COPA model initiated a significant transition from competency tools that targeted lists of tasks and procedures to tools that prioritized critical thinking, nursing judgement, and clinical reasoning skills. This posed unique challenges, with the need to teach preceptors how to foster critical thinking in novice nurses. Preceptor educational tools were minimal, hence the CTF required an additional focus on evidence-based preceptor development. The complete model includes resources to address development and validation of both nurse competency and the preceptor support systems that aim to develop competency and critical thinking capability.

The new grad support system evolved into a comprehensive innovative model (CTF) that is applicable for all types of new hires and has been adapted to support interdisciplinary team colleagues such as physical therapists as well. It is a comprehensive transitional support framework with competency guidelines, required performance criteria, clinical teaching (coaching) plans, and preceptor development/support systems.

Alliance membership grants access to CTF resources with full editing/usage rights. The Alliance distributes and expands the evidence-based model through research projects, membership linkages, user feedback, and ongoing adaptations to varied settings, specialties, and needs.

Nurse initiated; nurse led: The Clinical Transition Framework (CTF) was established by VONL to bridge the 'transition to practice gap' experienced by new graduate nurses. Starting with a workgroup of more than 40 nurses, project development engaged staff nurses as well as educators and managers from sites across the continuum of care.

Nurse managers, educators, and clinical preceptors comprise the team of end point users and framework contributors. This team introduced several unique, significant components to professional development of care providers. They established roles of Protector and Evaluator (competency validator) for preceptors, evidence-based preceptor instruction, Clinical Coaching Plans as a development guide for preceptor/preceptee use, and clearly defined competency expectations that target clinical reasoning and nursing judgment.

The team established unique Innovation aspects, including;

- 1) a collaborative, regional workgroup comprised of nurses from the full continuum of care, academia, and regulation
- 2) focus on model configuration that could be implemented statewide rather than for a single agency or health system

Nurses led the development, implementation and evaluation of this work. This is evidenced by the VNOL meeting minutes, multiple publications, and the current list of agencies and regional groups using the tools. The success of the original new graduate internship led to further research and performance improvement projects pertaining to transition and nurse competency development. The nurse led team developed supporting structures, tools, and guidance to establish the first comprehensive nurse transition program that addresses the full continuum of care and all levels of nurse hires within a single competency-based framework.

Impact on outcomes, safety, quality, experience: The Nebraska Center for Nursing Project collected data pertaining to nurse orientation costs and incidence of errors. CTF resources were used to modify how preceptors are taught and utilized in urban and rural settings across Nebraska. Managers were asked to estimate costs between the control and treatment periods. Orientation expenses were significantly reduced from the control phase of \$7028 per new graduate, to the treatment phase of \$4961 per new graduate. Significant project outcomes also revealed a **reduction in the number of errors or near misses**. The study concluded that new nursing graduates were more satisfied, better prepared, and had fewer errors when provided additional educational modules and had preceptors who had attended a program specific to managing new graduate development.

Robbins (2014) reported nurse employment turn-over rate decreased from 33.6% (prior to program) to 16.5% in the year following completion of the program, a 50% decrease ($p < 0.1$). Robbins reports that the savings associated with retaining just one specialty nurse is calculated to average \$85,000 in the Burn ICU specialty. The expert staff at that unit took the concepts to their specialty professional organization and used the framework to determine burn nursing competency expectations.

With implementation across the continuum of care - including school nurse, public health, home and extended care settings - the resources have been expanded to reflect current challenges in healthcare delivery. These resources move the collaborative engagement of the CTF towards broader use and efficacy in supporting transition to safe and effective clinical nursing practice.

Data elements used to measure the effectiveness: Multiple research and implementation projects used the model in part or whole with outcomes showing improvements on factors of satisfaction, retention, workplace culture, and improved patient safety (see items in annotated bibliography). The reported outcomes related to workplace culture, transition, and reduction of potential errors create an environment of improved safety through improved preceptor and nurse development, paired with focused competency validation. The outcomes directly improve patient care, experiences, and medical management.

Evaluation and surveys tools are included within the CTF resources and Alliance/CTF faculty routinely engage with agency-based implementation studies. The framework is also accessed by graduate students that seek performance improvement and research studies as part of their educational advancement. Their academic research projects continue evidence base development and the formative evaluation process of CTF components and impact.

As noted in the previous question, various tools provided by the CTF have been used by agency members to track target points related to nurse retention, satisfaction, turnover, costs, duration, and incidence of errors or near misses for nursing staff and/or patients on involved units. The elements are tracked and compared to data collected pre-intervention. When an agency uses an additional assessment method or tool, they are asked to contribute that back to the resource pool for use by all members. As a result, multiple research projects, implementation steps and outcomes are included in the CTF annotated bibliography and in the document: *Clinical Transition Framework: Core Components and Evidence Base* (VNIP, 2021) .

Capacity to scale and grow across healthcare segment: The capacity to scale and grow is revealed by the list of agencies and organizations engaging the model and/or tools on a local, regional or system-wide basis. CTF resources are currently in use in Vermont, Alaska, Indian Health Services, New York, Hawaii, Nebraska, Virginia, New Mexico, and Iowa. The model is the foundation for work in the military medical system that establishes a standardized and systematic framework for nurse competency development and validation for their full spectrum of care. This work continues and expects to extend the influence of the model to standardize nurse competency development and validation within their world-wide health system. Current users include agencies and/or health systems based in Australia, Egypt, and Canada. The past outreach and list of current users provides evidence of the appeal of the model and tools.

Multiple research projects and data collection are tallied in the document: *Clinical Transition Framework: Core Components and Evidence Base* (posted on the VNIP web site). Pilot studies and testing are part of ongoing work as established with partners from the New York State Nurse Association, VT Technical College, University of Vermont, Capital University, VT Dept of Public Health, New York City College of Technology, and AHEC Center for Nursing Workforce Research, Planning, and Development (see listing of VNIP Board of Directors at <https://www.vnip.org/about.html>).

Significant work is completed by volunteers and CTF Users, but revenue from membership is required to maintain an office, website, resource access, updated tools, cyber-communications, and ongoing data collection.

Planning for the Future: Award funds, membership fees, and service contracts will expand cyber-communications, strengthen membership, and create a readily available resource repository. The Innovation Team will produce deliverables including a fully functional website, a complete CTF User Manual, and a set of Coaching Plans ready for publication. These tools improve and advance CTF utilization. With these resources, preceptors will have explicit guidance in how to support clinical learning in a safe, effective manner. The clinical learning includes focused Preceptor instruction and resource tools that are crucial to nurse development.

Coaching plans provide guidelines that assist the preceptor/orientee development process and are concrete, systematic, standardized forms for guiding effective clinical learning and 'hand-off communications' between preceptors. We can establish textbooks of Clinical Coaching Plans in the same manner that nurses developed textbooks of Nursing Care Plans.

The Alliance developed a membership structure to sustain and advance the framework. Membership grants proprietary rights to all CTF materials as developed; thus, member agencies have the most recent literature review, concepts, and evidence-based resources for supporting transition. Alliance membership creates a team of colleagues that network, develop solutions, and support ongoing research.

The work and excitement grow exponentially with new partners, outreach and evidence-based endeavors! By expanding distribution of the Clinical Transition Framework within a shared ownership prototype, the tools, framework and concepts become available for all. The membership model of distribution is intended to share resources and development in a manner as close to 'open access' as possible.

For further information on the CTF and/or Alliance membership email: sb.vnip@gmail.com or sboyer@vnip.org

The updated VNIP website is under construction, but the legacy site is found at: www.vnip.org

Annotated Bibliography

Benner, P., Sutphen, M., Leonard, V., & Day, L. (2010). *Educating nurses: A call for radical transformation*. San Francisco, CA: Jossey-Bass.

- Benner, et al's text calls for changing how nurses are developed. This resource is foundational to changing the manner in which we teach nurses. Among other issues, the authors call for clinical development that targets application of critical thinking and clinical reasoning capability.

Caputi, L. J. (2018). Want Your Graduates to Succeed? Teach Them to Think! *Nursing education perspectives*, pp. 39 (1), 2-3.

- A resource that guided concepts applied within building and improving the CTF model. This calls again for developing the thinking and decision-making process as well as building task capability.

Lenburg, C. (1999, Sept. 30). The framework, concepts and methods of the competency and performance assessment model. *Online Journal of Issues in Nursing*, pp. 4(2), Manuscript 2. Retrieved from The framework, concepts and methods of the competency and performance assessment model: www.nursingworld.org/MainMenuCategories/ANAMa

- This resource was core to both initial and ongoing work with writing clinical nurse competency statements that address the full scope of nursing care and how critical thinking is viewed and validated within the clinical setting. The eight essential competencies identified by Lenburg, along with her guidance in writing observable performance criteria created the foundation for competency validation tools.

Del Bueno, D. (2005). A crisis in critical thinking. *Nursing Education Perspectives*, 26(5), 278-282. doi: [http://dx.doi.org/10.1043/1536-5026\(2005\)026\[0278:ACICT\]2.0.CO;2](http://dx.doi.org/10.1043/1536-5026(2005)026[0278:ACICT]2.0.CO;2).

- A core resource that ensures that critical thinking criteria become a central focus of the nurse competency tools and the full CTF model

Kavanagh, J. M., & Szveda, C. (2017). A crisis in competency: The strategic and ethical imperative to assessing new graduate nurses' clinical reasoning. *Nursing Education Perspectives*, 38(2), 57-62.

- An additional reference supporting application of concepts for developing and assessing the clinical reasoning capability of nurses.

Boyer, S. (2017). Clinical Transition Framework: Efficient solutions for transitional support systems. *Nurse Leader*, 15 (6). <https://doi.org/10.1016/j.mnl.2017.03.013> . Full text at: <https://www.sciencedirect.com/science/article/pii/S1541461216302968> Ac.

- Publication of outcomes and model components that were proving effective for transition to initial practice, new specialties, AND orientation requirements. Using the same set of nurse competencies for each of these transitions is logical, but not often done. This resource and other publications provide one approach to sharing the CTF with others. Based on subsequent requests for resource use, the non-profit organization titled 'Alliance for Clinical Transition' was established as a registered trade name and dissemination venue within the VNIP organization.

Boyer, S., Valdez-Delgado, K., & Mann-Salinas, E. (2018). Clinical Transition Framework: Integrating accountability, sampling and coaching plans in professional practice development. *Journal for Nurses in Professional Development*, 34(2), 84-91.

- The article emphasizes the role and process for unique features that are essential to the CTF model. As stated, the role of accountability, use of sampling theory, and the concept of using clinical coaching tools are introduced and explained.

Boyer, S., Mann-Salinas, E., Valdez-Delgado, K., & VanFosson, C. (2019). Using the Delphi technique to determine core components of a Nurse Competency Program. *Journal for Nurses in Professional Development*, 35(5) 261-267. DOI: 10.1097/NND.0000000000000569 .

- VNIP collaborated with the military medical system to collect broad-based data on which components and competencies were crucial within a comprehensive model.

Mann-Salinas, E., Hayes, E., Robbins, J., Sabido, J., Feider, L., Allen, D., & Yoder, L. (2014). A systematic review of the literature to support an evidence-based Precepting Program. *Burns*, 40(3), 374-387. DOI: <http://dx.doi.org/10.1016/j.burns.2013.11.008>.

- This article became the foundation for work with the military medical system. Their nurse scientists researched to determine available resources, impact of change project, and potential solutions for the significant issues they were experiencing with Burn ICU nurse turnover.

VNIP . (2021, October 9). *Clinical Transition Framework: Core Components and Evidence Base* . Retrieved from Vermont Nurses in Partnership: https://www.vnip.org/documents/VNIP-CTF_EvidenceBase2021_000.pdf

- This innovative program started 20 years ago and has experienced two decades of significant research, analysis, and ongoing improvements. VNIP maintains this document to outline the history, evidence, grant projects, publications and ongoing research behind the CTF model.

The following list of articles report on research project outcomes and graduate studies from CTF dissemination and application:

Barba, M., Valdez-Delgado, K., VanFosson, C. A., Caldwell, N. W., Boyer, S., Robbins, J., & Mann-Salinas, E. A. (2019). An Evidence-Based Approach to Precepting New Nurses. *AJN The American Journal of Nursing*, 119(3), 62-67.

- Military medical nurse leadership reported the outcomes of using the standardized preceptor development and support systems.

- Delfino, P., Williams, J., Wegener, J., & Homel, P. (2014). The preceptor experience: The impact of the Vermont Nurse Internship Project/Partnership model on orientation. *Journal for Nurses in Professional Development*, 30(3), 122-6. doi:10.1097/NND.0000000000000060.
- Hawkins, P., & Exstrom, S. (2014, 7 29). *Adaptation of a Transition to Practice Program for New Graduates in Acute and Long-term Care Facilities in Urban and Rural Nebraska: A Pilot Study*. Retrieved February 17, 2017, from National Council of State Boards of Nursing (NCSBN): <https://www.ncsbn.org/1527.htm>
- The Alliance for Clinical Transition supports nurse development in a manner close to 'open access' while maintaining program and product innovations in a world of rapidly changing healthcare needs. This innovative program started 20 years ago and has experienced two decades of significant research, analysis, and ongoing improvements.
- Goss, C. (2015). Systematic review building a preceptor support system. *Journal for Nurses in Professional Development*, 11(1), E7-E14. doi: 10.1097/NND.0000000000000117.
- Lewis, L. (2010). Uniting States, sharing strategies: Hawaii's innovative ways to educate its nursing workforce. *The American Journal of Nursing*, 110(6), 58-61, 110(6), 58-61.
- Robbins, J. (2014, October 31). Implementing an evidence-based preceptorship program in a military burn center. *Final report on USU Project Number: N12-P04*. Bethesda, MD, USA: TriService Nursing Research Program. Text at: <http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA617016>.
- Robbins, J. R., Valdez-Delgado, K. K., Caldwell, N. W., Yoder, L. H., Hayes, E. J., Barba, M. G., . . . Mann-Salinas, E. A. (2017). Implementation and outcomes of an evidence-based precepting program for burn nurses. *Burns*, 43(7), 1441-1448. <https://doi.org/10.1016/j.burns.2017.04.017>.
- Roleff, C. J., McNulty, J., & Montague, J. (2011). Alaska Frontier: Statewide Competency Development Initiative. *The Rural Nurse: Transition to Practice*, p. 177.
- Increased use within academic settings is encouraged to move towards a seamless transition from education to practice.
- Sorensen, H., & Yankech, L. (2008). Precepting in the fast lane: Improving critical thinking in new graduate nurses. *Journal of Continuing Education in Nursing*, 39(5):208-16.
- Valdez-Delgado, K. B.-S. (2018). 1002: Evolution of an evidence-based competency assessment program for specialty nursing. *Critical Care Medicine*, 46(1) (Supplement 1):485. doi: 10.1097/01.ccm.
- The Alliance for Clinical Transition supports nurse development in a manner close to 'open access' while maintaining program and product innovations in a world of rapidly changing healthcare needs.
 - Current work targets expansion of Alliance membership to allow others to use the evidence-based model and tools to address their unique needs and challenges.