

A "Safe Space" for Learning and Reflection: One School's Design for Continuity With a Peer Group Across Clinical Clerkships

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Abstract

The value of continuity in medical education, particularly during clerkships, is increasingly recognized. Previous clerkship-based models have described changes that emphasize continuity in patient care, learner supervision, and curriculum. The creation of continuous student peer groups can foster interactions that enhance mutual support through uncomfortable professional transitions during the clerkship years. Here, the authors describe a third-year clerkship model based at the San Francisco Veterans Affairs (VA) Medical Center called VA Longitudinal Rotations (VALOR), designed explicitly to establish a supportive learning environment for small peer groups.

Seven groups of medical students (42 total) completed VALOR across three academic years between 2007 and 2009. On clerkships during VALOR, one hour per week was designated for faculty-facilitated sessions amongst peer groups. Students' perceptions of peer group support and overall program satisfaction were determined with immediate post surveys and focus groups at the end of VALOR, and with follow-up surveys 5 to 27 months after completing VALOR. Students strongly valued several elements of VALOR peer groups, including support through clerkship challenges, meeting for facilitated reflection, and appreciating patient experiences across the

continuum of care. Students' appreciation for their peer group experiences persisted well after the conclusion of VALOR. VALOR students performed the same as or better than traditional clerkship students on knowledge and skill-based outcomes.

The authors demonstrate that their third-year clerkship program using peer groups has built supportive learning networks and facilitated reflection, allowing students to develop critical professional skills. Student communication around patient care was also feasible and highly valued.

Medical students are at risk of learning skills incompletely in an environment of fragmentation, inadequate supervision, workplace stress, competition with peers, and isolation.¹ In the current rotation-based system of American medical training, third-year students entering their clerkships also experience numerous transitions in supervision and clinical milieu with little formal guidance, potentially impairing their socialization into the culture of medicine.² Medical schools have begun to experiment with changing the design of clinical clerkships to include more continuity experiences, which can offset the negative impact of fragmentation and more effectively prepare trainees to

address societal health care needs, such as the shortage of primary care practitioners, the aging of the population, and the prevalence of chronic illnesses.^{1,3-5} Three principles of continuity in medical education have been proposed: continuity of patient care, continuity of learner supervision, and continuity of curriculum. Studies of clerkship programs with continuity have shown positive outcomes in students' skills, knowledge, and patient-centeredness.⁶⁻⁸ We suggest that continuity of peer group is a fourth principle of continuity in medical education that can significantly benefit students as they begin the acculturation process to medicine during their clinical clerkships.

"cognitive congruence" because peers possess a similar knowledge base and, therefore, use language that their colleagues readily understand to explain concepts at an appropriate level.⁹ Peers also share "social congruence" because of their similar social roles.^{10,11} This latter type of congruence is critical in the clerkship years, when students struggle with the transition to new roles and perceptions of professional identity.¹² In clerkships featuring continuity, stable groups of students typically rotate through clerkships together and meet formally on a regular basis for didactics. Informally, students have opportunities to share experiences and to solve logistical problems relating to clerkship activities, assignments, and assessments.

Working consistently with a stable peer group can offer students a rich opportunity to share the immersive clerkship-year experience with others who are experiencing similar transitions and to develop coping strategies in challenging learning environments. Using a model of peer-assisted learning,

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The Potential Benefits of Peer Group Continuity

Inherent in their design, continuity experiences in the clinical years provide opportunities for continuity amongst peers. Peer learning is frequently a prominent component of medical school curricula. Advocates of peer learning suggest that its benefit arises in part from

continuity with a peer group might offer educational benefits without the major investment of faculty time that many curricular innovations require.^{13,14} Finally, peer group continuity can present opportunities for group-based reflection that can allow students to reinforce ideals of professional practice¹⁵ and to interpret, reconsider, and increase learning from their clerkship experiences.^{16,17}

To our knowledge, however, no work to date has elucidated how peer continuity across clinical clerkships provides benefits from the medical students' perspective. Our longitudinal clerkship program uses peer group continuity as its core principle. Here, we share our students' reflections about the influence of their peer groups on their development from students into physicians.

The Veterans Affairs Longitudinal Rotations Program

Overall program structure

In the Veterans Affairs Longitudinal Rotations (VALOR) program, medical students spend six consecutive months at the San Francisco Veterans Affairs (VA) Medical Center, a core training site for the University of California, San Francisco (UCSF), School of Medicine. Students rotate through three clerkships: surgery, medicine, and a blended clerkship of psychiatry and neurology. Each year, the cohort of 18 VALOR students is chosen randomly by lottery from volunteers who express interest; preferences to participate in VALOR typically exceed the number of positions available. VALOR began as a pilot program with 7 students in 2006–2007; as of June 2011, 77 students have completed the program.

Before they begin VALOR, students complete a two-week “transitional clerkship” to orient them to the immersive clinical experience¹⁸ and begin a mandatory weekly outpatient longitudinal clinical experience (LCE) rotation with a VA-based physician. These experiences orient students to site-specific elements such as geography and computer system in a supportive, ungraded environment prior to beginning VALOR. We structured the program to allow students to complete one traditional clerkship before VALOR

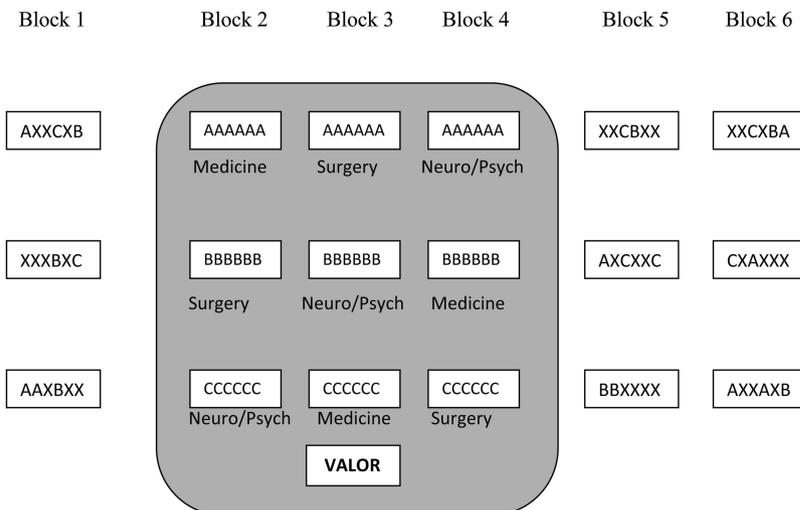


Figure 1 Continuity of student peer groups in Veterans Affairs Longitudinal Rotations (VALOR) at the San Francisco Veterans Affairs Medical Center. The clinical core at the University of California, San Francisco, School of Medicine is divided into six core clerkship blocks and an outpatient longitudinal clinical experience. The VALOR component adds three types of continuity: of site, of patient population, and of faculty mentorship. Students in VALOR rotate in consistent, six-person peer groups for three consecutive blocks. During the first, fifth, and sixth clerkship blocks, VALOR students are randomly allocated to their remaining clerkship assignments, alongside non-VALOR students (represented by X), at any of UCSF's teaching sites. In this figure, each A, B, C, or X indicates an individual student.

in order to experience one system-to-system transition and debrief about it at the beginning of VALOR.

Creation and function of peer groups

Each year, VALOR students are divided into three peer groups of six students. Peer groups are composed by balancing various considerations such as gender, preferences for clerkship order, and prior experiences with other students in the cohort. Specifically, the main parameter about which students express opinions is the membership of each group; we allow students to name one or two other students with whom they would like to work or with whom they feel they would have difficulty working because of a prior relationship (most commonly, roommates or prior or current dating relationships). So as not to create a dynamic of potentially exclusive subgroups that have prior relationships, we typically form peer groups that include no more than two students who have identified preexisting preferences for each other.

Students rotate en masse in their peer groups through the three VALOR clerkships in a predetermined order (see Figure 1). Weekly, hourlong VALOR peer group meetings, each with two faculty cofacilitators, are intercalated into the already-existing clerkship structures, with

little interference with departmentally based clerkship activities. During the internal medicine clerkship, for example, students are excused from the lecture-based medical grand rounds presentation to attend their VALOR meeting. Every VALOR session begins with a “check-in” that allows students to express their thoughts, ideas, and emotions about their concurrent experiences on clerkships. About half the time, the content of the remainder of the meetings is predetermined, with the following themes: clinical skills, including physical examination, oral presentations, and interviewing skills; continuity of care, including review of patient panels similar to but smaller in scope than those collected in other longitudinal clerkships,⁶ a telephone follow-up curriculum, and a nursing-home-based curriculum; and career planning. For the sessions without predetermined content, facilitators use learner-centered principles to encourage open reflection, allowing learning goals and content to emerge from the peer group. The goal of this part of the curriculum is to facilitate the development of a supportive environment to enable students in each peer group to reflect more deeply about critical incidents occurring on clerkships. Topics from the check-ins frequently trigger these peer-group-based reflections

or simulation exercises. Typical examples are impromptu clinical skills training on breaking bad news and motivational interviewing, writing exercises on personal–professional balance and developing roles as doctors, reflections on interacting with unprofessional role models, and role-playing ways of effectively soliciting feedback from supervisors. Occasionally, facilitators replace preplanned sessions with an open session if there is significant interest in an emerging topic. To enhance the sense of trust and safety, faculty facilitators have no formal role in evaluating the students.

Necessary resources

A program director (C.L.C.) received extensive training in group facilitation and leadership prior to developing the program, which occurred in the context of a conducive and progressive school environment.¹⁹ Innovations grant funding from the school’s Academy of Medical Educators²⁰ allowed for initial needs assessments and program development. Ongoing activities that require time include annual recruitment of faculty (one LCE mentor per student, and six faculty facilitators for the noontime peer group sessions), biweekly faculty development sessions for LCE mentors, and curricular planning and debriefing sessions for faculty facilitators. The UCSF Department of Medicine has graciously provided students food for their noontime VALOR sessions.

Program Outcomes

The evaluation process

All 42 UCSF medical students who completed the VALOR program in the 2006–2007, 2007–2008, and 2008–2009 academic years participated in a comprehensive program evaluation, for which we secured UCSF institutional review board approval. We examined students’ perceptions of peer group support and of overall program satisfaction via immediate post surveys and focus groups at the end of VALOR, and follow-up surveys 5 to 27 months after students’ participation in VALOR. We also compared VALOR students’ pre- and postclerkship academic achievement with that of students in the traditional clerkships.

Narrative data from open-ended questions on the surveys were analyzed by two investigators (C.L.C., A.T.), who

used open coding to generate a list of categories and subsequently refined those categories into themes.²¹ The final list of themes was used to analyze all qualitative data by both investigators. A third investigator (C.B.J. or B.S.) corroborated the coded data for accuracy. Themes from the qualitative analyses from the focus-group, post-, and follow-up surveys were identical and, thus, are presented in aggregate.

Of the overall curricular themes covered in the VALOR weekly meetings, the peer group and reflection themes were rated highest, with check-ins being the most highly rated subtheme under “reflection and work with peer group.” The vast majority of VALOR students reported that they valued working with their peer groups throughout the clerkship program. Many students felt the peer group experience was the best part of VALOR because it enabled them to work collaboratively and consistently across six months, learn from one another, and streamline tasks. Students attributed the power of peer group continuity to the provision of a supportive learning network, facilitated peer-group-based reflection, and communication around patient care.

The value of mutual support

First, students believed that the peer group provided a supportive and mutually beneficial network and a venue for sharing similar experiences during their third year, often characterized as personally and professionally challenging. Students noted that the peer group emphasized learning and helping one another rather than individual excellence, thereby reducing competition within the peer group. As one student stated:

I’ve found myself constantly challenged, often overwhelmed, and frequently questioning and second-guessing my own judgment and reactions, so it has become a highlight of my week to meet with other like-minded and empathetic classmates in a safe environment even for only an hour. As fortunate as I am to have a handful of good people in my life outside of medicine, there is no substitute for the support of classmates and mentors who are living the experience with you. Having these meetings structured into our curriculum feels like a true luxury.

Students not only valued the knowledge that others in their peer group shared their troubles; they also found it helpful that

others cared about their own troubles and that it was possible to be mutually supportive. One student stated:

Third year is simply *hard* in more ways than you anticipate going into it. Third year in VALOR is still hard, and yet you never feel like you are carrying the burden alone, which makes the whole experience that much more healthy and doable. The same stresses occur, but I always know there are people I can turn to. Above that, there are people who will ask. Likewise, it has been an honor to support my peers through their struggles.

The sense of support and relative dearth of competition valued by the peer groups allowed students to feel comfortable asking questions to enhance their learning about patient care and to trust the learning provided by their peers. One student stated:

Instead of worrying about competing with one another, we would help each other learn by sharing templates, resources, [and] solving cases in our study sessions.

The value of group-based reflection

Students learned the benefit of facilitated peer-group-based reflection, and many noted that this process helped them prioritize their learning and deepened their understanding of personal and professional development. Students felt that VALOR was a “safe space” and that it provided a forum for venting and dealing with emotions. As one student wrote:

Taking the time to reflect, confide with my VALOR group, and share experiences has not made things easier or harder for me, but rather has helped me have a more honest experience. Our conferences have made me think hard about certain issues, and without VALOR I would have just floated along more. [Because of VALOR,] I have been better in touch with myself and my own experiences.

Potential implications for patient care

Finally, students described the impact of peer group on patient care. “Comanaging” some of the same patients amongst themselves over time contributed to student learning. Students often shared and discussed cases and experiences. They solicited and received updates on patient status from the other students to enhance their learning about the patient case. One student commented:

We would discuss amongst ourselves the rationale behind each team’s treatment

recommendations for the patient ... [which] made us (and me) feel more "doctor-ish."

Over time, students learned the interests of the others in their peer groups and shared information about difficult patient interactions. Students pointed out that when one would rotate off a service, she or he could trust that the patient care information would be communicated to the next student.

Long-term impact of the VALOR program

In the postprogram evaluation, students continued to rate the peer group the highest of any feature of the clerkship program. Students agreed very strongly that lessons learned from the peer group experience on VALOR enhanced their learning about becoming a physician and were applicable in subsequent clerkship rotations. Of the comments pertaining to the strength of the peer group, most mentioned the advantage of having learned skills in effective team building (e.g., "I learned skills needed to build relationships with people in the hospital"). Nearly two-fifths spoke of the abiding usefulness of reflection and processing through stressful experiences (e.g., "The lessons I learned about processing my experiences through the VALOR cohort meetings/relationships were valuable in all other rotations to follow").

Performance on examinations

We found no difference in premeasures of academic achievement between VALOR students and students who participated in the traditional, block-style clerkships. VALOR students performed the same as traditional clerkship students on academic achievement outcomes with the exception of the data-gathering portion of our school's high-stakes clinical performance examination, on which VALOR students performed better than traditional clerkship students (mean = 69%, SD = 6 versus mean = 66%, SD = 7, respectively; $P = .05$).

The Benefits of Continuous Peer Groups in Clerkships

Students' feedback about the VALOR program shows that working with a peer group during the clerkship program bolstered their sense of support, encouraged reflection, and enhanced

their learning about longitudinal patient care. Students rated the peer group portion of VALOR highly and continued to appreciate those experiences well after the conclusion of their clerkships.

In keeping with what other clerkship students have previously described,^{12,22} students participating in VALOR felt challenged, uncertain, and overwhelmed in their clerkships. The transition from preclerkship to clerkship-based medical student is difficult, in part because educational experiences prior to clerkships typically do not simulate the kinds of experiential and self-regulated learning in clinical environments.^{22,23} Students in VALOR found that their peer groups provided them with excellent support and a stable structure in the face of this significant transition, and they could invoke and then reflect together about their common experiences with patients, personnel, and learning opportunities. Consequently, students could provide a reality check for their classmates—either specifically guided validation about challenges or different perspectives about the same context. VALOR peer groups thereby provided a safe, facilitated environment in which to explore and practice skills of self-regulated learning. In effect, this dynamic produces a context for situated learning about the factors that enable students to navigate their workplace.²⁴ We believe that these differences enhance the efficacy of VALOR over other clerkship reflection activities described elsewhere^{8,25} and that VALOR provides a viable, less transfiguring alternative to instituting a longitudinal, integrated clerkship program.^{1,6,13}

Common peer-support issues that arose during the VALOR sessions, including hierarchy, self-doubt due to constant assessments, and personal–professional balance, were consistent with themes that have been described in prior examinations of the informal curriculum.^{26,27} In designing medical student programs, clinical educators must increase their awareness of the distinction between what is taught and what is learned.²⁸ VALOR and its weekly peer group sessions created a formalized structure that allowed for exploration of the informal curriculum. Students had an approved hour when they were freed from their concurrent clinical duties and met in a protected space free from the

unending scrutiny on their clerkships. This experience communicated two messages that differ from the typical work and evaluation orientation of the clerkships: Self-reflection and authenticity are important components of becoming a good physician, and the peer group meetings had equal or increased value compared with the traditional, lecture-style grand rounds from which students were excused.

Part of the program's value may also derive from students' ability to reflect on and share the complexity of the challenges they face with interested faculty, a level of communication that may not be fully realized in most clinical education settings.^{12,29} We infer that having experienced faculty physicians present to validate the importance of students' experiences and feelings, role model empathy and professionalism, and provide guidance was valuable. These are the top three issues that fourth-year students name as important in developing humanism.³⁰ Though it is also possible that the faculty members' presence occasionally inhibited open discussion, the students had significant autonomy in determining the agenda for half of the sessions. Furthermore, the nonevaluative role of the faculty and the environment fostered by the student and faculty group matched the intent of learning communities, which are becoming increasingly common in medical education.³¹ Development of learning communities during the third year of medical school, when students commonly face their most intensive clinical clerkship experiences, and when students typically decrease their participation in school-based learning communities,³² represents an interesting area for future study.

Similar to other programs, VALOR students found that patient care is a critical aspect of learning.^{6,13,33} The structure of VALOR also gave students a relevant context in which to begin communicating with each other about patients for whom their teams shared clinical responsibility. Given new duty hours expectations for U.S.-based residents that emphasize the importance of transfer of responsibility,³⁴ one next step could be to formally teach this important skill in a way that is developmentally appropriate.

The benefits of team-based learning in medical education are increasingly recognized.³⁵ As the practice of medicine also becomes more team based, with recent initiatives such as the patient-centered medical home,³⁶ physicians must interact effectively in a team dynamic. VALOR students stated that they understood the importance of their peer groups in their development and recognized the pitfalls of negatively charged competition; we infer that their VALOR experiences will make them more receptive to future work in team-based structures.

A feature of VALOR that facilitated the continuous peer group experience was the chance to work in the VA system across a six-month period, which allowed students to become familiar with the systems, staff, and patients. For this time period, VALOR addresses a common concern of clerkship-year students about the necessity for learning site-specific logistics when rotating to a new clerkship site—a less frequent concern of clerkship directors.¹² Our findings are also consistent with prior studies that report high student satisfaction with longitudinal programs⁶ and with VA-based training.³⁷ Interestingly, students who had already matched into residency by the time of completion of the follow-up survey agreed that choosing a residency with a VA site was important in their decision making.

The Potential for Wider Applicability

Strengths of this study include a first-time exploration into the idea of continuity with a peer group during a clerkship, a larger sample of nonpilot students than has been previously described,^{6,8} longer-term follow-up of participating students' attitudes, and in-depth qualitative data analysis. One important limitation is students' self-selection into VALOR; interpretation of comparative data must occur with caution because VALOR may provide a conducive environment for students who prefer this type of learning. Additionally, VALOR encompasses traditional clerkship activities as well as our longitudinal program components, so it is possible that all positive outcomes were not due to VALOR but instead attributable to concurrent clerkship activities. However, our qualitative

analysis overwhelmingly names curricular components of VALOR over specific clerkship activities, so we believe that this is less likely.

Students strongly valued continuity with a peer group that includes weekly protected time dedicated to reflection and learning. In their review on continuity in medical education, Hirsh and colleagues¹ wrote that, in the best cases, "continuity of curriculum creates space for self-reflective practice." We agree and further aver that students desire—and require—support from each other to establish safe spaces for learning and reflection. On the basis of our findings, we suggest that a formal curriculum with structured faculty support will promote this space, and medical schools should strongly consider providing such opportunities during clerkships for students to participate in self-reflection and peer support as they transition to experiential, self-regulating learners. The resources necessary for developing such a curriculum, although not insubstantial, are not onerous and do not require large-scale change in ongoing clerkship activities. Demonstrating students' acquisition of these professional skills represents an important next step.

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