What’s in a Name? Role Clarity Goes Well Beyond a Simple Title

David A Turner, MD1,2, Kyle J Rehder, MD2, Alisa Nagler, JD, EdD3, Julia Aucoin, DNS, RN-BC, CNE4, Pam Edwards, EdD, MSN, RN-BC, CNE5, and Catherine Kuhn, MD1,6

Abstract

Background: Role clarity is important for patient care but challenging in graduate medical education (GME). Methods: Badge buddies were integrated for all GME trainees at a single institution, and surveys were conducted prior to and 5 months following implementation. Results: There were 932 pre- and 498 postimplementation respondents. Following implementation, both trainees and nurses reported improved awareness of GME training level, but there were no changes in patient/family perceptions. Conclusions: Badge buddies improved caregiver awareness of GME training level but did not impact patient/family perception. Patients appear to be focused primarily on relationships with caregivers and communication skills rather than a provider’s specific role.

Keywords
clinician–patient relationship, communication, patient expectations, patient satisfaction

Introduction

In the current era of team-based interprofessional care that exists in academic medical centers, increasing attention is being paid to role clarity. On a given day, a patient may encounter a multitude of health-care professionals from a wide range of disciplines, including graduate medical education (GME) trainees at different levels of training. While data linking role clarity specifically to patient safety outcomes are limited,(1) a number of regulatory agencies and accrediting bodies including the Joint Commission, Joint Commission International, and the Accreditation Council for Graduate Medical Education (ACGME) require that trainees inform patients of their respective roles in patient care (2–4). Role clarity is also emphasized in the ACGME Clinical Learning Environment Review process as a mechanism to ensure patient safety (5).

However, evidence addressing trainee identification in the clinical environment is limited. The literature addresses patients’ preferences for how doctors should dress and be introduced, but there are minimal data addressing the issue of provider identification (6–9). The best mechanism to meet identification requirements and the impact of enhanced trainee identification on patient care is not known.

One approach to enhance identification of team members is to use badge buddies, which are ubiquitous in hospitals and health systems. The impact of these badge buddies on patient and team member understanding of the specific role of health-care workers is not known. Our current investigation is focused on the downstream impact and actual perceptions of both patient and health-care team members’ understanding of GME resident and fellow roles with implementation of a new badge buddy system.

Methods

Duke University Hospital is a 957 bed, tertiary academic medical center with over 150 GME programs, approximately 1000 GME trainees, over 4000 nurses, and approximately 40 000 annual inpatient patient admissions. To improve the

1 Graduate Medical Education, Duke University Hospital and Health System, Durham, NC, USA
2 Department of Pediatrics, Pediatric Critical Care Medicine Fellowship, Duke University Hospital, Durham, NC, USA
3 American College of Surgeons, Chicago, IL, USA
4 University of North Carolina REX Healthcare, NC, USA
5 Duke University Health System, Durham, NC, USA
6 Department of Anesthesiology, Duke University Hospital and Health System, Durham, NC, USA

Corresponding Author:
David A Turner, DUMC Box 3046, Durham, NC 27710, USA.
Email: david.turner@duke.edu
identification of trainee roles in our institution, we implemented a new system of badge buddies. Prior to implementation of this project, GME trainees had a standard hospital badge with her/his name and department, with no designation of GME role. The new badge buddies, placed behind the hospital identification badge, distinguish each trainee with a title and a color: “Intern” (grey), “Resident” (blue), or “Fellow” (black). (Figure 1). To quantify the impact of the new badges, GME and nursing leaders developed surveys for nurses, trainees, and patients/families. Participants were surveyed prior to the badge buddy rollout, and again 5 months after implementation regarding their perceptions of the importance of and current practices of trainees identifying their level of training. This project was exempted by the Duke University Institutional Review Board based on the fact that it is educational in nature.

Results

Presurvey respondents included 309 trainees, 270 nurses, and 353 patients/family members. Graduate medical education intern, resident, and fellow responders represented 49 different specialties and postgraduate years (PGYs) ranged from 1 to 7, with 80% of respondents being PGY 1 to 4. Nurse respondents’ mean experience was 9.2 years (range: 1->25 years), and the nurse and patient groups represented adult and pediatric patients in inpatient, ambulatory, and critical care areas. Postsurvey respondents were similarly distributed and included 180 trainees, 87 nurses, and 231 patients/family members.

Prior to implementation of the new badges, significantly more patients (93%) and nurses (94%) than trainees (83%, \( P < .001 \)) agreed that patient/family awareness of team member level of training is important for patient safety. However, patients (53%) were less likely than trainees (78%, \( P < .001 \)) and nurses (96%, \( P < .001 \)) to agree that “a description of one’s specific role (and level of training) is an important element of patient care” (Table 1). Following implementation of the new badge strategy, both trainees and nurses perceived improved staff awareness of level of training (\( P < .02 \)). Trainee perception of the value of badge buddies to help with identification improved, while nursing perception of the value of the new badges decreased (\( P < .01 \), Table 1). Patients stated almost unanimously that they knew the specific role of their GME physician, but more than 25% of trainees and over 75% of nurses felt that this perception was inaccurate.

Discussion

Significant differences exist between trainees, nurses, and patients regarding the relative importance of understanding the roles of GME physicians. In many academic institutions, GME programs include interns, who are in their first year of residency training following medical school, residents, who have completed their intern year and participating in several years of training in a specific specialty, and fellows, who have completed a residency program and are doing additional time to learn a specific subspecialty.

Our findings suggest that a substantial disconnect exists when considering patients’ and families’ perceived understanding of specific GME role in comparison to both trainees and nurses. While there is uniform agreement regarding the importance of medical and nursing team member understanding of GME trainee role, the importance of this understanding for patients and families is less clear. Qualitative comments by trainees suggest that they feel it is important for patients to know that they are physicians, but they feel that explaining the specific details of their GME level of training is less important and potentially problematic. Nurses also revealed that they do not always know GME providers’ training level and are also concerned that emphasizing the specific GME role to patients might undermine the role of interns and junior residents. Nurses also felt that most residents and fellows do not often introduce their level of training, which appears consistent with our data suggesting that GME trainees do not perceive that this information regarding their specific role is relevant for patient care.

Interestingly, patients uniformly stated that they knew the specific role of their GME physician, but more than 25% of trainees and over 75% of nurses felt that this perception was inaccurate. These findings suggest that it is possible that many patients may not understand the structure within medical education sufficiently to understand the dual role of GME trainees as both employees and learners. Even with an introduction, a badge buddy, a different length white coat, or other specific identifier, the explanation required to clarify the different stages of GME may be more complex than is routinely possible. Many members of our interprofessional team perceive that many patients may not understand the complexity of the stages of medical education, even with a
badge buddy, which represents a visible prompt for discussion. However, when asked specifically, it appears that patients may not be concerned about this lack of understanding of the nuances of GME. Our data suggest that only half of our patients felt that understanding specific roles of team members is an important aspect of patient care. So, while role clarity is undoubtedly essential to keep a team functioning at its best, the concept of role clarity goes well beyond titles or level of training. The depth of role clarity may be the source of some of the ambivalence of patients and families about the nuances of trainee differentiation. The importance of differentiation and role clarification of this nature on patientsafety outcomes is also not well established. Clearly, open and honest communication among team members and with patients is paramount, but a clear link has not yet been made between knowledge of specific GME role and patient safety. In addition, many roles on a medical team may be situational, that is, the same task (or role) that may be performed by an intern one day may be completed by a nurse practitioner, resident, or fellow the next day. For optimal team function and patient safety, the level of the provider performing the task is less important than knowing which person is responsible for the task, and that the task is done proficiently.

While this intervention was limited to implementation of a badge buddy, the surveys focused on the broader issue of role clarity. Our data suggest that patients are more focused on the relationships they form with their providers and how well they communicate, rather than the provider’s specific role. Although it is outside the specific scope of this project, moving forward, we should consider that our focus may need to be on helping build relationships with patients rather than trying to teach a patient how to understand the difference between an intern, resident, or fellow. Shifting the focus away from tasks such as a complex explanation of one’s specific GME role could create a gift that is exceedingly rare in the current landscape of academic medicine—the gift of time. Even if this change creates only a few minutes in each clinical interaction, these precious minutes can be used to build and reinforce meaningful relationships with patients. In an era of computers on wheels, electronic medical records, and smartphone Apps, humanism and connections are becoming increasingly hard to create, and even the smallest of improvements can be critical for the well-being of both our learners and their patients.

### Limitations

Although these data were collected across a wide range of specialties and include both the inpatient and ambulatory setting, the single-center nature of the investigation is a limitation. Given the lack of prior investigation and no existing data, an additional limitation of this study was the use of a

| Table 1. Comparisons of Results of Surveys Prior to Implementation of the Badge Buddy System (pre) and 5 Months After Implementation (post).a |
|-----------------------------------------------|
| **Question**                      | **Trainees** | **Nurses and Staff** | **Patients and Family** |
| **Pre** | **Post** | **P Value** | **Pre** | **Post** | **P Value** | **Pre** | **Post** | **P Value** |
|-----------------------------------------------|
| Staff members are aware of GME physicians’ level of training | 87% | 94% | .02 | Intern 53% | 65% | .05 | 98% | 96% | .28 |
| Patients/families are aware of GME physicians’ level of training | 74% | 82% | .06 | Resident 56% | 70% | .02 | 93% | 90% | .16 |
| It is important for safety that patients/families are aware of GME physicians’ level of training | 84% | 82% | .78 | Fellow 66% | 79% | .02 | 93% | 96% | .15 |
| It is important for safety that staff are aware of GME physicians’ level of training | 95% | 92% | .16 | Intern 15% | 17% | .7 | 95% | 96% | .35 |
| It is helpful for physicians to wear identifying badge buddies | 46% | 73% | <.001 | 95% | 58% | <.001 | 83% | 80% | ** |
| Trainees introduce themselves | 99% | 99% | .91 | Resident 66% | 64% | .77 | 97% | 94% | .12 |
| Trainees identify his/her level of GME training | 76% | 80% | .3 | Fellow 71% | 65% | .34 | 79% | 75% | .28 |

aResponses presented as % respondents stating agree somewhat or strongly agree or % respondents stating always or most of the time.
**Nonsignificant.
study instrument that has not been validated. The design of this investigation also led to sampling of different providers and patients/families between the preintervention and postintervention periods. The investigation was also limited by the decreased number of survey respondents in the postintervention group. Despite these limitations, these data provide an interesting snapshot of the perspective of nurses, residents, fellows, patients, and families, and our results serve as a starting point for further conversation around the important issue of role clarity. Although this investigation suggests that the use of identifying badges for trainees may be a valuable tool to enhance interprofessional team awareness of GME level of training, this intervention may be less important for patients and families. Further investigation is needed to establish both the importance and optimal approach to identification and role clarity for GME trainees caring for our patients.

Declaration of Conflicting Interests
The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding
The author(s) received no financial support for the research, authorship, and/or publication of this article.

References
1. Nishisaki A, Nguyen J, Colborn S, Watson C, Niles D, Hales R, et al. Evaluation of multidisciplinary simulation training on clinical performance and team behavior during tracheal intubation procedures in a pediatric intensive care unit. Pediatr Crit Care Med. 2011;12:406-14.
2. Joint Commission. 2018. Available from: https://www.jointcommission.org/standards_information/jcfaqdetails.aspx?StandardsFAQId=1115&StandardsFAQChapterId=64&ProgramId=0&ChapterId=0&IsFeatured=False&IsNew=False&Keyword=&print=y. Retrieved March 12, 2018.
3. Joint Commission International. Standard Medical Professional Education 3. 2018. Available from: https://www.jointcommissioninternational.org/assets/3/7/JCI-Hospital-5E-Standards-Only-July2015.pdf. Retrieved March 12, 2018.
4. Accreditation Council for Graduate Medical Education. Common Program Requirements. 2017. Available from: http://www.acgme.org/Portals/0/PFAssets/ProgramRequirements/CPRs_2017-07-01.pdf. Retrieved November 1, 2017.
5. Accreditation Council for Graduate Medical Education. Clinical Learning Environment Requirement Pathways to Excellence. 2017. Available from: http://www.acgme.org/What-We-Do/Initiatives/CLER. Retrieved November 1, 2017.
6. Petrilli CM, Mack M, Petrilli JJ, Hickner A, Saint S, Chopra V. Understanding the role of physician attire on patient perceptions: a systematic review of the literature—targeting attire to improve likelihood of rapport (TAILOR) investigators. BMJ Open. 2015;5:e006578. doi:10.1136/bmjopen-2014-006578.
7. Cha A, Hecht BR, Nelson K, Hopkins MP. Resident physician attire: does it make a difference to our patients? Am J Obstet Gynecol. 2004;90:1484-8.
8. Hickerton BC, Fitzgerald DJ, Perry E, De Bolla AR. The interpretability of doctor identification badges in UK hospitals: a survey of nurses and patients. BMJ Qual Saf. 2014;23:609.
9. Chaito A, Niforatos J, Vega J. Exploring the effects of trainee naming: a randomized experiment. Perspect Med Educ. 2016;5:114-21.

Author Biographies
David A Turner is the Associate Director of Graduate Medical Education at Duke University Hospital and Health System. He is also a practicing Pediatric Critical Care physician.

Kyle J Rehder is a Physician Quality Officer for Duke University Health System. He is also a practicing pediatric critical care physician.

Alisa Nagler is Assistant Director for Accreditation, Validation, and Credentialing at the American College of Surgeons.

Julia Aucoin is the Director of Practice, Quality, and Research at REX UNC Healthcare.

Pam Edwards is Associate Chief Nursing Officer for Education at Duke University Health System.

Catherine Kuhn is the DIO, Director of Graduate Medical Education, and Associate Dean for Graduate Medical Education at Duke. She is also a practicing anesthesiologist.