and staff stationed in the medical wards were more likely to default on their PEP treatment. A possible reason for this is that nonphysicians underestimate the need to complete treatment and/or that staff in the medical ward might have underestimated exposure risks compared to those in the surgical ward.

This study highlights predictors of PEP default in a tertiary-care hospital in a resource-limited setting. Non-tenofovir containing regimen was a statistically significant predictor of PEP default, while 3 pills compared to 2 pills, staff in the medical ward and nonphysician status, though not statistically significant, also predicted default PEP treatment. However, the role of pill burden, category, and station of staff as predictors of PEP default should be further investigated in a multicenter prospective design using a larger sample size. This knowledge will help clinicians understand how to improve PEP uptake to prevent new HIV infections.

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REFERENCES

1. World Health Organization. *Factsheet: Post-Exposure Prophylaxis to Prevent HIV Infection*. Geneva, Switzerland: WHO; 2014.
2. Ford N, Irvine C, Shubber Z, et al. Adherence to HIV post-exposure prophylaxis: a systematic review and meta-analysis. *Aids* 2014;28:2721–2727.
3. Bassett IV, Freedberg KA, Walensky RP. Two drugs or three? Balancing efficacy, toxicity, and resistance in postexposure prophylaxis for occupational exposure to HIV. *Clin Infect Dis* 2004;39:395–401.
4. Weber D, Wang SA, Panlilio AL, et al. Experience of healthcare workers taking postexposure prophylaxis after occupational HIV exposures: findings of the HIV Postexposure Prophylaxis Registry. *Infect Control Hosp Epidemiol* 2000;21: 780–785.
5. Tokars JI, Marcus R, Culver DH, et al. Surveillance of HIV infection and zidovudine use among health care workers after occupational exposure to HIV-infected blood. *Ann Intern Med* 1993;118:913–919.
6. Ford N, Shubber Z, Calmy A, et al. Choice of antiretroviral drugs for postexposure prophylaxis for adults and adolescents: a systematic review. *Clin Infect Dis* 2015;60:S170–S176.
7. Tosini W, Muller P, Prazuck T, et al. Tolerability of HIV postexposure prophylaxis with tenofovir/emtricitabine and lopinavir/ritonavir tablet formulation. *AIDS* 2010;24: 2375–2380.
8. Fisher M, Benn P, Evans B, et al. UK Guideline for the use of post-exposure prophylaxis for HIV following sexual exposure. *Int J STD AIDS* 2006;17:81–92.
9. Sultan B, Benn P, Waters L. Current perspectives in HIV post-exposure prophylaxis. *HIV AIDS (Auckl)* 2014;6:147–158.

Healthcare Personnel Relationships Related to Coordination of Catheter Care

To the Editor—Relationships between healthcare personnel (HCP) influence coordination of care; therefore, these relationships are expected to impact healthcare-associated infections (HAIs). It would be helpful to explore these relationships for potential association with HAIs such as central-line associated bloodstream infection (CLABSI) and catheter-associated urinary tract infection (CAUTI). Because a relational coordination (RC) survey tool[1] has demonstrated associations between the survey scores and performance outcomes in previous studies conducted in healthcare and business settings like the airline industry,[2,3] we conducted an observational quality improvement study to explore relationships between different types of HCP within an individual unit (an intensive care unit [ICU] or a ward), with respect to caring for patients with central venous catheters and urinary catheters.

This study was conducted at Parkland Memorial Hospital, a 770-bed public academic safety net hospital in Texas with 6 ICUs and 27 wards during September 2014 and October 2014 as part of a system-wide initiative to reduce HAI. Available rates of CLABSI and CAUTI in 2013 per routine surveillance by the infection control program informed the choice of units to be included in the survey. After ranking all units in the hospital based on the rates of CLABSI and CAUTI, we included units belonging to either the highest or lowest quartiles that provided care for a minimum of 100 urinary catheter or central line days per month. Relational coordination surveys were sent to 384 HCP employed in 5 units with high CLABSI rates and 4 units with low CLABSI rates and 359 HCP in 4 units with high CAUTI rates and 6 units with low CAUTI rates. We did not survey HCP like physicians, whose services are not confined to any single unit. The surveys were anonymous and were emailed using the REDCap® database.[4]

TABLE 1. Infection Rates and Relational Coordination Scores in the Units with High Versus Low Incidence of Infection

Variable	High-Incidence Units	Low-Incidence Units
CLABSIs per 1,000 catheter days	1.23–3.34	0–0.80
Relational coordination for care of central venous catheters	3.16 (2.89–3.42)	3.09 (2.83–3.26)
CAUTIs per 1,000 catheter days	1.16–8.49	0–0.92
Relational coordination for care of urinary catheters	3.23 (2.84–3.55)	3.28 (2.75–3.47)

NOTE. CAUTI, catheter-associated urinary tract infection.

Respondents chose the most appropriate HCP role that defined them: nurse, nurse manager, health unit coordinator, or unlicensed assistive personnel. The survey assessed the 7 aspects of relational coordination: (1) timeliness, (2) accuracy, (3) frequency, and (4) problem-solving nature of communication; and (5) respect, (6) goals, and (7) knowledge shared with attending physicians, residents, medical students, nurses, unlicensed assistive personnel, patient visitors, patients, and support staff (eg, transporters, physical therapists, radiology technicians, respiratory therapists, and phlebotomists). Respondents then rated their interactions on a 5-point Likert scale specific to each question for each of the groups. Individual ratings were aggregated to derive an RC score. An RC score >4 was considered high and indicative of excellent coordination; a score of 3.5–4 was considered intermediate; and a score <3.5 was considered low.

1. Frequent communication: How frequently do you communicate with these care providers about patients with _____ catheters? [Not nearly enough = 1, Not enough, Just the right amount, Too often, or Much too often = 5]
2. Timely communication: Do people in these groups communicate with you in a timely way about patients with ___ catheters? [Never = 1, Rarely, Sometimes, Often, or Always = 5]
3. Accuracy of communication: Do people in these groups communicate with you accurately about patients with ___ catheters? [Never = 1, Rarely, Sometimes, Often, or Always = 5]
4. Problem-solving communication: When problems occur in the care of patients with ___, do people in these groups blame others? [Always blame = 1, Mostly blame, Neither blame nor solve, Mostly solve problem, or Always solve problem = 5]
5. Shared knowledge: How much do people in these groups know about the work you do with patients with ___? [Nothing = 1, Little, Some, A lot, or Everything = 5]
6. Mutual respect: How much do people in these groups respect the work you do with patients with ___? [Not at all = 1, A little, Somewhat, A lot, or Completely = 5]
7. Shared goals: To what extent do people in these groups share your goals for the care of patients with ___ catheters? [Not at all = 1, A little, Somewhat, A lot, or Completely = 5]

Data were analyzed using SPSS for Windows version 21.0 software (IBM, Armonk, NY). This study was deemed a nonresearch project by the institutional review board.

Overall, 131 of 384 surveys on the care of central venous catheters (34.1%; 17%–50% per clinical unit) and 139 of 359 of surveys on the care of urinary catheters (38.7%; 13%–77% per clinical unit) were completed. The RC scores are shown in Table 1. No statistically significant differences were detected between response rates or RC scores between units with high versus low incidences of infection. No statistically significant differences were detected between the RC scores between different types of personnel.

Overall, it was helpful to measure relational coordination scores among the wards and the intensive care units in the study. The questions themselves and the measured scores served as discussion points among unit staff and leaders. The most notable finding was that all units except 2 units in the high CAUTI category, which had an RC score of 3.55 (intermediate), were found to have low RC scores (<3.5) with respect to central-line or urinary catheter care. We were not able to find any meaningful differences between high- and low-performing units or between different HCP groups. The limitations of this study are those common to single-center observational studies. The RC scores allowed us an opportunity to increase system-wide awareness and education on relationships and teamwork and their potential influence on HAI rates. The RC survey tool and other tools to assess and monitor relationships between different types of healthcare personnel need to be further developed for application in infection prevention work.

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REFERENCES

1. Relational coordination survey. Relational Coordination Research Collaborative website. http://rcrc.brandeis.edu/survey/. Accessed June 30, 2017.
2. Gittell JH. *High Performance Healthcare: Using the Power of Relationships to Achieve Quality, Efficiency and Resilience*. 1st ed. New York: McGraw Hill; 2009.
3. Gittell JH, Godfrey M, Thistlethwaite J. Interprofessional collaborative practice and relational coordination: improving healthcare through relationships. *J Interprof Care* 2013;27: 210–213.
4. Harris PA, Taylor R, Thielke R, Payne J, Gonzalez N, Conde JC. Research electronic data capture (REDCap®)—a metadata-driven methodology and workflow process for providing translational research informatics support. *J Biomed Inform* 2009;42: 377–381.