

Members commented on several issues related to meeting content and processes. They thought that their joint meetings with the PI and IS group were valuable for developing the stakeholder-driven research agenda. Several suggested that joint meetings should have occurred earlier and more often. Most members said that the language used by the research team in meetings was appropriate for people who did not have a background in healthcare. However, one member noted that he sometimes looked for definitions of terms after meetings, and another said that the research team used too many acronyms. Members were concerned that people who participated in meetings remotely, or who did not use a computer and email, may not have had comparable opportunities to contribute. Finally, members wished that they had heard more about how the researchers would build on the project and whether they would involve the PCS group in future projects. “We did all this work—what’s going to happen now? It was not as clear as you would hope it would be.”

In summary, PCS members identified several elements of engagement that worked well in this project and several areas for improvement. The collegial atmosphere established by the research team helped members feel comfortable sharing their stories and perspectives. Members highly valued meetings that involved the PI and IS group, as these interactions offered an opportunity to see the direct impact of PCS contributions on the project. Based on member’s comments, we identified additional strategies that can help us enhance the experience of stakeholders on future projects.

1. Conduct a structured orientation to prepare stakeholders.⁷ Content should address the project goal and intended outcomes; role of PCS group members and other stakeholders; and mutual expectations for stakeholders and the project team.
2. Provide a comparable meeting experience for all stakeholders, regardless of differences in access to computers/smartphones or ability to participate in person. If members participate remotely, facilitators can use round-robin activities to ensure that all members have opportunities to contribute.
3. Use plain language that everyone can understand during meetings, in materials, and in communications.
4. Provide meaningful closure by explicitly discussing the research team’s plans for the future, including future involvement of the PCS group.

The results of this evaluation represent findings from one group of patient and caregiver stakeholders and are not generalizable to all HAI research that involves patient stakeholders. However, the strategies for effective engagement that emerged may provide a useful starting point for HAI researchers planning to involve patients and caregivers as advisors.

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Current status of infection control professionals in a Chinese city

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To the Editor—Healthcare-associated infection (HAI) management is an important component of medical quality management; it directly affects the quality of healthcare and patient safety.¹ With

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advances in medical technology, the HAI problem has become more and more prominent, which has put forward higher work requirements for infection control professionals (ICPs). More than 40 years ago, the Centers for Disease Control and Prevention (CDC) conducted the national Study on the Efficacy of Nosocomial Infection Control (SENIC).² Its findings suggested that an adequate staffing ratio of ICPs had lower rates of HAI. Similarly, a number of other studies reported that high levels of

Table 1. Demographics and Work Situations of Infection Control Professionals (ICPs) in Wuhu City

Variable	Secondary Hospital (n=24), No. (%)	Tertiary Hospital (n=22), No. (%)	P Value
Gender			.581
Male	2 (8.33)	4 (18.18)	
Female	22 (91.67)	18 (81.82)	
Age, y			.376
≤30	6 (25.00)	4 (18.18)	
31–40	2 (8.33)	5 (22.73)	
≥41	16 (66.67)	13 (59.09)	
Marital status			.581
Married	22 (91.67)	18 (81.82)	
Single	2 (8.33)	4 (18.18)	
Education background			<.001
Junior college	12 (50.00)	2 (9.09)	
Undergraduate	12 (50.00)	13 (59.09)	
Graduate	0 (0.00)	7 (31.82)	
Major			.097
Clinical medicine	1 (4.17)	3 (13.64)	
Nursing	21 (87.50)	13 (59.09)	
Preventive medicine	2 (8.33)	4 (18.18)	
Others	0 (0.00)	2 (9.09)	
Years of service			.561
≤5	13 (54.17)	12 (54.54)	
6–10	8 (33.33)	5 (22.73)	
≥11	3 (12.50)	5 (22.73)	
Reasons of ICPs engaged in HAI management			0.020
Administrative arrangement	21 (87.50)	12 (54.55)	
Personal preference	1 (4.17)	4 (18.18)	
Employment needs	0 (0.00)	4 (18.18)	
Others	2 (8.33)	2 (9.09)	

ICPs played an important role in reducing HAI rates.^{3,4} To our knowledge, little information is available regarding the current status of ICPs in China published in the English language.

In January 2019, we collected the demographic characteristics and occupational statuses of 46 ICPs from 5 tertiary hospitals and 16 secondary hospitals where independent nosocomial infection and control departments had been set up. Demographics and work situations of ICPs are shown in Table 1. Among the investigated ICPs, 86.96% were female, and 63.04% were aged ≥41 years. Most ICPs had taken undergraduate courses (69.57%) and were in a nursing specialty (73.91%). Except education background, the differences in gender, age, marital status, major, and years of service were not statistically significant between ICPs in secondary and tertiary hospitals ($P > .05$). Surprisingly, the most common causes for engaging in HAI management were administrative arrangements, which accounted for 71.74%.

The ICP teams were mainly composed of female nurses. This composition is consistent with the findings from other cities in China concerning ICP characteristics.^{5,6} A few hospitals hire retired nurses to ensure the quantity of ICPs in accordance with the requirements.⁷ However, the proportion of nurses will gradually decrease in the future. As the prevention, management, and control of infection have developed, most hospitals have begun to recruit candidates from a wide range of clinical or healthcare-science backgrounds, especially public health graduates. Vassallo et al⁸ proposed that those hiring ICPs should consider masters of public health graduates as candidates whose epidemiologic skills could help to drive the future of this profession in decreasing HAIs and promoting patient safety and service quality.

Moreover, most ICPs had worked <5 years, which reflects the instability of the management team. Most ICPs were engaged in HAI management due to administrative arrangements. Previous studies have suggested that the main causes of the instability in the management team are heavy workload, insufficient leadership attention, and low pay in China.^{5,9} Only by solving these problems can we cultivate high-quality ICPs.

In conclusion, the HAI management team in Wuhu city has basically formed. The structure of ICPs in tertiary hospitals is better than that of secondary hospitals, but the personnel structure is still unreasonable, and the professional level needs to be further improved.

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