

Financial Incentives Drive Infection Control Improvement in Long-term Care Hospitals : A 3-Year Longitudinal Evaluation

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1 Background

- In July 2023, Korea introduced an infection prevention and control (IPC) incentive for long-term care hospitals (LTCHs) under the Second National Action Plan on Antimicrobial Resistance (AMR).
- The IPC fee is reimbursed at three levels (Grades 1–3) based on institutional eligibility criteria.
- The policy aimed to strengthen minimum IPC requirements, including staffing, organization, and participation in surveillance systems.
- However, evidence on its real-world impact on IPC structures and activities in LTCHs remains limited

2 Objective

- To examine 3-year changes in IPC incentive claims and IPC-related infrastructure indicators in LTCHs in Gwangju from 2023 to 2025.
- To compare IPC infrastructure and qualitative IPC activities between claiming and non-claiming hospitals in 2025.

3 Methods

- Repeated annual surveys were conducted among LTCHs in Gwangju.
- Eligible hospitals numbered 61 in 2023, 63 in 2024, and 59 in 2025.
- Trends in IPC incentive claims, Korean National Healthcare-associated Infections Surveillance System (KONIS) participation, staffing, infrastructure, and selected IPC activities were assessed.
- A cross-sectional comparison of 2025 data was performed between claiming and non-claiming hospitals using the chi-square test or Fisher's exact test, as appropriate.

Figure 1. 2025 Survey on Infection Control at Gwangju LTCHs

4 Results

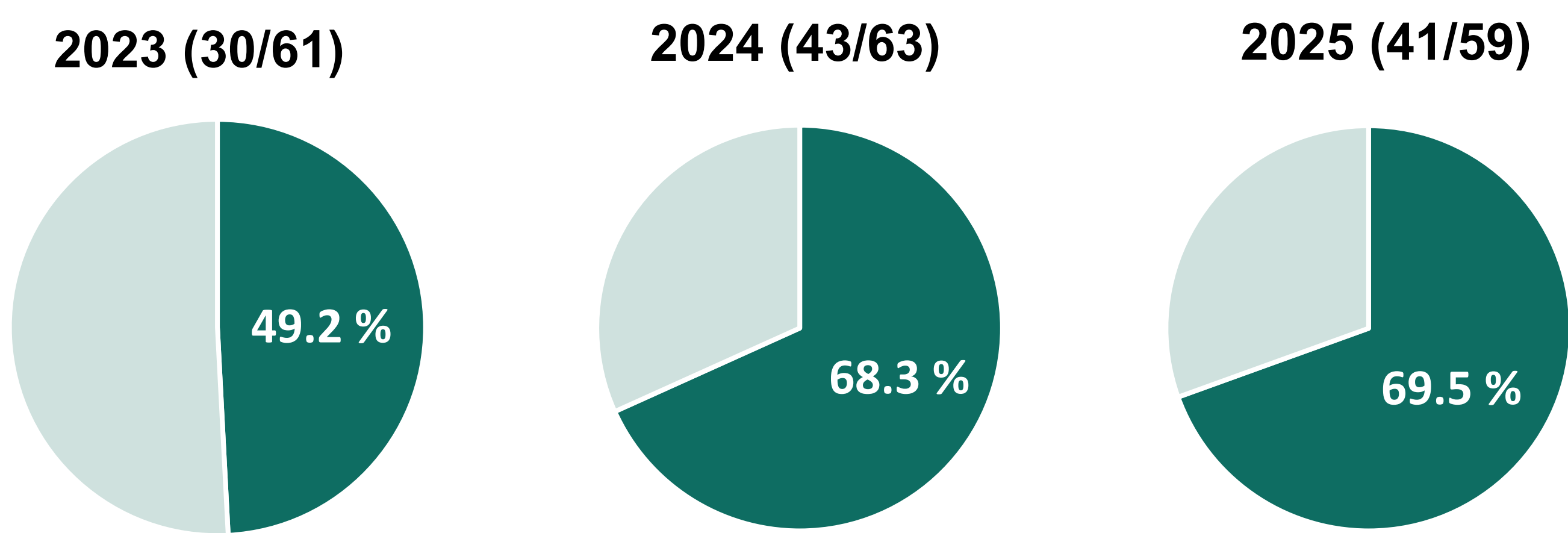


Figure 2. Number of hospitals responding to the survey (2023-2025)

- Survey participation hospitals increased from 49.2% in 2023 to 69.5% in 2025.
- Claim rates reached 74.4% (32/43) in 2024 and 75.6% (31/41) in 2025.

4 Results

- KONIS participation increased from 16.7% to 70.7%, and IPC incentive claim reached 75.6% in 2025, with most claiming hospitals classified as Grade 1.

Table 1. General characteristics and infection control status of long-term care hospitals by year (2023-2025)

Variable, n (%) or M±SD	2023 (n=30)	2024 (n=43)	2025 (n=41)	p-value
Number of beds				0.252
>300	11 (36.7)	10 (23.3)	9 (22.0)	
150-299	17 (56.7)	22 (51.2)	24 (58.5)	
50-149	2 (6.7)	11 (25.6)	8 (19.5)	
Accreditation status (Yes)	28 (93.3)	42 (97.7)	39 (95.1)	0.660
KONIS participation (Yes)	5 (16.7)	5 (11.6)	29 (70.7)	<0.001
IPC incentive claim	-	32 (74.4)	31 (75.6)	<0.001
Grade 1	-	22 (68.8)	26 (83.9)	
Grade 2	-	5 (15.6)	1 (3.2)	
Grade 3	-	5 (15.6)	4 (12.9)	
CRE* notification status				
Reported hospitals	21 (70.0)	23 (53.5)	27 (65.9)	0.301
Mean annual CRE cases per reporting LTCH (SD**)	5.7 (11.7)	6.4 (11.7)	9.0 (13.5)	0.493

*CRE: Carbapenem-Resistant Enterobacterales **SD: Standard Deviation

- IPC incentive claim status differed by hospital size, with markedly lower claim rates in smaller hospitals

Table 2. Comparison of IPC incentive claim status by hospital size(2025)

Variable, n (%)	Claimed (n=31)	None claimed (n=10)	p-value
Number of beds			0.001
>300	8 (88.9)	1 (11.1)	
150-299	21 (87.5)	3 (12.5)	
50-149	2 (25.0)	6 (75.0)	

- Hospitals claiming the IPC incentive had better IPC staffing and infrastructure, including full-time IPC nurses, experienced IPC nurses, infection control doctors, and dedicated IPC offices.

Table 3. Comparison of infection control personnel and infrastructure by IPC incentive claim status(2025)

Variable, n (%)	Claimed (n=31)	None claimed (n=10)	p-value
IPC Committee operation (Yes)	31 (100)	9 (90.0)	0.244
IPC nurse (Full-time Assigned)	28 (90.3)	3 (30.0)	0.001
Experience of IPC nurse ≥1 year (Yes)	31 (100)	6 (66.7)	0.009
Infection control doctor (Yes)	30 (96.8)	8 (80.0)	0.034
Dedicated IPC office (Yes)	31 (100)	6 (60.0)	0.002

- Claiming hospitals showed better qualitative IPC activities, including separate IPC budgets, IPC risk assessment tools, contact precautions in single rooms, and CRE notification.

Table 4. Comparison of infection control activities by IPC incentive claim(2025)

Variable, n (%)	Claimed (n=31)	None claimed (n=10)	p-value
Separate IPC budget (Yes)	30 (96.8)	6 (60.0)	0.009
IPC risk assessment tool (Yes)	31 (100)	7 (70.0)	0.011
Hand hygiene monitoring (Yes)	31 (100)	10 (100)	-
CRE preemptive screening (Yes)	14 (45.2)	1 (10.0)	0.063
Contact precaution (Single room)	26 (83.9)	5 (50.0)	0.045
CRE notification status (Yes)	25 (80.6)	2 (20.0)	0.001

5 Conclusions

- The IPC incentive was associated with significant improvements in IPC staffing, infrastructure, and surveillance participation in LTCHs.
- To ensure long-term effectiveness, the IPC incentive must go beyond structural improvements and also focus on qualitative enhancements, such as healthcare-associated infection management.
- Additionally, dedicated policy support is needed for smaller hospitals, where lower claim rates and greater infrastructure gaps highlight the need for more tailored assistance.