

Implementación de un Equipo de Infusión y Acceso Vascular en un Hospital Terciario: Análisis Coste-Beneficio

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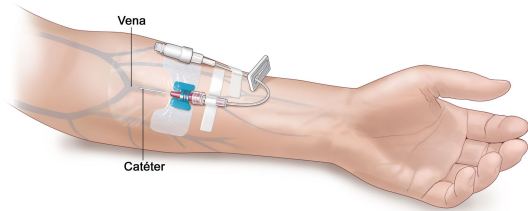
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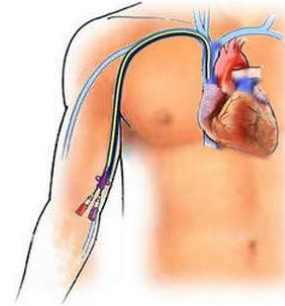
Ricou, L; Esposito, C; Pons, A; Adroher, C; Andrés, I; Nuño, I; Castellà, M; Castellà, L; García, M; Estrada, O; Ara, J; López, F. (2023) Implementation of a vascular access specialist team in a tertiary hospital: a cost-benefit analysis. *Cost Effectiveness and Resource Allocation*, 21(1), 67.

1. Motivación y objetivo

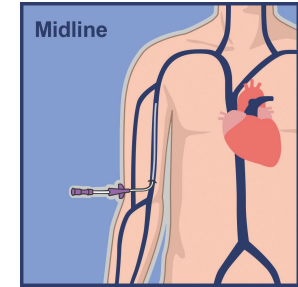
Catéter Venoso Periférico (**CVP**)



Catéter Central de Inserción Periférica (**PICC**)



Catéter de línea media (**Midline**)



- 66% de los pacientes
- Complicaciones
- Uso excesivo e inapropiado
- El 73% contraen una HAI

- Mejoran la seguridad y satisfacción del paciente
- Reducen complicaciones y cantidad de punciones venosas.
- 71% de las enfermeras no usan por falta de habilidad en su uso.

2. Metodología

Intervención: equipo de 2 personas que atienden a pacientes que requieren un catéter mediante la inserción ecoguiada.

Table 1 Categories of costs

Cost category	Cost (EUR)	Unit
Personnel		
Vascular Access Specialist Team	€ 53,583	Annual cost to company per employee
Personnel burden PICC	€ 32	Per procedure
Personnel burden PICC with ultrasound-guided technique	€ 21	Per procedure
Personnel burden midline	€ 21	Per procedure
Personnel burden midline with ultrasound-guided technique	€ 10	Per procedure
Personnel burden PVC	€ 12	Per procedure

Table 1 Categories of costs

Cost category	Cost (EUR)	Unit
Material		
Material price PICC	€ 56	Per procedure
Material price midline	€ 34	Per procedure
Material price PVC	€ 2	For 3 procedures
Radiography		
Confirmatory radiography PICC	€ 15	Per procedure
Possible complications		
Increased length of stay due to phlebitis	€ 674	Per day of hospital stay
Increased resource use due to bacteremia	€ 18,078	Per bacteremia

3. Resultados

Table 2 Benefits and costs of substitution

		Benefit/Cost of substitution	% of reduction
Substitution of PICC with ultrasound-guided PICC	Reduction of personnel burden	€ 32	62%
	Reduction of bacteremia	€ 5	10%
	Confirmation X-ray elimination	€ 15	29%
	Reduction of resources	€ 52	100%
	Increase of personnel burden	€ -21	
	Increase in resources	€ -21	
	Total	€ 31	
Substitution of 3 PVC with 1 ultrasound-guided PICC	Reduction of personnel burden	€ 12	9%
	Reduction of bacteremia	€ 5	4%
	Elimination of PVC material	€ 2	1%
	Reduced hospital stay due to elimination of phlebitis	€ 121	86%
	Reduction of resources	€ 140	100%
	Cost of PICC	€ -56	
	Increase of personnel burden	€ -21	
	Increase in resources	€ -77	
Total	€ 63		

Substitution of midline with ultrasound-guided midline	Reduction of personnel burden	€ 21	81%
	Reduction of bacteremia	€ 5	19%
	Reduction of resources	€ 26	100%
	Increase of personnel burden	€ -10	
	Increase in resources	€ -10	
Total	€ 16		
Substitution of 3 PVC with 1 ultrasound-guided midline	Reduction of personnel burden	€ 12	9%
	Reduction of bacteremia	€ 5	4%
	Elimination of PVC material	€ 2	1%
	Reduced hospital stay due to elimination of phlebitis	€ 121	86%
	Reduction of resources	€ 140	100%
	Cost of midline	€ -34	
	Increase of personnel burden	€ -10	
	Increase in resources	€ -44	
Total midline	€ 96		

4. Conclusión

Los beneficios de implementar un equipo especializado en la inserción de catéteres mediante dispositivos ecoguiados **superan los costes.**

Gracias por su atención