# **ECONOMICS COSTS ASSOCIATED WITH HYPERKALEMIA IN ARGENTINA**

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Study

#### **Incremental Cost of** Hyperkalemia in Argentina:

The presence of HK leads to an average additional cost per patient of approximately USD Highlights 6,280 in a year (See Fig 1).

#### Main Cost Drivers:

In Argentina, associated events account for between 56% and 81% of the costs related to Hyperkalemia (See Fig 2b).

## **Clinical Practice Patterns in** Argentina:

The predominant strategy for HK treatment in Argentina is the suspension of RAASI.



Our study could contribute significantly to a best-practice consensus on HK in Argentina.

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#### INTRODUCTION

Hyperkalemia (HK) refers to elevated serum potassium levels, a condition that is more frequently observed in populations with certain underlying pathologies. This elevation can have serious health consequences. However, in clinical practice, there seems to be both a lack of awareness and, at times, an undue tolerance towards its presence. In Argentina, there is currently no updated clinical practice guideline addressing the monitoring and treatment of HK. Furthermore, the economic implications and costs associated with this condition remain largely unexplored.

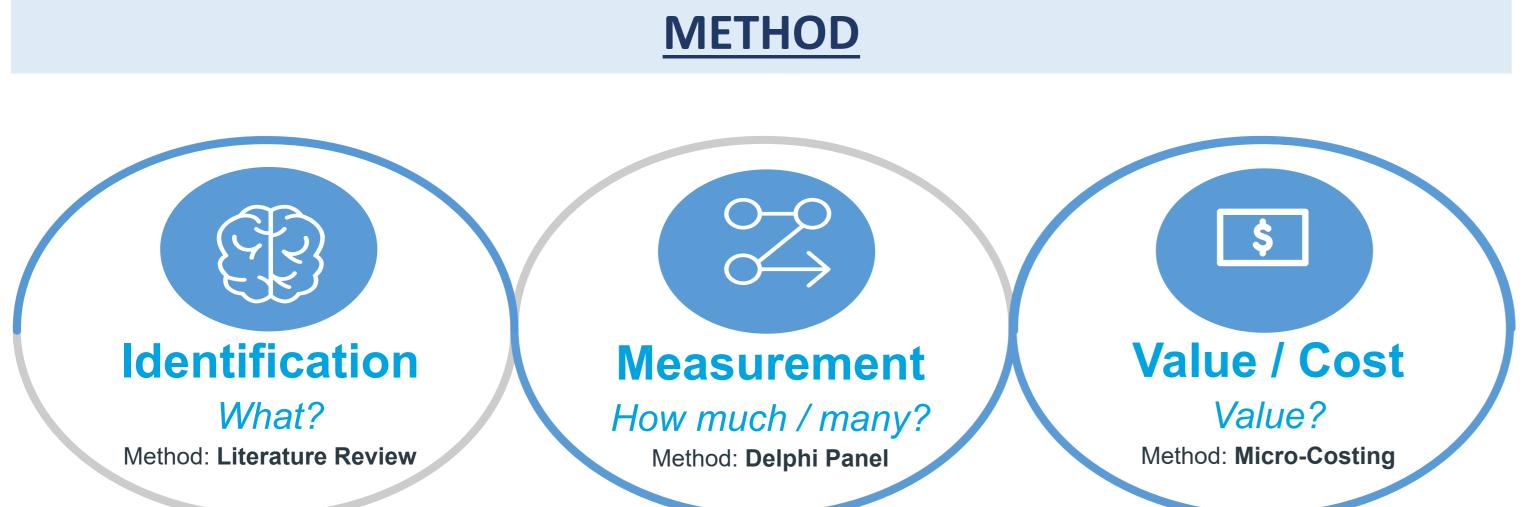
#### **Fig 1: OVERALL RESULTS**

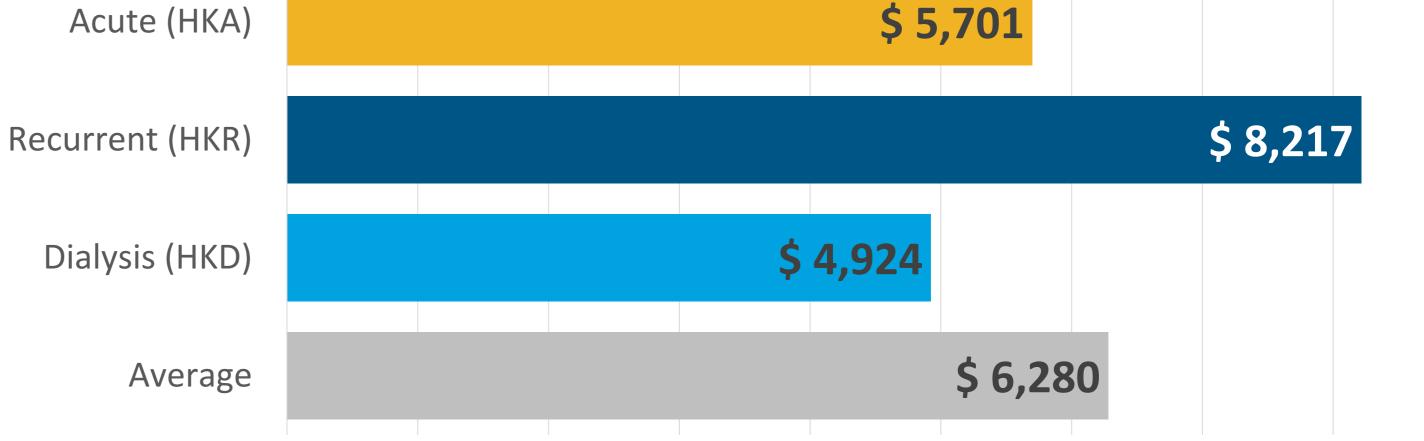
Fig 1: Annual average cost per patient in each patient profile (USD)

Acute (HKA)

#### **OBJECTIVE**

The aim of this study is to identify and estimate the direct medical costs and resources used annually for the management of HK in Argentina.





#### **Fig 2: DETAILED RESULTS**

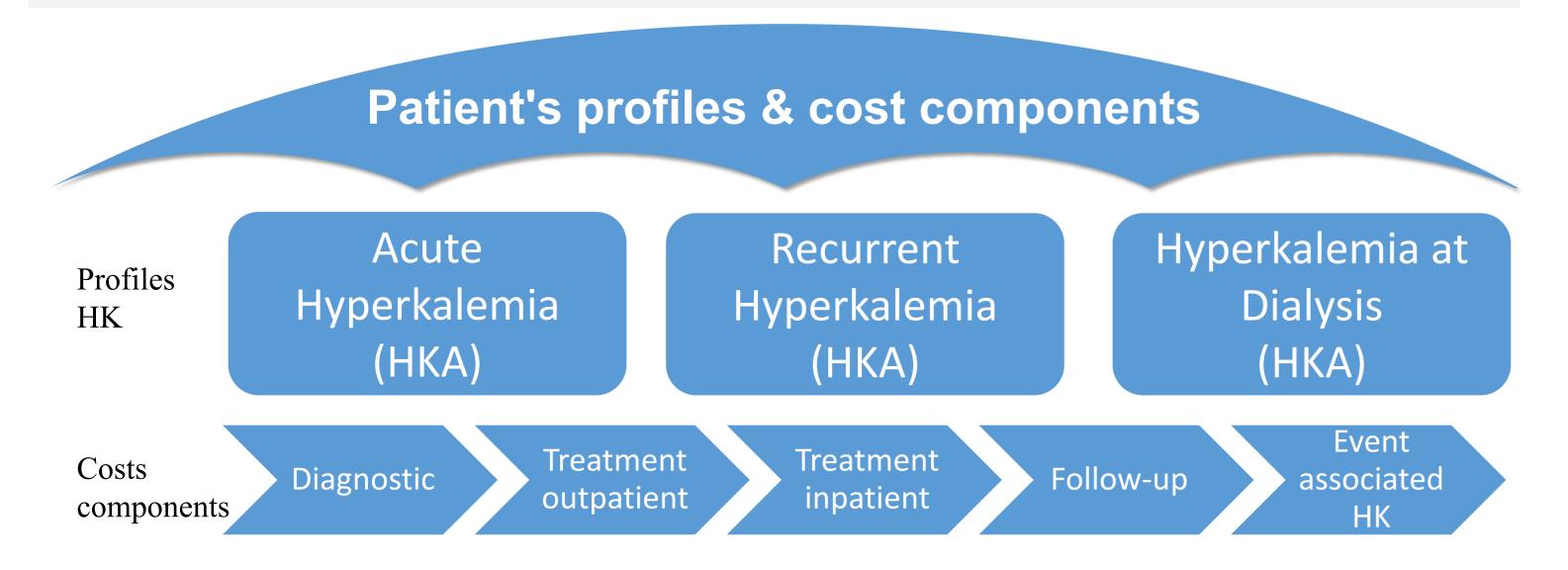
Fig 2a: Annual average cost per patient's profile and Health System sector (USD)

		Sector Público		PAMI		Seguridad Social		Sector Privado		Total	
Acute (HKA)	Total USD	\$	6,823	\$	4,212	\$	4,749	\$	6,991	\$	5,701
Recurrent (HKR)	Total USD	\$	7,262	\$	6,677	\$	7,833	\$	12,411	\$	8,217
Dialysis (HKD)	Total USD	\$	1,318	\$	5,715	\$	6,223	\$	8,469	\$	4,924

#### Fig 2b: Cost by components per patient profile and Health System sector (%)

		Sector Público	PAMI	Seguridad Social	Sector Privado	Total
Acute (HKA)	Diagnostic	0.6%	1.9%	1.6%	1.4%	1.2%
	Outpatient	0.1%	0.1%	0.1%	0.1%	0.1%
	Inpatient	0.2%	19.2%	23.7%	32.3%	15.9%
	Follow-up	0.3%	3.0%	2.5%	2.2%	1.7%
	Event Associated	98.8%	75.7%	72.0%	64.0%	81. <mark>2%</mark>
Recurrent (HKA)	Diagnostic	2.3%	3.7%	2.9%	2.3%	2.7%
	Outpatient	0.2%	0.2%	0.2%	0.1%	0.2%
	Inpatient	0.8%	36.4%	43.1%	54.7%	33.1%
	Follow-up	3.9%	11.9%	10.1%	6.8%	7.7%
	Event Associated	92.8%	47.8%	43.7%	36.0%	56.3%
Dialysis (HKD)	Diagnostic	13%	4%	4%	3%	4%
	Outpatient	45%	3%	2%	1%	5%
	Inpatient	1%	3%	5%	8%	5%
	Follow-up	11%	4%	4%	4%	4%
	Event Associated	31%	86%	86%	8 <mark>3%</mark>	80%

We employed the Delphi Panel method to gain a comprehensive understanding of resource utilization in managing Hyperkalemia within the Argentine health system. This approach allowed us to consider variations and nuances across different subsectors of the healthcare system. The Delphi Panel consisted of six experts and involved two rounds of iterative questioning.



### **OTHER HIGHLIGHTS**

## 3 events are the main cost-driver

(1) Arrhythmias, (2) cardiovascular and (3) cerebrovascular events explain up to 81.2% of the total cost (See Fig 2b).

The strategy for HK treatment in Argentina is the suspension of RAASI, which could lead to cardio-renal vulnerability and, consequently, explain the events associated as cost drivers.

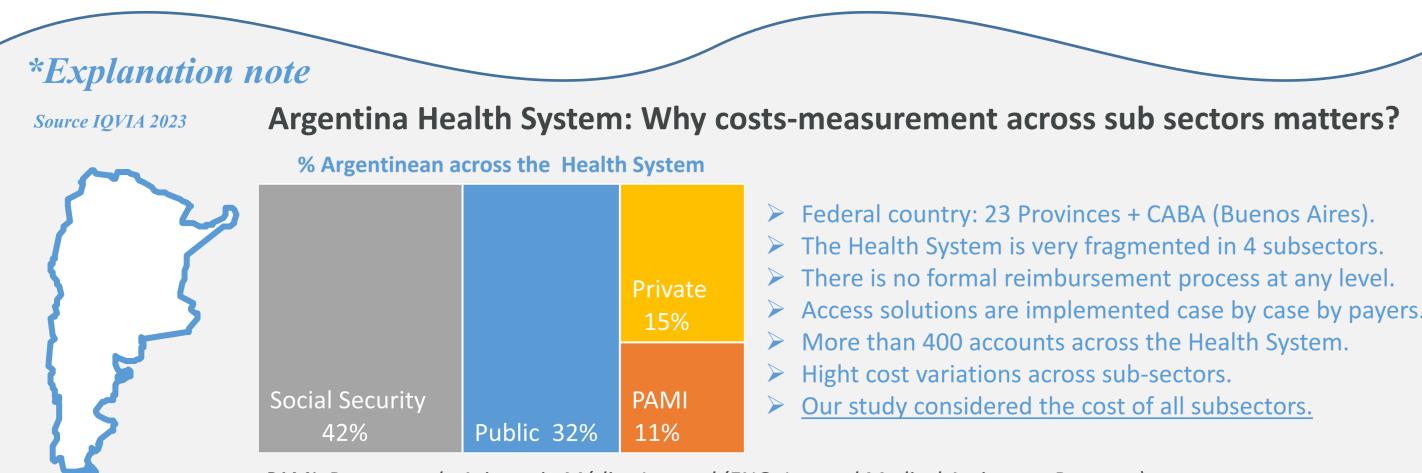
Reduction of (in sector)	Public	Social Security and Private
ACEi	50%	50%
ARAs	50%	50%
MRAs	50%	73%

#### CONCLUSION

Hyperkalemia in Argentina leads to an average additional cost per patient of approximately USD 6,280 in a year. We are presenting the first comprehensive study estimating the resource utilization and treatment costs of HK in Argentina. The financial implications of HK underscore the urgency of addressing this medical condition. The findings can serve as a foundational reference for developing clinical guidelines or consensus on managing HK in Argentina and the region.

#### Micro Costing

We used micro-costing to estimate costs across all health system sectors: Public, Social Security, PAMI and Private.\*



PAMI: Programa de Asistencia Médica Integral (ENG: Integral Medical Assistance Program)



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