

**LESS FREQUENT DOSING OF
ERYTHROPOIESIS STIMULATING AGENTS
MAY RESULT IN COST SAVINGS IN
EUROPEAN DIALYSIS CENTERS**

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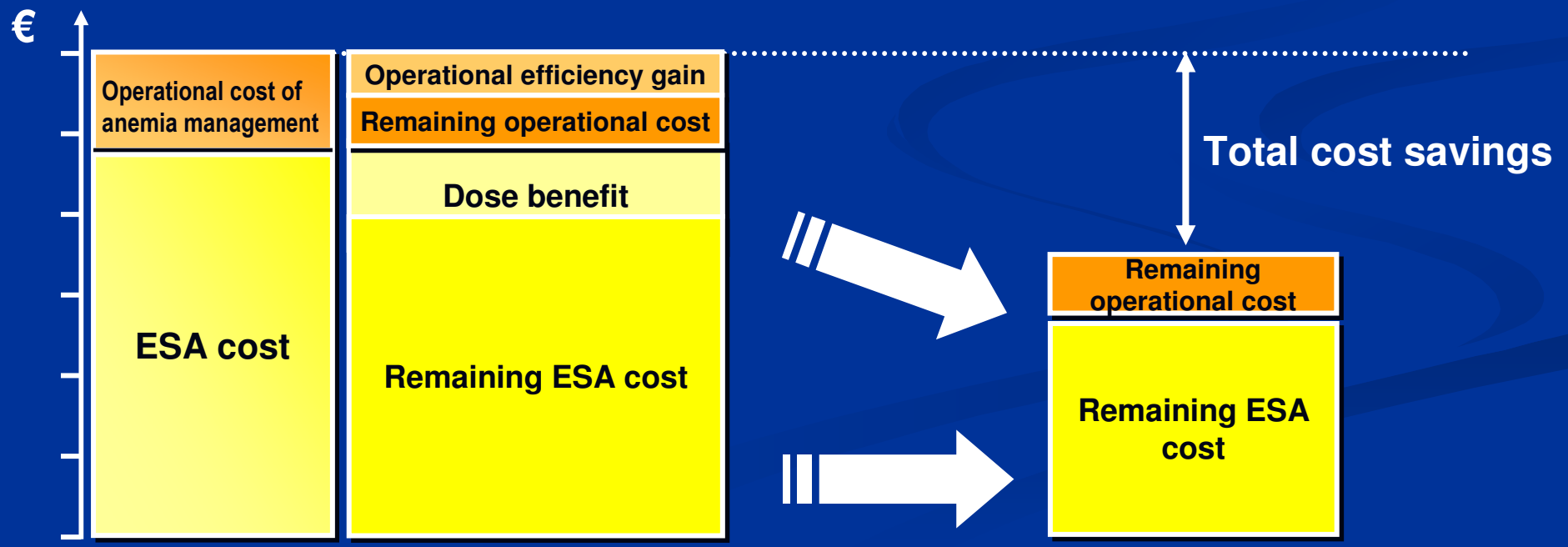
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Introduction

- **MERCURIUS is the first comprehensive study to assess the process of anemia management in European dialysis centers. Its objectives are to:**
 - Describe the operational aspects and costs of associated with the delivery of erythropoiesis stimulating agents (ESAs) in Europe
 - Optimize the process of anemia management
 - Simulate the impact of different dosing frequencies

Optimizing the Process of Anemia Management

- Acquisition costs of ESAs are only a fraction of the costs to manage anemia
- Less frequent ESA administration may bring operational efficiency gains to the centre



The MERCURIUS Project

MERCURIUS is an impact analysis of processes related to anemia management in patients with chronic kidney disease

Objective 1:

Characterize process of ESA delivery in a dialysis organization

Objective 2:

Evaluate the impact of changing from current ESA dosing frequencies to Q2W dosing using darbepoetin alfa

Important additional benefit:

Opportunity to optimize the process of ESA delivery for the dialysis organization

MERCURIUS in 5 European Countries



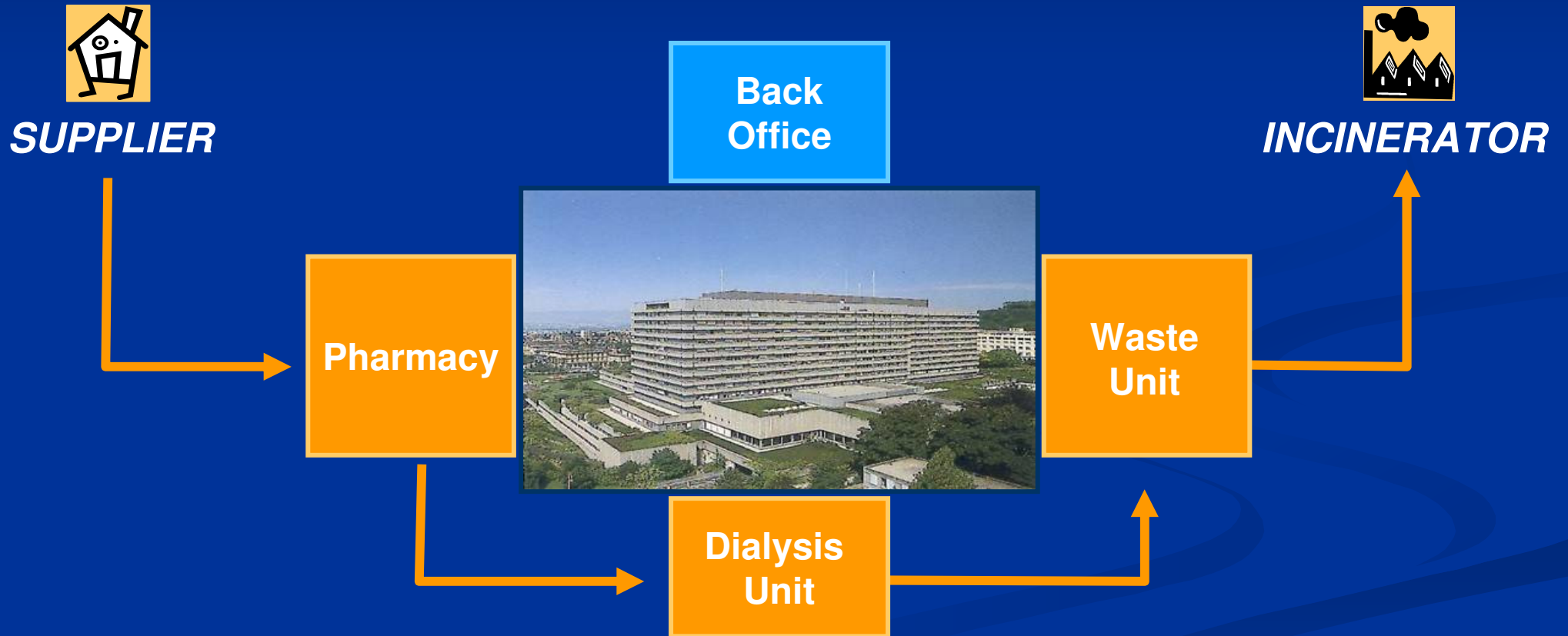
Variations between centres due to:

- Reimbursement
- Centre organization

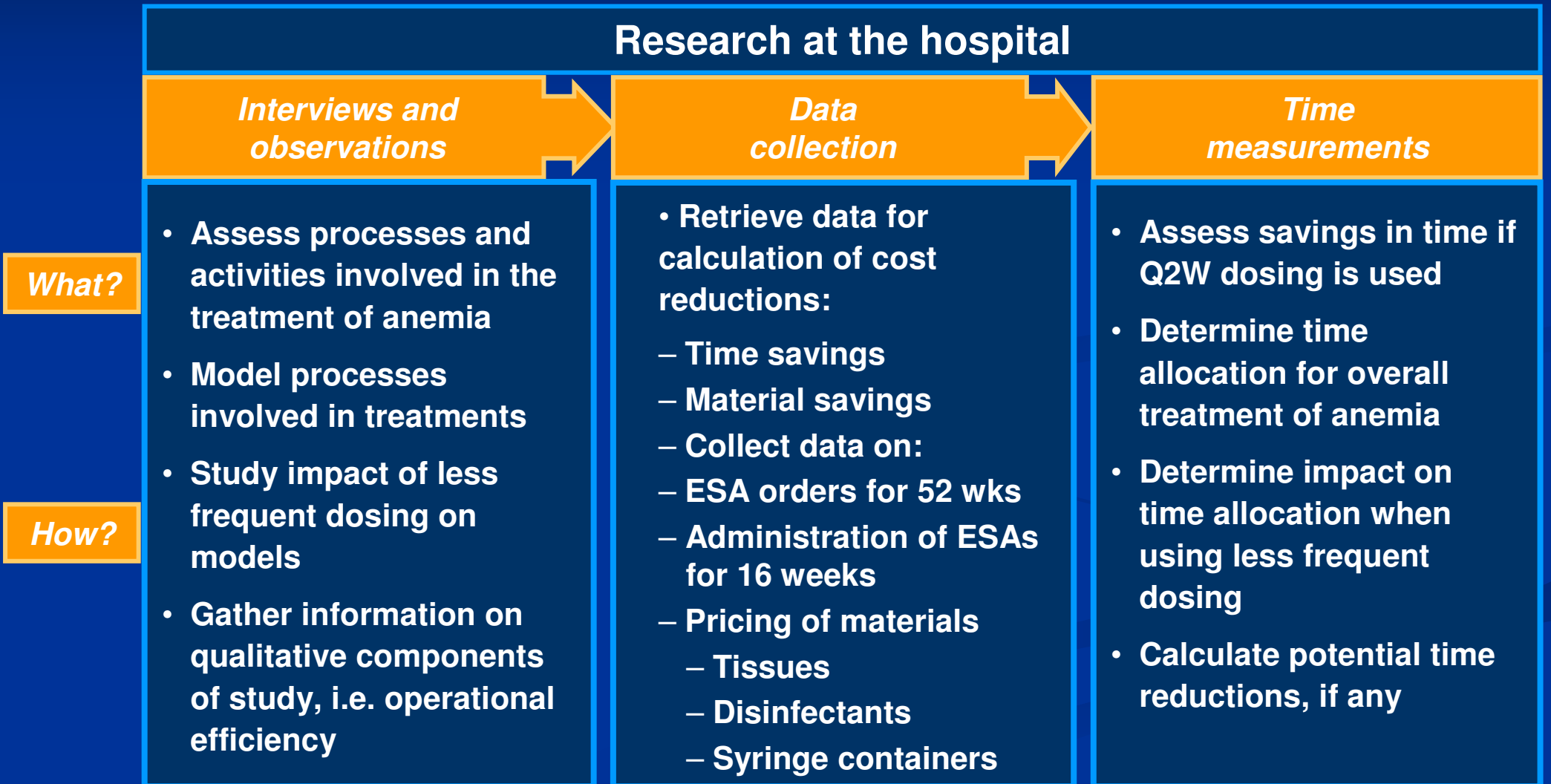
Benefits for individual centres:

- Assess and optimize process of anemia management

The ESA Delivery Process



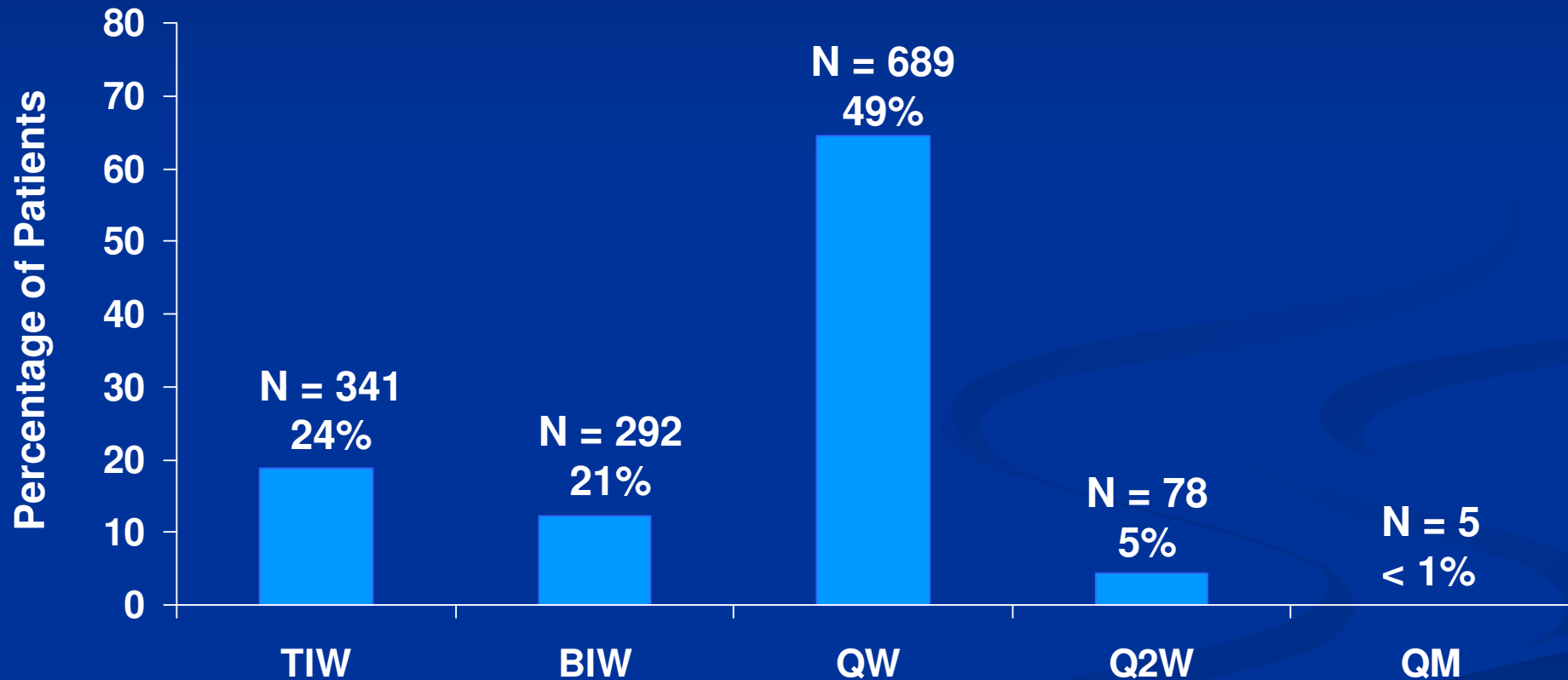
MERCURIUS Data Collection Methodology



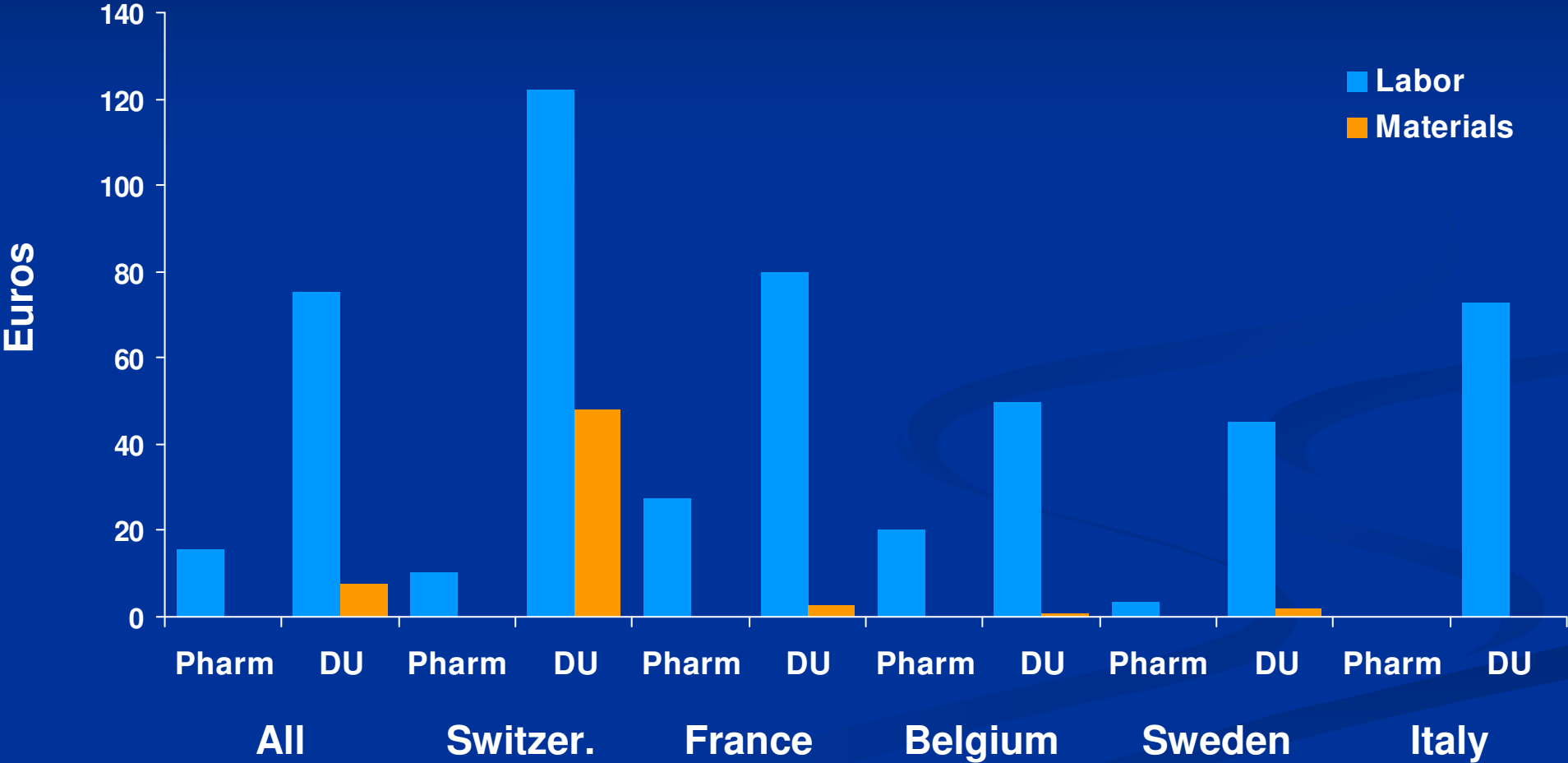
Results

- Eight centers in five European countries supplied data for an average of 175 patients (range 42–707 patients).
- Total number of patients N = 1405
- Total number (%) of patients receiving:
 - epo-alfa 206 (14.7)
 - epo-beta 694 (49.4)
 - darbepoetin alfa 505 (35.9)

Dosing Frequency in Patients with Chronic Renal Disease Receiving ESAs to Treat Anemia



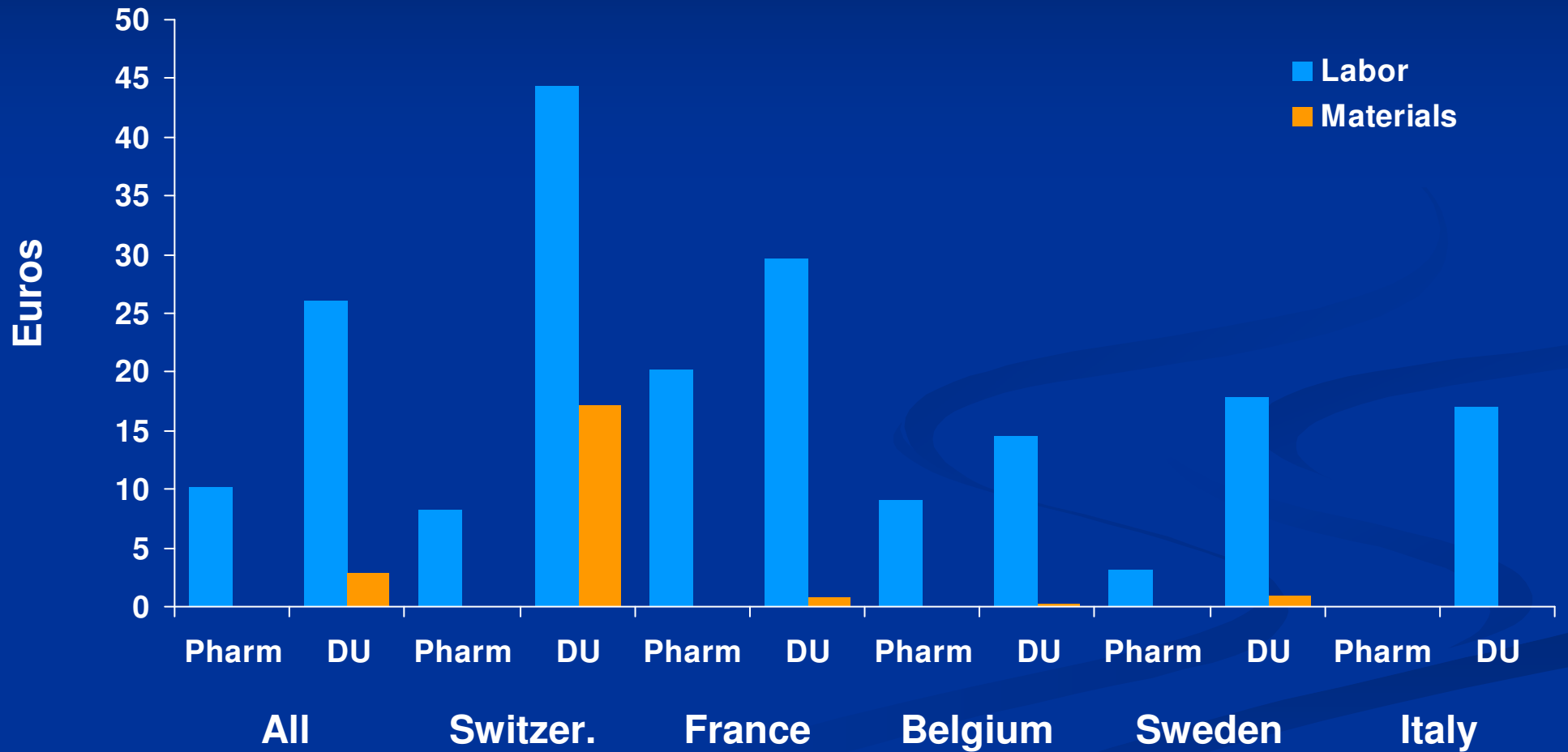
Current Cost Per-Patient-Per-Year*



*Actual drug cost not included in the calculation

Pharm: Pharmacy
DU: Dialysis unit

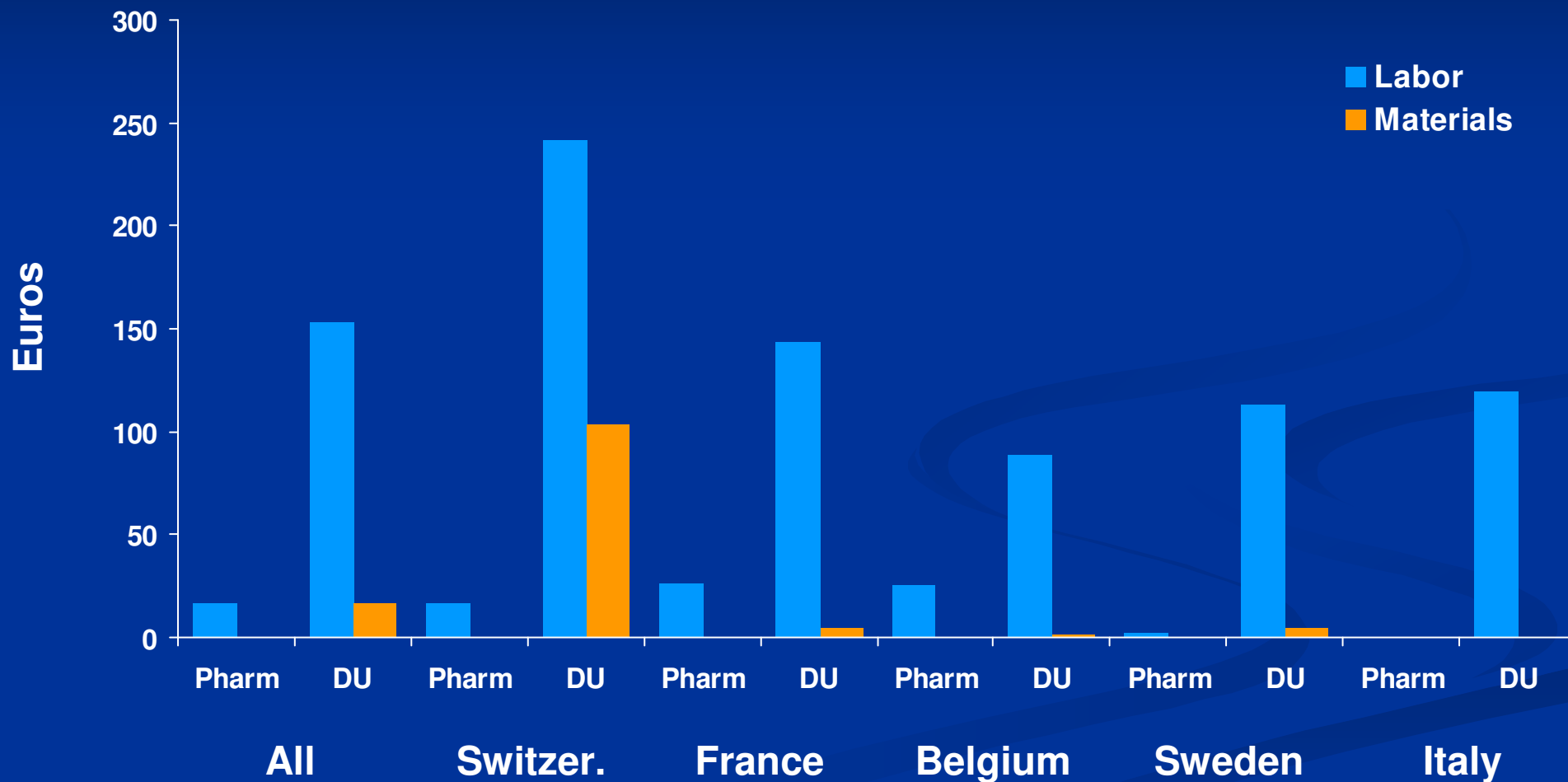
Q2W Cost Per-Patient-Per-Year*



*Actual drug cost not included in the calculation

Pharm: Pharmacy
DU: Dialysis unit

TIW Cost Per-Patient-Per-Year*



*Actual drug cost not included in the calculation

Pharm: Pharmacy
DU: Dialysis unit

Reduced Usage Of Materials

Current

Q2W

12,420

5,085

Number of syringes



59.21

19.62

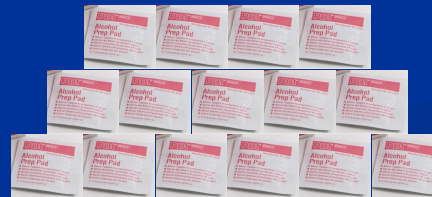
Bottles of disinfectant



13,026

4,316

Number of disinfectant
wipes



Mean Costs for Each Process and Estimates of the Percentage Reduction in Costs Obtainable by Using a Fixed Q2W ESA Administration in European Centers

	Pharmacy labor	Dialysis unit labor	Waste disposal labor	Dialysis unit materials	Waste unit materials
Mean current per-patient-per-year (Euros)	15.69	75.32	0.01	7.62	0.23
Mean percentage reduction for Q2W dosing	25%	64%	49%	60%	47%

Summary of Results

- There is substantial variation in the time it takes to perform routine ESA delivery activities in European dialysis centers.
- Operational costs vary depending on the ESA dosing regimen.
- Projected costs show reductions for switching a patient population to darbepoetin alfa Q2W dosing.
- Potential beneficial effects that accompany less frequent dosing include:
 - reduction in the potential for incorrect doses
 - less waste from packaging and cooling elements for transport
 - reduction in the risk of accidental needle sticks

Conclusions

- MERCURIUS is the first comprehensive study to assess the process of anemia management in European dialysis centers. Its aims are to:
 - Optimize the process of anemia management
 - Simulate the impact of different dosing frequencies
- MERCURIUS results enable a benchmark to be set and information can be shared to optimize best clinical practice with other European dialysis centers
- First results already indicate high variability of operational costs between centers related to differences in environmental and structural factors

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