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Estimating Treatment Costs of Road Accident Victims in Poland

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International
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Division of costs in health care

MEDICAL COSTS

- Variable costs
- Fixed costs
 - Personnel costs, infrastructure maintenance costs

NON-MEDICAL AND INDIRECT COSTS

- Other than medical services

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STRUCTURE OF VARIABLE AND **FIXED** COSTS IN HEALTH CARE

- Expenditure on medications,
- Medical materials,
- Procedures,
- Laboratory and diagnostic tests,
- Specialist medical consultation,
- Rehabilitation,
- Transport,
- Other medical services
- Personnel costs,
- Infrastructure maintenance costs



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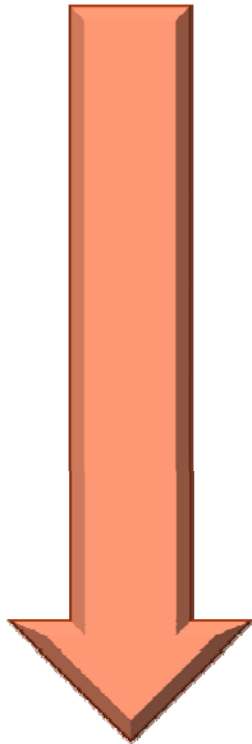


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Accuracy of hospital cost calculation



- „micro-costing” - determined as every element of resources consumed and a calculated unit cost
- Costs of individual categories of patients relating to a determined diagnosis, calculated based on uniform groups of patients, with respect to the length of hospital stay
- Person/ambulance costs
- Person/day cost at a ward
- Person/day cost at hospital
- Hospitalization cost



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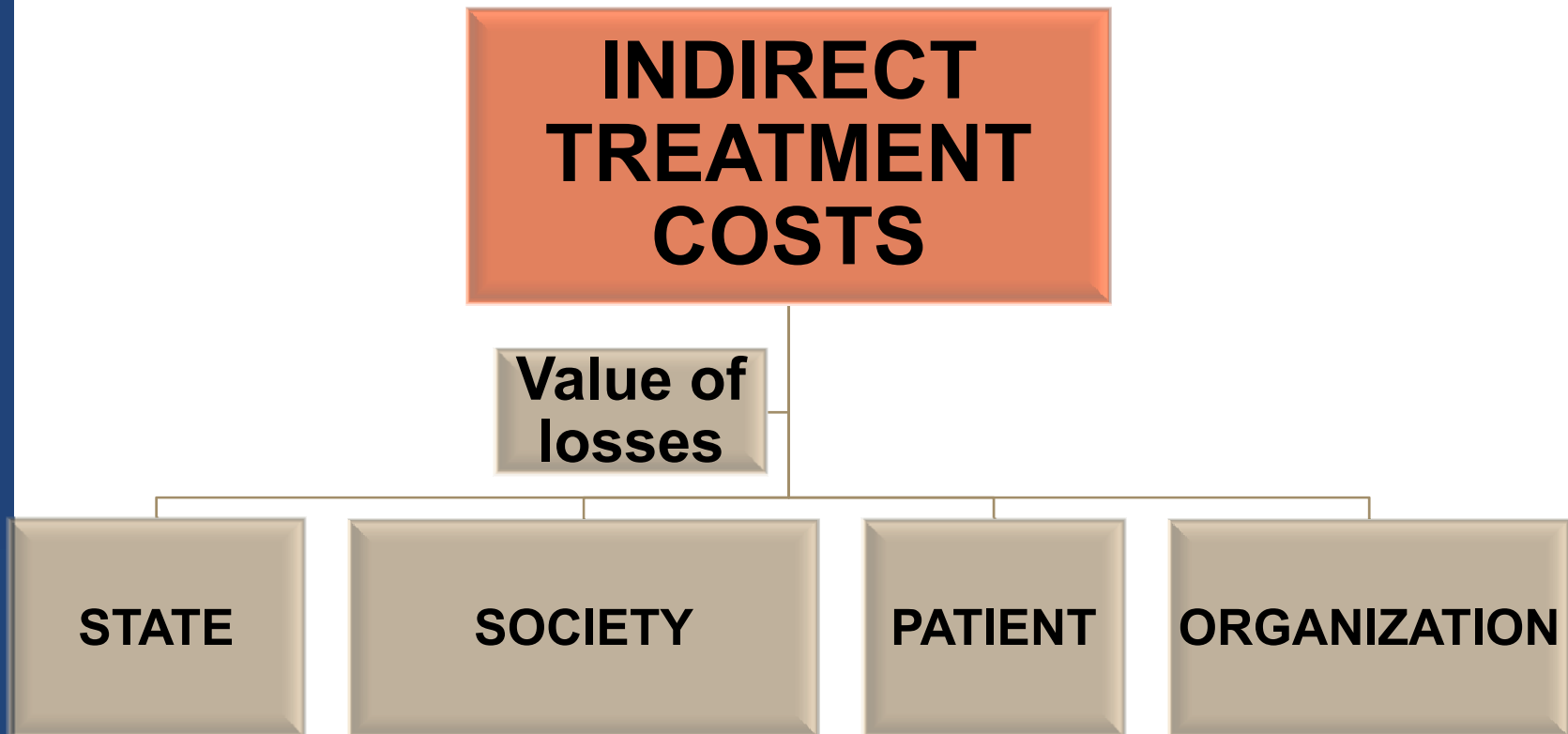
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NON-MEDICAL COSTS – OTHER THAN MEDICAL CARE SERVICES

- **Costs of transporting a patient and family to a medical centre**
- **Costs of purchasing medical and hygienic materials**
- **Money spent on medications by patients**
- **Social care**



INDIRECT TREATMENT COSTS – OUTSIDE MEDICAL CARE SERVICES





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MEASURES OF INDIRECT COSTS- OUTSIDE MEDICAL SERVICES

- **Temporary leave from work**
- **Permanent or long-term disability**
- **Early death**

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Appraisal of first aid costs spent on road accident casualties in Poland – 1st stage of the study

- Aim of the study:
 - Estimating costs of medical rescue provided to road accident casualties in 2001-2005,
 - Valuation of average costs incurred due to one ambulance intervention on a casualty of a road accident in Świętokrzyskie Voivodship (Province)



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STUDY METHODOLOGY:

APPRAISAL OF EXPENDITURES ON FIRST AID

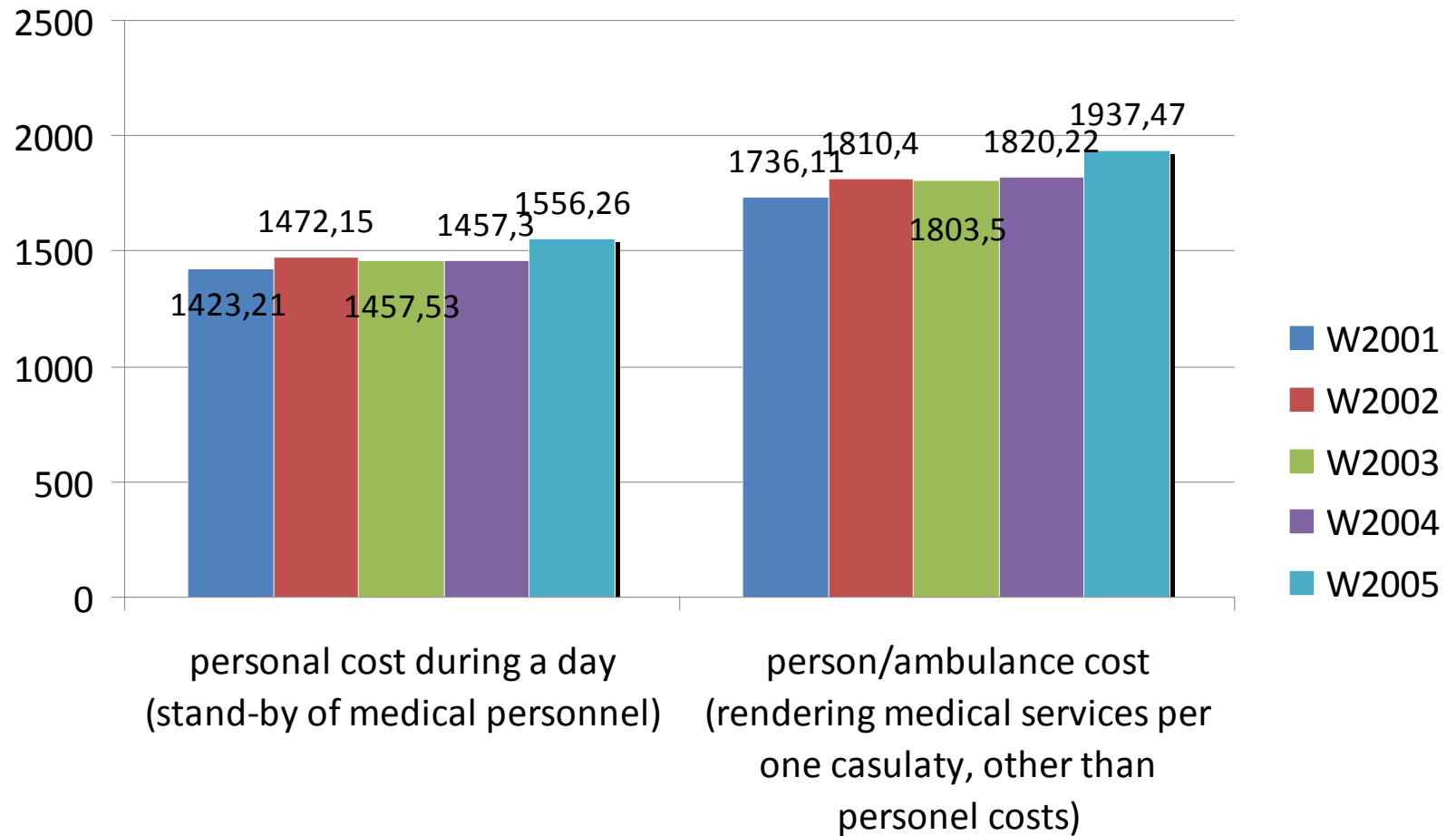
- **VALUATION OF FIXED COSTS**
 - Depreciation of medical equipment
 - Work of medical personnel
 - Ambulance operation costs
 - **Other material costs:** depreciation, material consumption, external services, taxes and charges, business trips
- **VALUATION OF VARIABLE COSTS**
 - Person/ambulance cost
 - Transport of a casualty to hospital



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Personal costs



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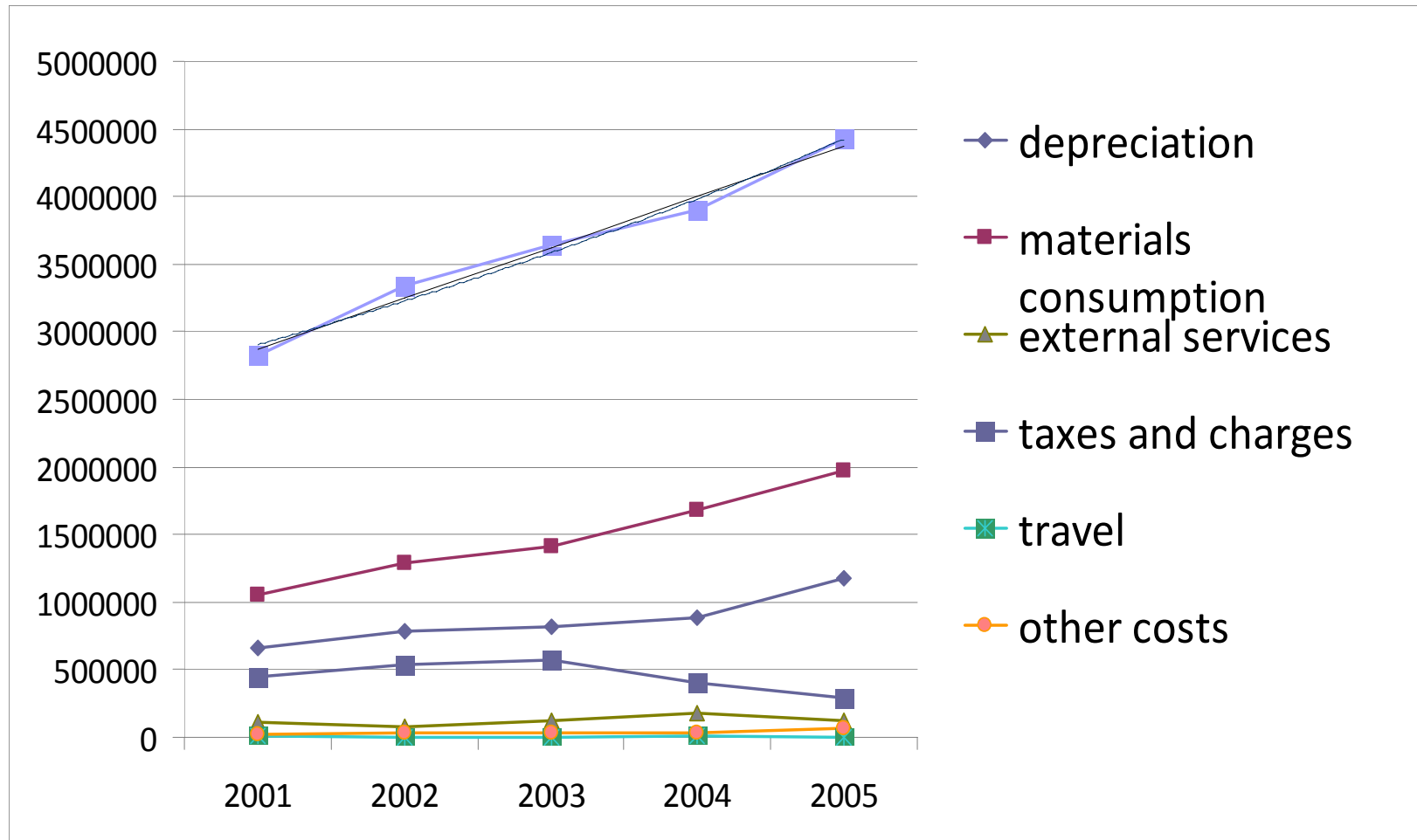
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Structure of material costs



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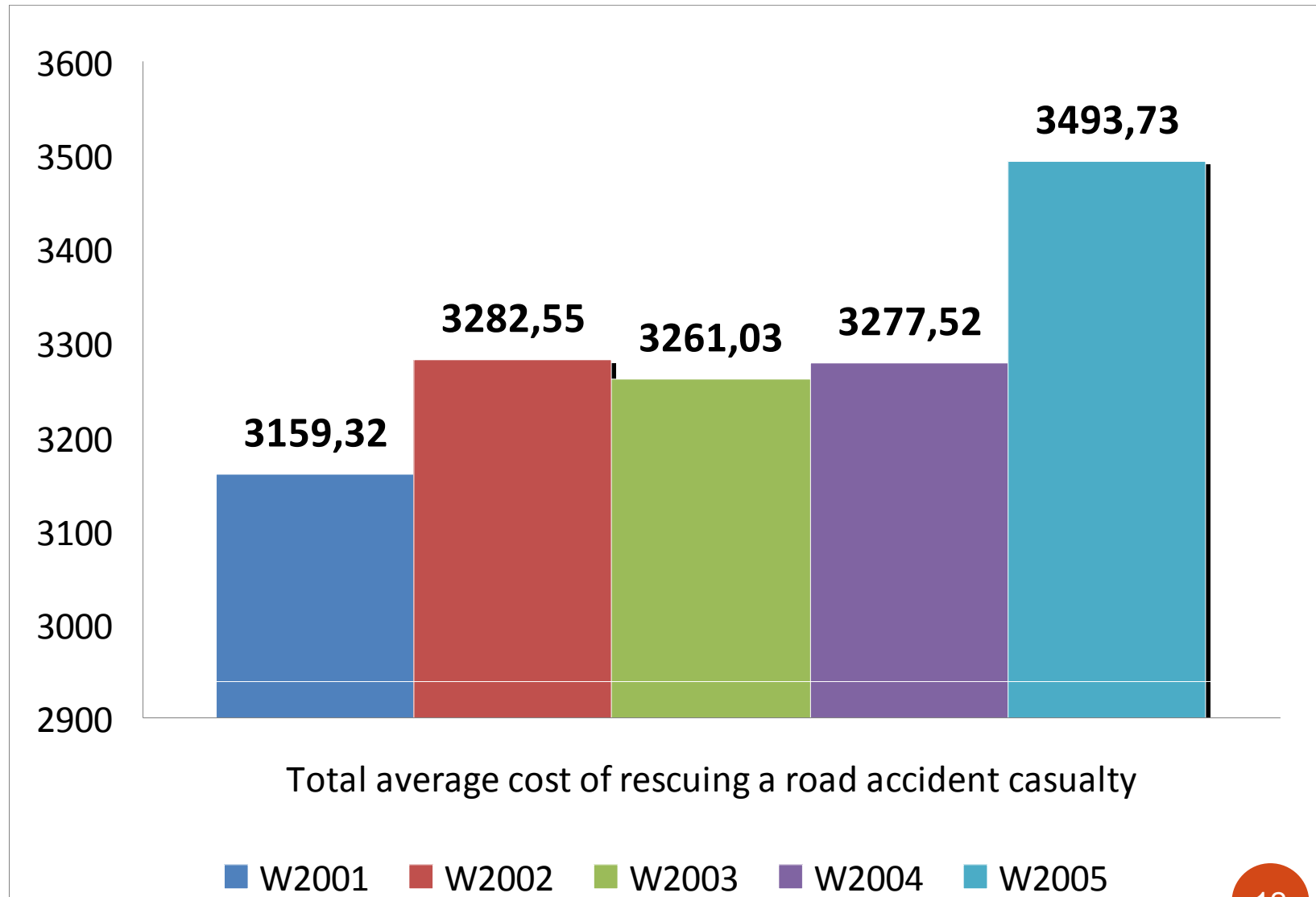


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Total average cost of rescuing a road accident casualty





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Conclusions

- **The highest financial expenditures were incurred due to remunerations of medical personnel, amounting to almost 75% of total medical rescue costs**
- **In the last five years the costs of ambulance operation have increased, as well as the material consumption costs, increasing the person/ambulance cost by 11%**
- **The highest expenditures within material costs were due to materials consumption and depreciation of equipment**



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Conclusions

Total costs of first medical aid provided to road accident casualties have been regularly growing in the last five years. In 2005 an average cost amounted to PLN 3493 per one casualty



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2nd STAGE OF THE STUDY – valuation of hospitalization costs of road accident victims

- Methodology of the study:
 - A special questionnaire form containing information on:
 - **Costs of ward procedures** (pharmacotherapy + consumption of medical materials, diagnostics, procedures, medical consulting)
 - **Ward costs** (energy consumption, external services, taxes and charges, remunerations, employee benefits, depreciation, other costs)



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***Thank you for your
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