Inter-American Development Bank

# Cost Simulation Tool for Long-Term Care Systems

Social Protection and Health Division

Nadin Medellín

DATABASE/DATASET

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# Cost Simulation Tool for Long-Term Care Systems

## Description

The cost simulation tool for long-term care systems provides a way to quickly estimate how much it would cost governments in Latin America and the Caribbean to implement this type of system. It can also be used to compare different service packages and make projections.

The spreadsheet contains data on population, levels of care dependence, and other macroeconomic variables that are processed by formulas to allow users to quickly estimate how much it would cost a government to implement a long-term care system in 2020. Users can estimate the cost of up to two long-term care service packages and project costs for 2025 and 2030.

**IDB unit in charge of the project:** Social Protection and Health Division of the Social Sector (SCL/SPH)

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**Temporal scope:** 2020-2030.

**Spatial scope:** Argentina, Bahamas, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Dominican Republic, Suriname, Trinidad and Tobago, Uruguay, and Venezuela.

## Related publication:

Medellín, Nadin. 2020. Cost Simulation Tool for Long-Term Care Systems: An Application to Latin America and the Caribbean. Technical Note No. IDB-TN-01998. Inter-American Development Bank, Washington DC. https://www.iadb.org/en/panorama/cost-simulation-tool

## Description of variables:

| Name of variable | Unit | Description | Temporal scope |
|---|---|---|---|
| Care dependence rate | percentage | Estimate of the percentage of the population that depends on long-term care by age group and level of care dependence based on United Nations population estimates and projections and care dependence data from the IDB's Panorama of Aging and Long-Term Care | 2020, 2025, 2030 |
| Number of care-dependent people | thousands of people | Number of care-dependent people by age group and level of care dependence | 2020, 2025, 2030 |

| Name of variable | Unit | Description | Temporal scope |
|---|---|---|---|
| Cost of a long-term care system | millions of USD | Estimate of the cost of long-term care systems based on the parameters set by the simulation tool user. | 2020, 2025, 2030 |
| Relative cost of a long-term care system | percentage | Estimate of the cost of long-term care systems expressed as a percentage of gross domestic product based on the parameters set by the simulation tool user. | 2020, 2025, 2030 |
| Public funding per type of service | percentage | Percent of public funding allocated to each type of long-term care service in a system | 2020, 2025, 2030 |
| Change in the cost of long-term care systems, assuming a constant care dependence rate in the future | percentage | Projected change in the cost of a long-term care system, assuming that the care dependence rate remains constant. (2020 is used as a baseline) | 2025, 2030 |
| Change in the relative cost of long-term care systems, assuming a constant care dependence rate in the future | percentage | Projected change in the cost of a long-term care system expressed as a percentage of GDP, assuming that the care dependence rate remains constant. (2020 is used as a baseline) | 2025, 2030 |
| Change in the cost of long-term care systems, assuming a changing care dependence rate. | percentage | Projected change in the cost of a long-term care system based on a care dependence rate that changes according to the parameters set by the cost simulation tool user. (2020 is used as a baseline) | 2025, 2030 |
| Change in the relative cost of long-term care systems, assuming a changing care dependence rate. | percentage | Projected change in the cost of a long-term care system, expressed as a percentage of GDP, based on a care dependence rate that changes according to the parameters set by the cost simulation tool user. (2020 is used as a baseline) | 2025, 2030 |
| Amount collected through copayments | Millions of USD | The amount collected by implementing the copayment scheme selected by the cost simulation tool user, in millions of dollars | 2020 |
| Amount collected from copayments as a percentage of GDP | percentage | The amount collected by implementing the copayment scheme selected by the cost simulation tool user, as a percentage of GDP | 2020 |
| Amount collected from copayments as a percentage of the total cost of the system | percentage | The amount collected by implementing the copayment scheme selected by the cost simulation tool user, as a percentage of the total cost of the system | 2020 |

**Note:** The accompanying technical note, "Cost Simulation Tool for Long-Term Care Systems: An application to Latin America and the Caribbean," describes how to use the Excel file containing the cost simulation tool. It also gives details on the method used to perform the cost simulations and on the tool's underlying data. Available at https://www.iadb.org/en/panorama/cost-simulation-tool.

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