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FACULTY OF  
SOCIAL SCIENCES

Henry Bailey PhD,  
The University of the West Indies,  
St Augustine Campus.

Dr. Avery Hinds, CM  
Ministry of Health,  
Trinidad and Tobago

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## POLICY BRIEF

**MEASURING HEALTH:  
USING HEALTH OUTCOMES  
MEASURES TO EVALUATE  
CHANGES IN THE HEALTH  
STATUS OF THE TRINIDAD  
AND TOBAGO POPULATION  
OVER THE PERIOD  
2012-2022/23.**

## Summary

Health outcomes measures are used in health policy, clinical research and practice to evaluate the health status of patients, demographic groups, regional and national populations. Population norms surveys capture health outcomes data at the individual level to provide the baseline levels of health that can be used in pharmacoeconomic analysis and Health Technology Assessment (HTA). The 2012 and 2022/23 EQ-5D-5L population norms studies for Trinidad and Tobago illustrate how population norms studies can also be used to compare and track the health status of subgroups within a population and to see how these change over time.

## Problem Statement

Process measures are commonly used to assess the impact of healthcare and health policy. These include the numbers of procedures, facilities, treatments, patients, the amount of spending etc. Such measures are input-oriented and they can be complemented by generic health outcomes measures which evaluate the health of people by capturing health status at the individual level, yet flexible enough to measure health regardless of which illness(es) everyone might have. It is possible for a health system to increase process measures, resulting in higher expenditure but with little or no improvement in population health. Health outcomes measures can provide some guidance as to which- and where interventions can be re-directed to improve population health and/or to reduce inequalities in health. Such measures can be used in conjunction with disease-specific measures, lifestyle measures and process measures. For Trinidad and Tobago, annual health expenditure details are available from various sources (1). In 2011 and 2024 the Pan American Health Organization (PAHO) produced the STEPwise approach to NCD risk factor surveillance (STEPS) Reports for Trinidad and Tobago (2,3) covering self-reported behaviours and prevalence rates relating to Chronic Non-Communicable Diseases (CNCDs). Comparison of the two PAHO STEPS reports can quantify the increases over the period in such measures as tobacco and alcohol consumption, cholesterol, hypertension, overweight prevalence and reductions in fruit and vegetable consumption among the T&T adult population. Insights from documents such as these would be complemented by information on changes in the actual generic health outcomes of the population over a corresponding period.

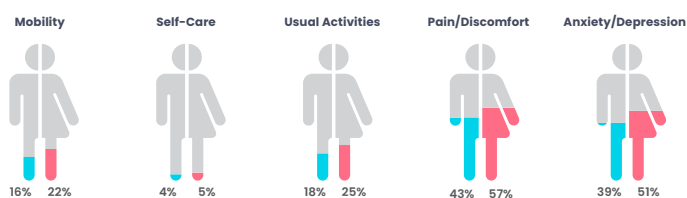
## Research Overview

EQ-5D is the most widely used generic health outcomes instrument internationally (4). EQ-5D-5L Population studies were conducted in Trinidad and Tobago in 2012 and 2022/23 with representative samples of 2,036 and 2,989 adults respectively (5,6). Data from these two studies provide information on changes in the self-reported health status of the adult population. The variables in these studies included 5 dimensions of health status along with demographic data from each respondent. EQ-5D-5L index values were calculated for each respondent based on the levels of the 5 dimensions and for EQ-5D-5L values for Trinidad and Tobago (7). EQ-5D Index values are the most commonly used basis for obtaining Quality Adjusted Life Years (QALYs) in economic analysis. The EQ-5D instrument also includes EQ VAS scores which capture the subjective health valuation of each respondent. The EQ-5D-5L instrument provides summary values for the health of the population and allows for the calculation of distributional and demographic health inequalities within a population.

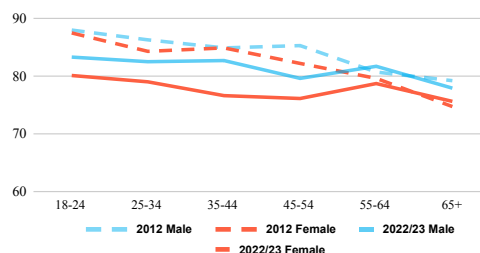
## Findings

In 2022/23 the mean index value was 0.921, and the mean EQ VAS score was 79.6, with pain/discomfort and anxiety/depression being the dimensions with highest rate of reported problems: 43% of males and 57% of females reported having pain at some level, while 39% of males and 51% of females reported problems with anxiety/depression. The rate of reporting problems with anxiety/depression was lower among older respondents for both sexes. This was not observed for the other dimensions. Higher Index values and EQ VAS scores were associated with: male sex, being younger, higher income (except for very high levels of income), higher levels of education, and being employed. Compared to the 2012 population norms, the findings from the EQ-5D-5L Population Norms studies concurred with those of the PAHO-STEPS study. The period 2012-2022/23 saw an increase in the percentage of respondents reporting problems on all EQ-5D dimensions with larger increases for women. EQ VAS and EQ-5D-5L Index values were lower for all age-sex groups in 2022/23, with older women showing the fastest rate of decline. For EQ VAS scores, the Kakwani index of inequality had increased from 0.103 in 2012 to 0.113 in 2022/23 suggesting that health inequality had increased over the period. The biggest drivers of health inequality in Trinidad and Tobago continue to be sex and age, and the dimension with the highest inequality continues to be pain/discomfort.

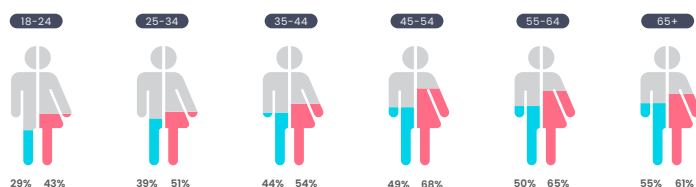
**The percentage of male and female respondents reporting Problems on each of the EQ-5D dimensions in 2022/23**



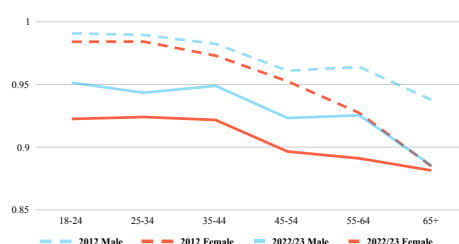
**EQ VAS Scores by Age Group and Sex: 2012 and 2022/23**



**The percentages of male and female respondents reporting problems with pain/discomfort by age group in 2022/23**



**Index Values by Age Group and Sex: 2012 and 2022/23**



## Policy Recommendations

EQ-5D-5L values and population data already exist for Trinidad and Tobago and are available for use in policy making, clinical practice, healthcare research etc. Policy makers and clinicians can easily include these measures in planning and in practice, and can now adopt HTA in resource allocation decision making- for example in deciding on which new interventions to introduce or where to locate services. As the ministries of Health in the Caribbean region continue their drive toward evidence driven decision-making, the use of health outcomes measures will provide an invaluable means of evaluating, and comparing the potential impacts of possible health policy initiatives.

For further information, contact **Dr. Henry Bailey** at [henry.bailey@uwi.edu](mailto:henry.bailey@uwi.edu).

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