

Additionally, a cost–consequence analysis (CCA) was conducted to assess the economic impact of healthcare resource utilization changes.

**Results:** Based on an estimated 1,150,691 dementia cases in Italy, with approximately 12 percent institutionalized, the COI model estimated an annual expenditure of around EUR23.6 billion (USD25.7 billion) for dementia patient management, with 63 percent attributed to out-of-pocket expenses. CCA indicated that if all affiliated with Centers for Cognitive Disorders and Dementia (CDCD) received nonpharmacological interventions (versus the surveyed 25.5 percent), there would be a direct cost increase of approximately EUR4.3 million (USD4.7 million).

**Conclusions:** This analysis provides an updated overview of current dementia patient management in Italy, offering valuable insights for decision-makers to prioritize health policies and interventions for patients and their caregivers.

## OP45 Incorporation Of The Tetravalent Dengue Vaccine In The Brazilian Public Health System: A Cost–Benefit Analysis

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**Introduction:** Dengue, a mosquito-borne disease, is prevalent in Brazil, ranking third in the Americas. The country has confirmed all four serotypes (DENV-1, DENV-2, DENV-3, and DENV-4) of the virus. In 2023, a tetravalent vaccine, approved for individuals aged four to 60 years, opens the possibility of integration into the public health system.

**Methods:** The invested amount for purchasing two doses of the vaccine to immunize the entire eligible population in the year 2023 was calculated. A comprehensive analysis of direct and indirect costs was conducted regarding the integration of the tetravalent dengue virus vaccine into Brazil's public healthcare system. Direct costs encompassed treatment expenses for mild, moderate, and severe cases, while indirect costs involved workdays lost and mortality-related expenses. Direct and indirect costs were compared in two scenarios (with and without vaccination), followed by a cost–benefit ratio calculation.

**Results:** The investment for procuring vaccines for over 168 million Brazilians amounted to approximately EUR17.9 billion, resulting in savings of about EUR193.5 million. Indirect costs were particularly significant when compared to the non-vaccinated population. Considering herd immunity and reducing the vaccinated population to 70 percent of the eligible populace, the invested amount was approximately EUR12.5 billion, while savings reached EUR214.2 million. A

cost-benefit ratio calculation revealed a return of one centavo (EUR0.0019) for every BRL1.00 invested (EUR0.0019), and considering herd immunity, the cost–benefit ratio was approximately 0.02.

**Conclusions:** Despite Brazil being one of the countries with the highest prevalence of dengue in the Americas, the availability of the tetravalent dengue virus vaccine in the country's public system does not seem to be a sustainable option, given the unfavorable cost–benefit analysis for such implementation. Nevertheless, it is imperative to conduct this analysis with due consideration for alternative scenarios.

## OP46 A New Modular Approach To Updating National Institute For Health And Care Excellence Manuals

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**Introduction:** Methods and processes for health technology assessment (HTA) must be sufficiently flexible to reflect emerging best practice and adapt to changes in the health and care landscape. They must also be clearly documented and subject to review, assessment, and consultation. This requires a framework to flexibly update HTA manuals, while providing stability and predictability for stakeholders.

**Methods:** The National Institute for Health and Care Excellence (NICE) is introducing a modular approach to updating its manuals. Previously, NICE completed full, but infrequent, updates to its manuals. A modular update is a review of the process and/or methods informing NICE's guidance in a specific subject area, which can then be updated in the appropriate manual(s) if required. We are developing a modular updates framework that sets out NICE's approach for identifying and prioritizing modular updates to review, reviewing the evidence and proposing changes to the manual(s), engaging and consulting with stakeholders, and implementing the modular updates.

**Results:** The proposed approach allows external stakeholders to contribute to topic identification and the content of updates, helping to ensure that the manuals meet the needs of users. The first modular update to the NICE manual for health technology evaluations was published in October 2023. This included updated processes for carrying out cost comparisons, streamlining committee decision-making and handling confidential information. Potential future modular updates may include updated methods to consider health inequalities.

**Conclusions:** The introduction of a modular approach will enable NICE to be more agile and responsive in monitoring, reviewing, and improving our methods and processes, making sure they remain cutting edge as the health and care landscape continues to evolve.