

## PD30 How Is Sustainability Incorporated Into Healthcare Systems? A Progress Report Card For The EU5

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**Introduction:** In 2020, the World Health Organization (WHO) released guidance for climate-resistant and environmentally sustainable healthcare facilities. Implementation of sustainability into healthcare policy is at varying stages, and its impact on technology appraisal and procurement is expected to differ across countries. The objective of this research was to review healthcare sustainability policy and implementation progress across the EU5.

**Methods:** Healthcare sustainability policies in the EU5 (France, Germany, Italy, Spain, and the UK) were reviewed. Policies were identified via government websites (e.g., the Ministère de la santé et de la prévention) and through review of climate and sustainability policy news on the WHO website. Common goals featured in the policies included carbon reduction plans, reduction of single use plastics, ethical and environmental considerations, and self-sustainability. These four goals were selected to form sustainability categories for comparisons across markets. The policies were reviewed for each of the categories with respect to level of inclusion, targets, and anticipated implementation dates.

**Results:** The UK had clear policies focusing on carbon and emission reduction. Implementation of these policies began in April 2023 and will become a requirement for all new procurements from April 2024. France, Italy, and Spain mentioned carbon emission reduction and environmental impact in policies, but targets and guidelines have yet to be set. Italy and the UK had policies relating to reduction of single-use plastics, whereas the other markets did not. Germany had limited policies mandating changes geared toward increased environmental sustainability, focusing instead on self-sustainability and resilience in the market.

**Conclusions:** As expected, incorporation of sustainability plans into healthcare policy is variable. Within markets with established policies, such as the UK, there is progress toward mandating the inclusion of sustainability policy in procurement, the impact of which may be seen in early 2024. Although the progress of implementing sustainability in other markets is slower, countries are moving toward environmentally sustainable healthcare policies.

## PD31 The Significant Societal And Environmental Impact Of Chronic Kidney Disease Over The Next Decade In Brazil

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**Introduction:** Chronic kidney disease (CKD) is a progressively worsening condition that is often overlooked in its early stages. In Brazil, factors such as population aging and rising comorbidities are expected to shift CKD prevalence toward more advanced stages, leading to greater socioeconomic and environmental impacts. The significant burden of renal replacement therapy (RRT) suggests the need to prioritize preventive and early detection strategies.

**Methods:** We developed a patient-level simulation model to estimate the impact of CKD in Brazil over 10 years (from 2023 to 2032) on clinical, patient, health system, environmental, productivity, and societal outcomes. Validation was conducted against Brazilian demographic data and cross-validated with the Inside CKD model. We estimated productivity losses by multiplying CKD-related workdays missed by daily costs for patients and caregivers.

**Results:** The number of Brazilians with CKD was projected to increase by 7.2 percent (approximately 27.7 million) over the next 10 years, mainly among patients with late-stage disease, while the number of patients undergoing dialysis was projected to increase by 170.8 percent (approximately 233,000) over the same period. CKD was projected to result in BRL198 billion (USD 38 billion) of lost income. From an environmental standpoint, freshwater consumption, fossil fuel depletion, and carbon dioxide emissions due to patients with CKD were projected to increase by 40 percent by 2032. RRT was projected to require the equivalent annual water usage of approximately 370,000 households and the annual power of approximately 11 million lightbulbs and will produce annual carbon dioxide emissions equivalent to approximately 1.5 million cars.

**Conclusions:** While the overall number of patients with CKD will increase by 7 percent (from 25.8 million in 2022 to 27.7 million in 2032), the distribution toward later stages of CKD will cause significant impacts in terms of the healthcare system (resource use and costs), patients and caregivers, society, and the environment.