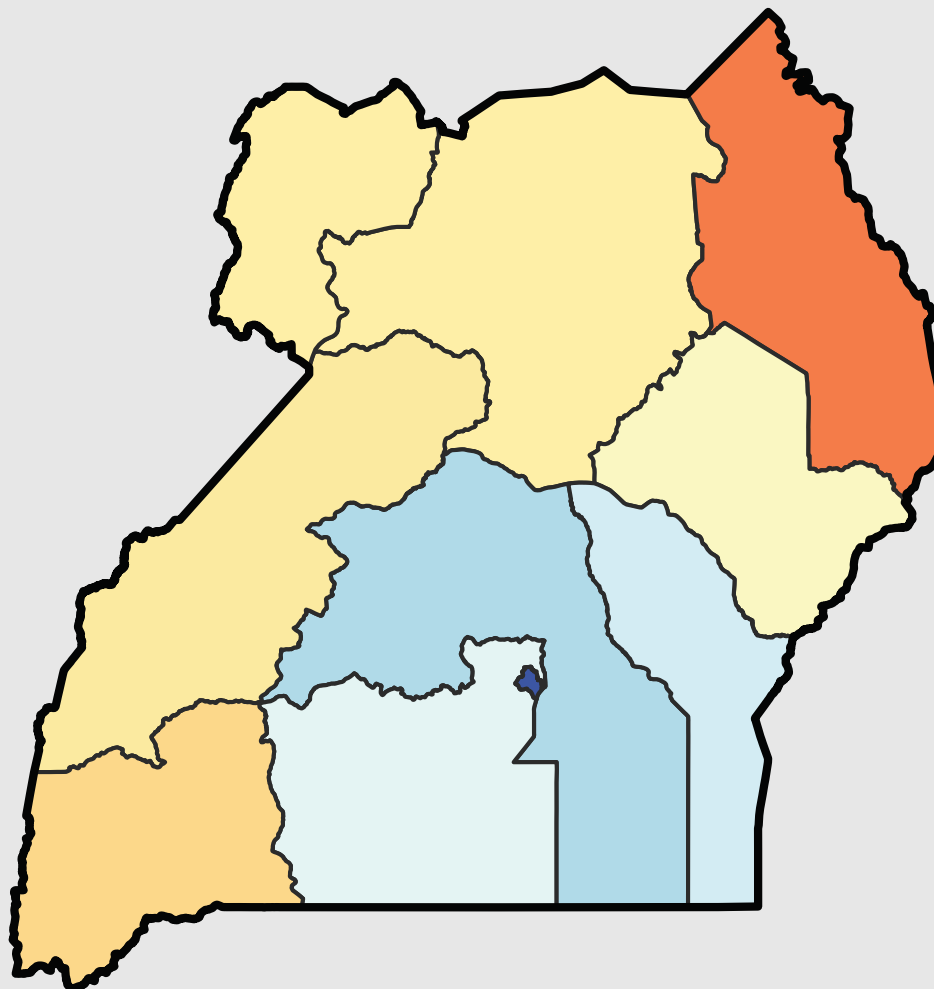


# Assessing Impact, Improving Health Progress in Child Health Across Regions in Uganda

A REPORT OF THE MCPA PROJECT



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# Executive summary

Uganda has seen marked improvement in childhood survival over the past two decades. While the scale-up of malaria interventions has been suggested as one of the biggest drivers of these improvements, little research has considered the contribution of other health interventions and socio-demographic factors alongside malaria interventions. To address this knowledge gap, the Infectious Diseases Research Collaboration (IDRC) and the Institute for Health Metrics and Evaluation (IHME) collaborated to implement the Malaria Control Policy Assessment (MCPA) project. The objective of the MCPA project was to harness existing data in Uganda and use rigorous statistical methods to quantify trends in child health interventions, with a focus on malaria interventions, as well as non-health factors, to better understand their collective impact on under-5 mortality at the subnational level.

In this report, we show trends for a range of key child health outcomes, interventions, and socio-demographic factors from 1990 to 2011 for 10 regions in Uganda. This is the first time that annual estimates and corresponding levels of uncertainty for such a range of indicators have been generated at the regional level and for this period of time. Regional profiles, located at the back of this report, depict trends in child health over time and benchmark regional performance across indicators. With this information, local and national policymakers and health officials can identify areas of successful health service delivery and detect early signs of declining coverage or stalled progress.

We originally attempted to conduct analyses at the district level. Although we collated all available data from a range of sources, no health survey could provide sufficient sample sizes to extract district-level estimates, and the country's frequent redistricting from 1990 to 2011 led us to use regions as the unit of analysis. District-level results would have been more directly relevant for policymakers and local health program managers in Uganda, as the district is the administrative level at which health services are delivered. Further, district-level trends would have allowed us to conduct causal attribution analyses and to determine the impact of various factors on declines in under-5 mortality.

The results presented in this report are descriptive, and while informative, they cannot be used to make causal inferences. This highlights the critical need for greater investment in health information systems and routine data collection, as these are the mechanisms by which policymakers should receive timely and locally relevant information to answer the key health questions they face. Without this kind of investment going forward, properly assessing the impact of any priority health programs or scale-up of intervention packages is likely to be fraught with challenges. An increasing emphasis is placed on documenting the impact of programs, particularly amidst competing policy agendas and tightening budgets. To maintain and strengthen the argument for continued investment in malaria programs, it is crucial to collect the kind of data and invest in the information systems that can support the assessment of program impact.

This report shows that Uganda is succeeding on several fronts in child health and development. First, we found that between 1990 and 2011, under-5 mortality significantly declined across all regions in Uganda, with the majority of regions achieving the child survival targets set forth by the Ugandan Ministry of Health (MOH). Second, coverage of key malaria interventions, such as household ownership of insecticide-treated nets (ITNs) and the receipt of artemisinin-based combination therapies (ACTs), increased dramatically in a very short period of time. Some of the regions with the highest malaria transmission documented the highest levels of ACT coverage, reflecting Uganda's ongoing commitment to reducing its malaria burden. Third, as an early adopter of the pentavalent vaccine in 2002, Uganda has successfully brought coverage to levels comparable to vaccines that have been on the immunization schedule for decades. Fourth, the proportion of children under 5 who sought care for suspected pneumonia steadily increased between 1990 and 2011, suggesting that both access to health facilities and health-care-seeking behaviors may have improved in Uganda during this time. Finally, steady gains were recorded in educational attainment among women and household access to improved sanitation in most areas of the country.

These successes were accompanied by concerning trends for a number of key child and maternal health interventions. First, declines in under-5 mortality slowed after 2007 in several regions, as evidenced by complete stagnation of progress or even slight increases in under-5 mortality for some regions. Second, the receipt of at least two doses of intermittent preventive therapy in pregnancy (IPTp2) was persistently low over time and across regions. This finding warrants further investigation, especially since trends in the proportion of women who had at least four antenatal care visits (ANC4) consistently exceeded levels of IPTp2. Third, despite substantial gains in vaccine coverage over time, levels of measles and polio immunization for most regions remained lower than optimal in 2011. Uganda has experienced outbreaks of both diseases in recent years, further highlighting the importance of expanding coverage and maintaining high immunization rates. Last, a number of regions recorded minimal progress in improving low levels of ANC4 and skilled birth attendance (SBA), with some even recording declines in ANC4. Targeting these areas for improvement should be a priority if Uganda is to ensure that its achievements in child health continue into the present decade.

With a focus on subnational trends, findings from the MCPA project in Uganda provide side-by-side comparisons of health performance over time, geography, and intervention type. The child health landscape is markedly heterogeneous, even at the regional level, highlighting the need for continuous and timely assessment of even more local data to understand the determinants of effective delivery of health services. With regularly collected and analyzed health information, policymakers can have the evidence base they need to make targeted, data-driven decisions for achieving greater and more equitable health gains in Uganda.