

Monitoring of the achievement of the health-related Millennium Development Goals

Report by the Secretariat

1. The Executive Board at its 138th session considered and noted an earlier version of this report.¹ Paragraph 32 has been amended to take account of updated information on efforts to meet Goal 6, Target 6.C.
2. The target year for achievement of the Millennium Development Goals was 2015. It is generally agreed that the concept of the Goals has been a success. Certainly they have been more influential and achieved wider public recognition than any other attempt at international target-setting in the field of development. The period of their currency, 2000 to 2015, has also seen, particularly during the initial decade, significant increases in development financing, especially for health: development assistance for health more than tripled between 2000 and 2013, accompanied by strong growth in domestically sourced financing.
3. The success of the Goals is generally attributed to the fact that they galvanized concerted action around a limited number of time-bound, measurable and easy-to-communicate goals. Although criticized for ignoring many aspects of development (not least sustainable economic growth and health system strengthening) and focusing on aggregate rather than equitable achievement, the Goals' targets were nevertheless widely accepted as a measure of progress in the developing world.
4. The degree to which the remarkable progress in health outcomes over the past 15 years, and the increase in resources that have made these achievements possible, is directly attributable to the existence of the Goals per se is debatable.² However, there have been significant achievements. Globally, the Goals' targets for HIV, tuberculosis and malaria have been met. Child mortality has fallen by 53% and maternal mortality by 44%. Even though these latter figures fall short of the two-thirds and three-quarters declines that were targeted, they are still cause for celebration.³
5. It is hard to isolate specific causal effects, but it seems reasonable to suppose that the intensity of focus (and investment) has been a key driver of innovation, enabling the scale-up of new

¹ See document EB138/13 and the summary record of the Executive Board at its 138th session, fifth meeting, section 2 (document EB138/2016/REC/2).

² See for example: Kenny C, Sumner A. 2011. More money or more development: what have the MDGs achieved? CGD Working Paper 278. Washington, DC: Centre for Global Development. <http://www.cgdev.org/content/publications/detail/1425806> (accessed 16 March 2016).

³ A more detailed account of the achievements is found in: WHO. Health in 2015: from MDGs to SDGs. Geneva: World Health Organization; 2015 (<http://www.who.int/gho/publications/mdgs-sdgs/en/>, accessed 16 March 2016).

interventions, such as antiretroviral therapy, long-lasting insecticide-treated bednets, artemisinin-based combination therapy, vaccines against pneumonia and diarrhoeal disease, and new and better diagnostic tests for multiple diseases.

6. It can also be argued that, without the influence of the Millennium Development Goals on promoting measurement, and the development of monitoring systems, the world would not be in a position to track progress with the degree of confidence that is now possible. Moreover, the focus on measurement has encouraged political leaders in several countries to make public commitments to achieving specific targets in areas such as maternal or child mortality. These commitments not only put pressure on health ministries but also provide a way for civil society, parliaments and the media to hold health providers accountable for their performance.

7. Beyond the health sector, the broader determinants of health have shown similar improvements. Extreme poverty, as measured by the number of people living on less than US\$ 1.25 per day, has declined by more than half. The proportion of undernourished people in developing countries has fallen significantly. Primary school enrolment, for girls and boys equally, has exceeded 90% and, in 2015, 91% of the global population was using an improved drinking-water source.

8. There remain several targets towards which progress has been limited (for example, use of family planning and improved sanitation) and there remains an “unfinished agenda” to complete work on the current health-related Millennium Development Goals. It is also evident that progress within and between individual countries is highly variable. This unfinished Millennium Development Goal agenda is reflected in the Sustainable Development Goals of the 2030 Agenda for Sustainable Development¹ and has been enhanced to include new and more ambitious targets such as ending epidemics of HIV, tuberculosis and malaria and all preventable maternal and child deaths with a greater focus on equity.

9. This report summarizes the status of the health-related Millennium Development Goals and specific targets.² It also highlights the individual goals and targets, and describes the status on reducing child mortality through the prevention and treatment of pneumonia, as requested in resolution WHA63.24 (on accelerated progress towards achievement of Millennium Development Goal 4 to reduce child mortality: prevention and treatment of pneumonia, 2010); the prevention and reduction of perinatal and neonatal mortality (resolution WHA64.13, on working towards the reduction of perinatal and neonatal mortality, 2011); prevention and management of birth defects (resolution WHA63.17, on birth defects, 2010); and achieving universal coverage of maternal, newborn and child health care (resolution WHA58.31, on working towards universal coverage of maternal, newborn and child health interventions, 2005).

¹ United Nations General Assembly resolution 70/1 – Transforming our world: the 2030 Agenda for Sustainable Development, see http://www.un.org/en/ga/search/view_doc.asp?symbol=A/RES/70/1 (accessed 16 March 2016).

² For a list of the relevant specific targets and statistics on the targets, see the WHO Global Health Observatory: <http://www.who.int/gho/en/> and http://www.who.int/topics/millennium_development_goals/en/ (accessed on 16 March 2016). For a fuller story and overview goal and targets not mentioned in the present report, see the United Nations Millennium Development Goals 2015 Report, at: [http://www.un.org/millenniumgoals/2015_MDG_Report/pdf/MDG%202015%20rev%20\(July%201\).pdf](http://www.un.org/millenniumgoals/2015_MDG_Report/pdf/MDG%202015%20rev%20(July%201).pdf) (accessed 16 March 2016).

Goal 1 (Eradicate extreme poverty and hunger), Target 1.C: Halve, between 1990 and 2015, the proportion of people who suffer from hunger

10. Between 1990 and 2015, the proportion of underweight children declined from 25% to 14%; the number of stunted children declined globally by 39%, from 254 million to 156 million.

Goal 4 (Reduce child mortality), Target 4.A: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate

11. Globally, substantial progress has been made in reducing mortality in children under five years of age. Between 1990 and 2015, under-five mortality declined by 53%, falling from an estimated rate of 91 deaths per 1000 live births to 43 deaths per 1000 live births. The global rate of decline has accelerated greatly, from 1.8% per annum between 1990 and 2000 to 3.9% per annum between 2000 and 2015. About 19 000 fewer children died every day in 2015 than in 1990. Despite the evidence of progress, the gains were insufficient to reach in 2015 the target of a two-thirds reduction from 1990 levels of mortality.

12. The total number of neonatal deaths decreased from 5.1 million in 1990 to 2.7 million in 2015. Neonatal mortality rates per 1000 live births declined from 36 to 19 over the same period, a reduction of 47%. This decline is slower than that for child mortality overall, and the proportion of deaths in children under five years of age that occur in the neonatal period increased from 40% in 1990 to 45% in 2015. Leading causes of under-five mortality are prematurity (18%), acute respiratory infections (16%), interpartum-related complications (12%), diarrhoea (9%), malaria (7%), and congenital anomalies (8%). Undernutrition causally contributes to an estimated 45% of all deaths among children under five years of age.¹

13. In 2014, global coverage of measles vaccination was 85% among children aged 12–23 months, and more countries were achieving high levels of vaccination coverage; 63% of Member States reached at least 90% coverage, compared with only 44% of Member States in 2000. Between 2000 and 2015, the estimated global number of measles deaths in children under five years decreased by more than 75%.

14. In 2014, the Health Assembly in resolution WHA67.10 endorsed the newborn health action plan, which provides a road map of strategic actions for preventing newborn mortality, and will also contribute to reducing maternal mortality and stillbirths. Subsequently, several countries have developed new or sharpened national plans for newborn health. Globally, a coordination mechanism has been put in place to advance country implementation, monitoring and evaluation, and advocacy.²

15. The integrated global action plan for the prevention and control of pneumonia and diarrhoea³ focuses on two of the leading causes of mortality in children under five years of age, which together

¹ Black RE, Victora CG, Walker SP, Bhutta ZA Christian P, de Onis M et al. Maternal and child undernutrition and overweight in low-income and middle-income countries. *Lancet* 2013;382:427–51.

² See document A68/36, section H, for more details (available at http://apps.who.int/gb/ebwha/pdf_files/WHA68/A68_36-en.pdf, accessed 16 March 2016).

³ WHO/UNICEF. Ending preventable deaths: Global action plan for prevention and control of pneumonia and diarrhoea by 2025. Geneva: World Health Organization; 2013, at http://www.who.int/maternal_child_adolescent/documents/global_action_plan_pneumonia_diarrhoea/en/ (accessed 16 March 2016).

account for 24% of all under-five deaths.¹ Following its launch in April 2013, several countries have integrated the strategic objectives of the plan into national and subnational child health strategies and implementation plans. Renewed commitments to end preventable deaths by 2030 provided an additional stimulus for countries to develop detailed diarrhoea and pneumonia action plans and use the process to find synergy and complementarity between child health-related programmes such as immunization and nutrition and those on water, sanitation and hygiene. In many countries, the introduction of new vaccines, such as rotavirus vaccine and pneumococcal vaccine, has been used as an opportunity for promoting a broader child health agenda, including for instance messaging on care seeking and treatment for pneumonia and diarrhoea, and the promotion of nutrition and safe water and sanitation interventions. The global report on water, sanitation and hygiene in health care facilities, published in 2015, highlighted the importance of coordinated actions for ensuring quality of care in health facilities.²

Goal 5 (Improve maternal health), Target 5.A: Reduce by three quarters, between 1990 and 2015, the maternal mortality ratio

16. The number of women dying because of complications during pregnancy and childbirth has decreased by 44%, and there will be 303 000 deaths in 2015. The decrease has been noteworthy, but falls well short of the target. The global rate of decline in the maternal mortality ratio also accelerated in the past decade, increasing from 1.2% in 1990–2000 to 3.0% in 2000–2015. The declines have been mostly driven by the South-East Asia and the Western Pacific regions which saw changes of more than 60% between 1990 and 2015. Direct obstetric causes, notably haemorrhage (27%), hypertensive diseases of pregnancy (14%) and sepsis (11%), continue to be the leading causes of maternal death. Increasingly, however, deaths during pregnancy are attributed to other medical conditions. More than one in four maternal deaths are caused by medical conditions that can be aggravated by pregnancy, such as diabetes, HIV infection, malaria, cardiac conditions and obesity.³

17. WHO and its partners have elaborated the elements of a post-2015 vision for ending preventable maternal mortality, following consultations with Member States and public stakeholders.⁴ A consensus statement was issued that included outcomes, targets and objectives.⁵ Among them, the average global target was set: maternal mortality ratio of less than 70/100 000 live births by 2030, with no country having a figure greater than twice the global average. Recognizing the synergies in approaches required to end preventable maternal and newborn mortality, the global community is working towards common strategic objectives and actions. Concretely, WHO is leading a global effort to

¹ Global health estimates: deaths by cause, age and sex 2000–2012. Geneva: World Health Organization; 2015 (available at http://www.who.int/healthinfo/global_burden_disease/estimates/en/index1.html) and Liu L et al. Global, regional, and national causes of child mortality in 2000–13, with projections to inform post-2015 priorities: an updated systematic analysis, *Lancet*, 2015, 385:430–440, DOI: [http://dx.doi.org/10.1016/S0140-6736\(14\)61698-6](http://dx.doi.org/10.1016/S0140-6736(14)61698-6) ([http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(14\)61698-6/abstract](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(14)61698-6/abstract)) accessed 16 March 2016.

² WHO, UNICEF Water, sanitation and hygiene in health care facilities: status in low- and middle-income countries and way forward. Geneva: World Health Organization; 2015 http://apps.who.int/iris/bitstream/10665/154588/1/9789241508476_eng.pdf (accessed 16 March 2016).

³ Say L, Chou D, Gemmill A, Tunçalp Ö, Moller AB, Daniels J, et al. Global causes of maternal death: a WHO systematic analysis. *Lancet Global Health*, 2014; 2(6):323–33.

⁴ See Strategies toward ending preventable maternal mortality, http://who.int/reproductivehealth/topics/maternal_perinatal/epmm/en/ (accessed 16 March 2016).

⁵ WHO. Targets and strategies toward ending preventable maternal mortality: consensus statement at: http://apps.who.int/iris/bitstream/10665/130776/1/WHO_RHR_14.21_eng.pdf?ua=1&ua=1 (accessed 16 March 2016).

develop standards for quality of maternal and newborn care with accompanying implementation guidance, as well as a measurement framework for assessing progress in maternal and newborn mortality reduction globally and in countries.

Goal 5, Target 5.B: Achieve, by 2015, universal access to reproductive health

18. In order to reduce maternal mortality and improve maternal health, women need access to effective interventions and good-quality reproductive health care. In many Member States, programmes have been implemented to increase access to effective interventions. Contraceptive prevalence with a modern method rose from 48% to 58% between 1990 and 2015 among married or in-union women age 15–49 years, but still 24% wanted to stop or postpone childbearing but were not using modern contraception. The proportion of women receiving antenatal care reflects a high rate (88%) for one visit, but drops to a disappointing rate of 64% for the recommended minimum of four visits. A skilled birth attendant is present at 54% of births in the African Region (which has the highest maternal mortality ratio), but recent surveys are beginning to show improvements in several countries.

19. About 16 million adolescent girls give birth each year. The adverse effects of adolescent childbearing also extend to the health of infants, for instance, through a higher incidence of low birth weight. In response to the recommendation to focus more on adolescent health issued in 2013 by the independent Expert Review Group on Information and Accountability for Women's and Children's Health, and in the follow-up to resolution WHA64.28 (2011) on youth and health risks, WHO launched the report, "Health for the world's adolescents" during the Sixty-seventh World Health Assembly.¹ The report is an online resource that provides regional and country data on adolescent health, gives links to all WHO's guidance concerning adolescents across the full spectrum of health issues, and explores universal health coverage for adolescents. To accelerate action in countries, the Secretariat is proposing to develop a global framework as the basis for coherent country plans and to align the contributions of relevant stakeholders for implementation.²

20. WHO provides normative guidance and support to countries to accelerate progress towards universal access to reproductive health. Examples include guidelines on the prevention of early pregnancy and poor reproductive outcomes among adolescents in developing countries,³ guidelines to promote a human rights-based approach to family planning programmes,⁴ and policy briefs on key reproductive health subjects.⁵

21. Essential care during childbirth and in the early postnatal period is crucial for the prevention and management of conditions that cause maternal and neonatal death. Up-to-date, evidence-based guidelines for health care workers published by WHO cover many areas, including preterm birth,

¹ WHO. Health for the world's adolescents: A second chance in the second decade. Geneva: World Health Organization; 2014, available at: <http://apps.who.int/adolescent/second-decade/> (accessed 16 March 2016).

² As set out in document A68/15, noted by Committee A of the Sixty-eighth World Health Assembly (see document WHA68/2015/REC/3, summary record of the tenth and eleventh meeting, section 3).

³ WHO guidelines on preventing early pregnancy and poor reproductive outcomes among adolescents in developing countries. Geneva: World Health Organization; 2011 (http://www.who.int/immunization/hpv/target/preventing_early_pregnancy_and_poor_reproductive_outcomes_who_2006.pdf, accessed 16 March 2016).

⁴ For more information on relevant guidelines, see: http://www.who.int/reproductivehealth/publications/family_planning/human-rights-contraception/en/ (accessed 16 March 2016).

⁵ See http://www.who.int/reproductivehealth/topics/family_planning/policybriefs/en/index.html (accessed 16 March 2016).

augmentation of labour, induction of labour, and the prevention and management of the major maternal, perinatal and neonatal conditions. Important research on areas supported by WHO include: efficacy of simplified management of suspected newborn sepsis in settings where referral is not possible; efficacy of newer interventions to reduce newborn mortality; effect of early initiation of breastfeeding on mortality, independent of its effect on increasing exclusive breastfeeding; use of antenatal corticosteroids in low- and middle-income settings; and global use of maternal and newborn interventions. WHO-coordinated research is continuing to improve monitoring of labour to improve birth outcomes, scale up interventions (such as kangaroo mother care), management of severe neonatal interventions, community case management of pneumonia and diarrhoea, and home-based management of severe acute malnutrition.

22. In 2015, in the fourth and final year of implementing the recommendations of the United Nations Commission on Information and Accountability for Women's and Children's Health, country-level action continued on key focus areas, with 17 countries moving to a second round of targeted funding. Of the 75 focus countries, 68 have national accountability frameworks being implemented through catalytic funds supporting the Commission's recommendations; 55 have implemented facility-based maternal death reviews and 30 have implemented community-based maternal death reviews; 33 countries have completed at least one year of national health accounts; civil society, parliaments and media from 21 countries are engaged in budget tracking; and parliaments in 30 countries have taken legislative action for women and children, including increased budget allocations.

23. This year, for the first time, members of the Organisation for Economic Co-operation and Development's Development Assistance Committee used a new policy marker to better capture data on aid in support of reproductive, maternal, newborn and child health. Reporting was low in this first round, but it is expected that the use of the marker will yield fuller results in subsequent rounds.

24. The Global Financing Facility, hosted by the World Bank, has emerged as an important vehicle for aligned investments in civil registration and vital statistics, as well as other future priorities related to accountability. The Government of Canada committed Can\$ 100 million to improving civil registration and vital statistics systems through the Global Financing Facility and in support of Every Woman Every Child.

25. In September 2015, the independent Expert Review Group published its final report, "Every woman, every child: Achievements and Prospects", presented at a side event during the United Nations General Assembly in New York. The report pointed out that, although progress had been made across all 10 of the original recommendations of the Commission on Information and Accountability, few had been fully achieved, leaving room for progress under the next accountability framework to accompany the subsequent Global Strategy (2015–2030).¹ These findings, and the independent Expert Review Group's recommendations for the next phase, were discussed in greater detail during an accountability stakeholder meeting (Geneva, 16 and 17 November 2015).

26. At the same time, the global community celebrated the launch on a new Global Strategy for Women's, Children's and Adolescents' Health by the United Nations Secretary-General. The Global Strategy addresses the unfinished agenda of the health-related Millennium Development Goals for women and children but has a much greater ambition to ensure that women, children and adolescents are able to enjoy the highest standard of health. The objectives of the Global Strategy encompass 17 targets derived from the Sustainable Development Goals of the 2030 Agenda for Sustainable

¹ Available from http://www.who.int/woman_child_accountability/ierg/reports/2015/en/ (accessed 16 March 2016).

Development that are specifically relevant for the health of women, children and adolescents. WHO will track progress towards these targets in the future and provide technical assistance to countries to operationalize the Global Strategy.¹

Goal 6 (Combat HIV/AIDS, malaria and other diseases), Target 6.A: Have halted by 2015 and begun to reverse the spread of HIV/AIDS and Target 6.B: Achieve, by 2010, universal access to treatment for HIV/AIDS for all those who need it

27. In 2014, an estimated 2.0 million people became newly infected with HIV, down from 3.1 million in 2000. Multiple preventive interventions are contributing to this decline, including the promotion of behavioural changes and biomedical interventions.

28. By the end of 2014, about 14.9 million people had received antiretroviral therapy globally, up from 690 000 in 2000. This figure still only represents 40% of the estimated 36.9 million people living with HIV. However, the recommendations in WHO's consolidated guidelines on the use of antiretroviral medicines, issued in 2013,² have resulted in much higher numbers of HIV-infected people needing treatment. Consequently, universal access to treatment will be more challenging in the foreseeable future. By mid-2015, the target of placing 15 million people on antiretroviral therapy by 2015 in low- and middle-income countries had been exceeded.

29. The decrease in the number of those newly infected and the increase in availability of antiretroviral therapy has caused a decline in HIV/AIDS mortality from 2.0 million in 2005 to an estimated 1.2 million in 2014. The population living with HIV will continue to grow as fewer people are dying from AIDS-related causes.

Goal 6, Target 6.C: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases

30. At the global level, the malaria-specific Target has already been met. In terms of country-level progress, of the 106 countries with ongoing transmission of malaria in 2000, 102 are estimated to have met the target of reversing the incidence of malaria. In 2015, an estimated 214 million cases of malaria led to 438 000 deaths globally. Increasing coverage with interventions such as insecticide-treated bednets, indoor residual spraying, diagnostic testing and effective treatment contributed a decrease of malaria incidence by 37% globally between 2000 and 2015, and mortality rates fell by 60%. But significant challenges remain. In 2013, 278 million of the 840 million people at risk of malaria in sub-Saharan Africa lived in households without even a single insecticide-treated bednet; 15 million of the 35 million pregnant women did not receive preventive treatment; and between 56 and 69 million children with malaria did not receive artemisinin-based combination therapies.

¹ See also document A69/16 on an operational plan to take forward the new Global Strategy for Women's, Children's and Adolescents' Health.

² WHO. Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection: recommendations for a public health approach. Geneva: World Health Organization; 2013 (http://apps.who.int/iris/bitstream/10665/85321/1/9789241505727_eng.pdf?ua=1, accessed 18 December 2015).

31. Globally, the number of new cases of tuberculosis fell at an average rate of about 1.5% per year between 2000 and 2014, meaning that the target of halting and reversing incidence has been achieved. Incidence rates are also falling in all WHO regions and in 16 of the 22 highest-burden countries. The mortality rate due to tuberculosis fell by 47% between 1990 and 2015 and the prevalence rate fell by 42% over the same period. Globally, treatment success rates for new cases have been sustained since 2005 at high levels of around 85%, the target first set by the Health Assembly in 1991 in resolution WHA44.8. The burden of tuberculosis remains high: there were an estimated 9.6 million new cases in 2014, with an estimated 1.5 million deaths, of whom 0.4 million were HIV-positive.

32. Target 6.C includes neglected tropical diseases, a medically diverse group of infections caused by a variety of pathogens. The number of reported cases of human African trypanosomiasis – 3796 in 2014 – has reached its lowest level since the systematic collection of global data started 75 years ago. The disease is now targeted for elimination as a public health problem by 2020. Dracunculiasis is on the verge of eradication with a historic low of 22 reported cases in 2015. In Chad, Ethiopia, Mali and South Sudan, where dracunculiasis cases are still being recorded, local solutions are being implemented to offset current challenges. Plans to eliminate leprosy worldwide as a public health problem by 2020 have been prepared, and their implementation is progressing. Elimination of visceral leishmaniasis as a public health problem by 2020 in the Indian subcontinent is on track, with the number of incident cases reduced by more than 75% since the launch of the elimination programme in 2005. More than 5.6 billion treatments have been delivered since 2000 to stop the spread of lymphatic filariasis, targeted for elimination as a public health problem by 2020. Of the 73 countries in which the disease is known to be endemic, 80% have a chance to stop preventive treatment and 30% could be validated by the target date. Through preventive treatment campaigns, more than 853 million people received treatment for at least one disease in 2014. For dengue, chikungunya and Zika virus disease, which are some of the world's fastest growing vector-borne infections – innovative, effective and sustainable vector control and disease prevention measures require strong, well-funded national programmes and strategies, and the support of partners in the global public health community to reduce morbidity and mortality by 2020.

Goal 7 (Ensure environmental sustainability), Target 7.C: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation

33. Work to increase access to safe drinking-water and basic sanitation is covered by Target 7.C. This target was met in 2010 for drinking water, as measured by the proxy indicator of access to improved drinking-water sources. In 2015, 91% of the population used an improved source of drinking water compared with 76% in 1990. Coverage is at least 90% in all WHO regions except the African Region. Although progress has been impressive, disparities exist across different regions, between urban and rural areas, and between rich and poor people. With regard to basic sanitation, 2100 million people have gained access to an improved sanitation facility since 1990; nevertheless, in 2015, about 2400 million people (about one-third of the global population) still lacked such access. The global target for sanitation has been missed by 700 million people. The United Nations Secretary-General has called for a doubling of efforts to achieve Target 7.C on sanitation. WHO is committed to mobilizing the health sector to resolve the crisis of sanitation, through advocacy, technical assistance and improved global monitoring.

Goal 8 (Develop a global partnership for development), Target 8.E: In cooperation with pharmaceutical companies, provide access to affordable essential medicines in developing countries

34. Many people continue to face a scarcity of medicines in the public sector, forcing them to the private sector where prices can be substantially higher. Based on data from 26 surveys in low-income and lower-middle-income countries, generated with the standardized WHO/Health Action International methodology, the availability of generic medicines in public and private sector health facilities was 58% and 67%, respectively. Prices for patients increase as the wealth of the country increases: patients procuring medicines in the public sector of the low-income countries were paying on average twice the international reference prices, whereas in lower-middle-income countries patients were paying over three times international reference prices.

ACTION BY THE HEALTH ASSEMBLY

35. The Health Assembly is invited to note the report.

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