

3 Non-communicable diseases

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Non-communicable diseases (NCDs) refers to a group of conditions that are not caused by an acute infection, are non-infectious and result in a need for long-term treatment and care as a chronic condition. NCDs, which include cancer, heart disease, diabetes, chronic lung disease, hypertension

and stroke, account for 74% of all deaths worldwide.¹

This chapter will include just one indicator, namely, cervical cancer screening coverage.

Cervical cancer screening coverage

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Key findings

- None of the districts across South Africa reached the WHO cervical cancer screening target of 70% to be attained by 2030.
- KwaZulu-Natal was the best performing province in 2022/23, with all the districts obtaining a cervical cancer screening coverage above the national average of 21,4%.
- Northern Cape had the lowest coverage; three of its five districts had the lowest coverage in the country.
- All provinces had an increase in cervical cancer coverage in 2021/22 and all provinces recorded a decrease 2022/23. The biggest decrease was in Western Cape and Mpumalanga.
- Only 13 districts had an increase in the cervical cancer screening coverage in 2022/23.
- The COVID-19 pandemic coupled with the change in the definition of the cervical cancer screening coverage indicator in 2020 contributed to the decrease in the screening coverage in 2020/21.

Introduction

Cervical cancer is the fourth most common cancer among women globally, with an estimated 604 000 new cases and 342 000 deaths in 2020. About 90% of these occurred in low- and middle-income countries.² According to the National Cancer Registry (NCR), in 2019, cervical cancer was the second most diagnosed cancer in South African (SA) females after breast cancer. The NCR recorded 6 945 cases diagnosed histologically in 2019, which accounted for 15,85% of all female cancer cases in SA.³ Cervical cancer, however, remains the most common cancer diagnosed

in black females, amounting to 5 932 cases (or 85%) of all cervical cancer cases nationwide.

The World Health Organization (WHO) devised a global strategy to accelerate the elimination of cervical cancer as a public health problem. Elimination in this context means that a country reaches less than four cases of cervical cancer per 100 000 women per year. To reach this threshold by the end of 21st century, WHO has set up the 90-70-90 targets to be attained by 2030 and to be maintained.⁴

¹World Health Organization. Noncommunicable diseases: Overview. URL: https://www.who.int/health-topics/noncommunicable-diseases#tab=tab_1 Accessed: [30 November 2023]

²Sung H, Ferlay J, Siegel RL, Laversanne M, Soerjomataram I, Jemal A, et al. Global cancer statistics 2020: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *CA Cancer J Clin.* 2021;71:209-49. doi:10.3322/caac.21660.

³National Cancer Registry. https://NCR_Path_2019_Full_Report_8dec2021.pdf (nicd.ac.za). [Accessed – 9/10/2023].

⁴Lei J, Ploner A, Elfstrom KM, Wang J, Roth A, Fang F, et al. HPV Vaccination and the Risk of Invasive Cervical Cancer. *N Engl J Med.* 2020;383(14):1340-8.

These targets entail the following:

- 90% of girls to be fully vaccinated with human papilloma virus (HPV) vaccine by age 15;
- 70% of women to be screened with a high-performance test by 35, and again by 45 years of age;
- 90% of women identified with cervical disease to receive treatment (90% of women with pre-cancer treated; 90% of women with invasive cancer managed).

The age-standardised incidence rate for cervical cancer was 22.92 per 100 000 women in 2019. There has been a decrease in the past decade from 31.6 per 100 000 in 2009.⁵ However, this falls far below the WHO strategy's target of a threshold of less than four cases of cervical cancer per 100 000 women per year to eliminate cervical cancer.⁶ Even with the cervical cancer prevention and control policy in place for more than 10 years, SA still sees a high number of women presenting with advanced invasive disease. *Cancer Tomorrow*, a tool that predicts the future cancer incidence and mortality burden worldwide, estimates that deaths from cervical cancer will rise by almost 50% by 2040 if no drastic measures are taken.⁷

Cervical cancer is unique in that it has a known causative agent (in most cases), well defined precancerous stages which, under most circumstances, are slowly progressive, and therefore provides an opportunity for screening in order to interrupt the eventual disease at any point. Screening and early detection of cervical cancer in asymptomatic women, with subsequent appropriate timely referral and treatment, are vital for reducing cervical cancer morbidity and mortality.⁷

According to the National Indicator Data Set (NIDS), cervical cancer screening coverage is defined as the number of women of 30 years and older who received a smear as a proportion of the female population that is 30 years and older. Eighty per cent of these women should be screened for cervical cancer every 10 years and 20% must be screened every three years. This should be included in the denominator because it is estimated that 20% of women aged 30 years and older are HIV positive. The numerator is cervical cancer screening in non-HIV women 30 years and older plus cervical cancer screening in HIV-positive women 20 years and older. The denominator is (80% of women aged 30 to 59 years)/10 plus (20% women aged 20 to 59 years)/3.⁸

The source of the data is the District Health Information System (DHIS) as a proxy for cervical cancer incidence. In this reporting period, cervical cancer screening coverage is still being used as a proxy for cervical cancer detection and treatment. The Large Loop Excision of the Transformation Zone (LLETZ) indicator was introduced into the NIDS from the April 2023. However, this will only reflect in the next reporting period.

National overview

The national average for cervical cancer screening coverage in 2022/23 was 21.4% which is significantly low in comparison to the 70% WHO target. There is also a marked drop from the last report of 45.8% in 2018/19 and 46.8% in 2019/20 (Figure 1). This is largely attributed to the COVID-19 pandemic, which negatively affected the screening coverage due to limited access to health care

facilities and reallocation of resources. This, coupled with the change in the definition of the screening indicator in 2020, which takes into consideration the three-yearly cervical cancer screening for HIV positive women, thereby increases the targeted number of women needing to be screened.

⁵Cowling N. Age-standardized incidence rate for cervical cancer in South Africa 2009-2019. URL: <https://www.statista.com/statistics/1387052/age-standardized-incidence-rate-for-cervical-cancer/>. [Accessed 9/10/2023].

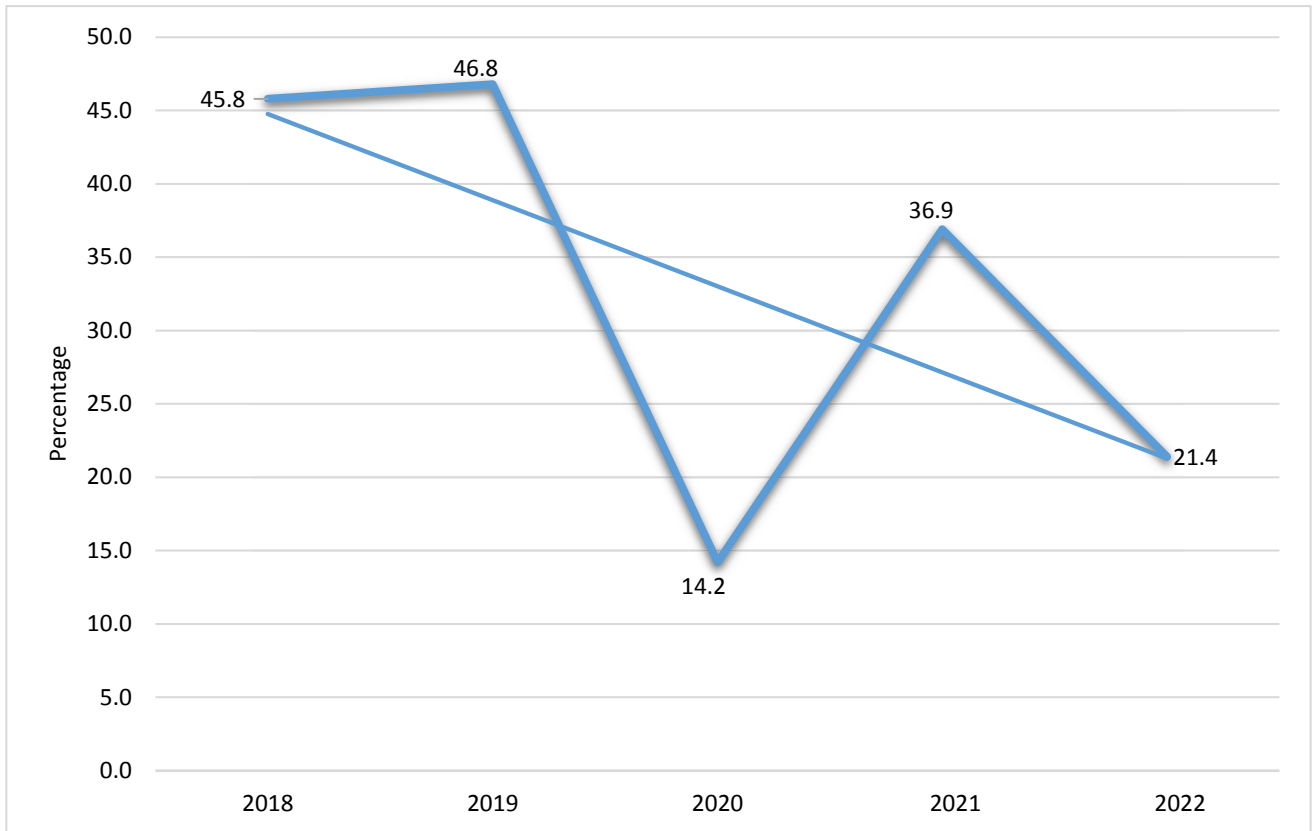
⁶World Health Organization. Cervical Cancer Fact Sheet. URL: <https://www.who.int/news-room/fact-sheets/detail/cervical-cancer>. [Accessed – 9/10/2023].

⁷South African HPV Advisory Board. Cervical cancer and human papillomavirus: South African guidelines for screening and testing. South African Journal of Gynaecological Oncology; 2010; 2(1):23-6. <http://www.sasog.co.za/images/Guidelines.pdf>.

⁸National Department of Health. National Indicator Data Set 2020. Pretoria: NDoH; 2020.

⁹Cancer tomorrow is a tool that predicts the future cancer incidence and mortality burden worldwide. From the current estimates in 2020, deaths from cervical cancer will rise by almost 50% by 2040. Available from: Cancer Tomorrow (iarc.fr).

Figure 1: National cervical cancer screening coverage, 2018/19–2022/23



Source: DHIS

Provincial overview

Only four provinces performed above the national average of 21.4% and five provinces fell significantly below, while none of the provinces reached the target of 70% (Figure 2). KwaZulu-Natal (KZN) was the best performing, with coverage of 38.9%, followed by Mpumalanga (MP) at 24.7% and the Free State (FS) at 24.0%. The cervical cancer screening coverage in Northern Cape (NC) at 9.6% was the lowest, followed by North West (NW) at 9.7%.

The coverage fluctuated hugely in all provinces between

2019/20 and 2022/23 (Figure 3). The biggest decrease in the coverage between 2019/20 and 2020/21 of 43.7 percentage points was in the North West and the smallest of 23.6 percentage points was in Limpopo (LP). All provinces had an increase in the cervical cancer coverage in 2021/22 but all had a decrease 2022/23. The biggest decrease was in Western Cape (WC) with 22.6 percentage points, followed by Mpumalanga with 18.0 percentage points.

Figure 2: Cervical cancer screening coverage by province, 2022/23

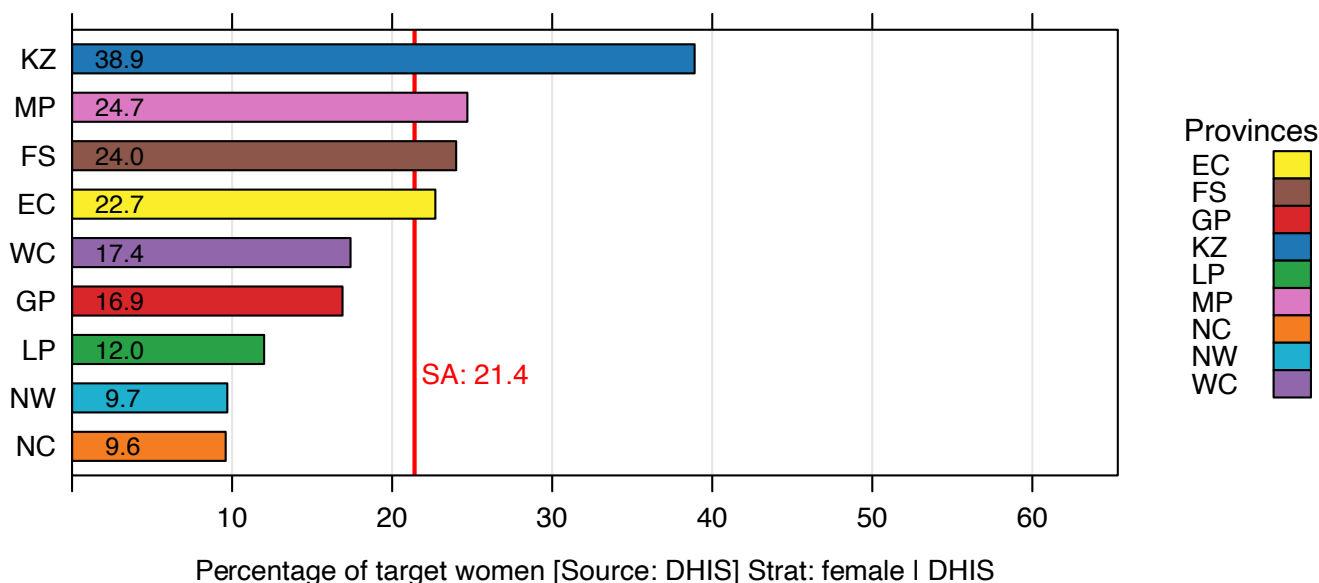
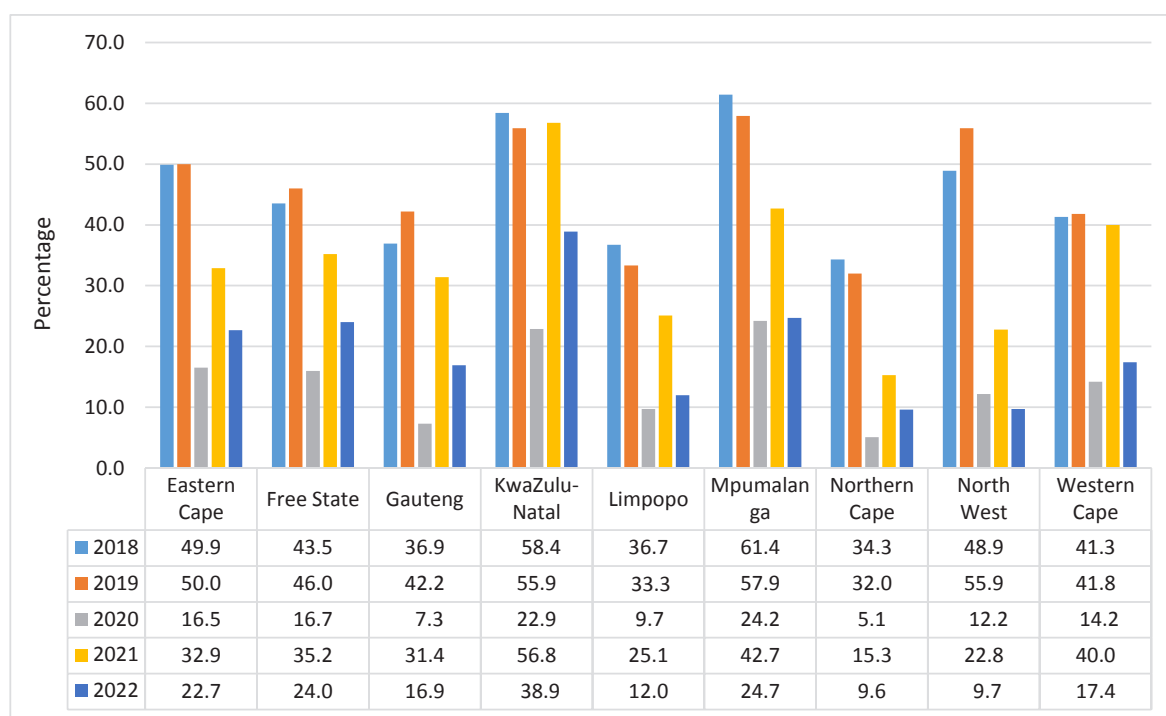


Figure 3: Cervical cancer screening coverage by province, 2018/19–2022/23



District overview

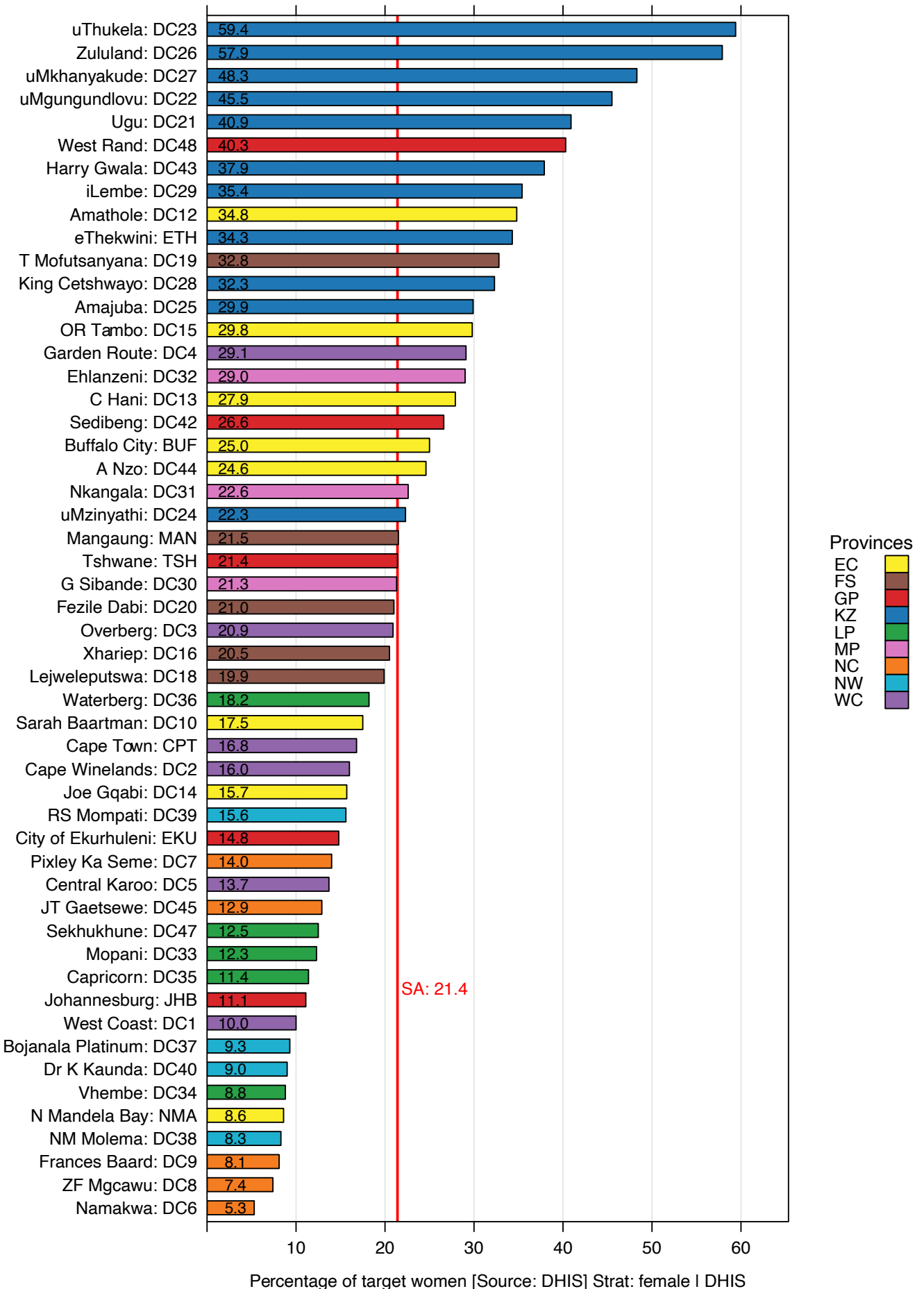
The inter-district variation, shown in Figure 4, reveals an 11.2-fold variation between Namakwa ((NC) with the lowest cervical cancer screening coverage of 5.3%) and uThukela (KwaZulu-Natal (KZN)) with the highest coverage of 59.4%.

Only 24 districts performed on par and above the national coverage of 21.4%. All 11 districts in KwaZulu-Natal performed above the national average, with eight of them being among the 10 districts with the highest cervical cancer screening coverage (Map 1). In Mpumalanga, all

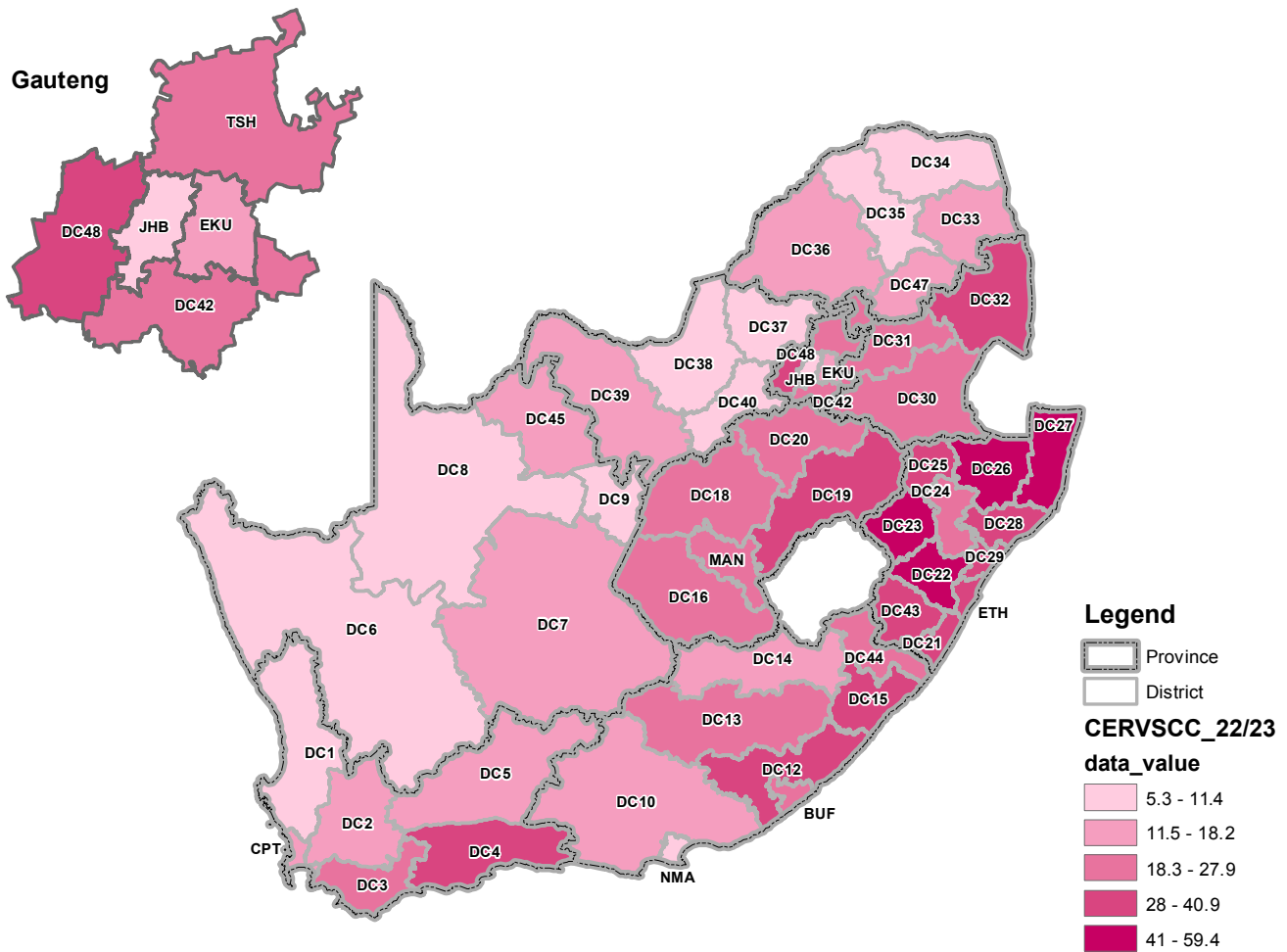
three districts also performed above the national average, placing the province second best in provincial performance.

The 10 districts with the poorest cervical cancer screening coverage of 10% and lower include three districts in the Northern Cape (Namakwa (5.3%), Zwelentlanga Fatman Mgcawu (7.4%) and Frances Baard (8.1%)), three in North West (Ngaka Modiri Molema (8.3%), Dr Kenneth Kaunda (9.0%) and Bojanala Platinum (9.3%)) and one each in the Eastern Cape (Nelson Mandela Bay (8.6%)), Limpopo (Vhembe (8.8%)) and Western Cape (West Coast (10.0%)).

Figure 4: Cervical cancer screening coverage by district, 2022/23



Map 1: Cervical cancer screening coverage by district, 2022/23



Source: DHIS

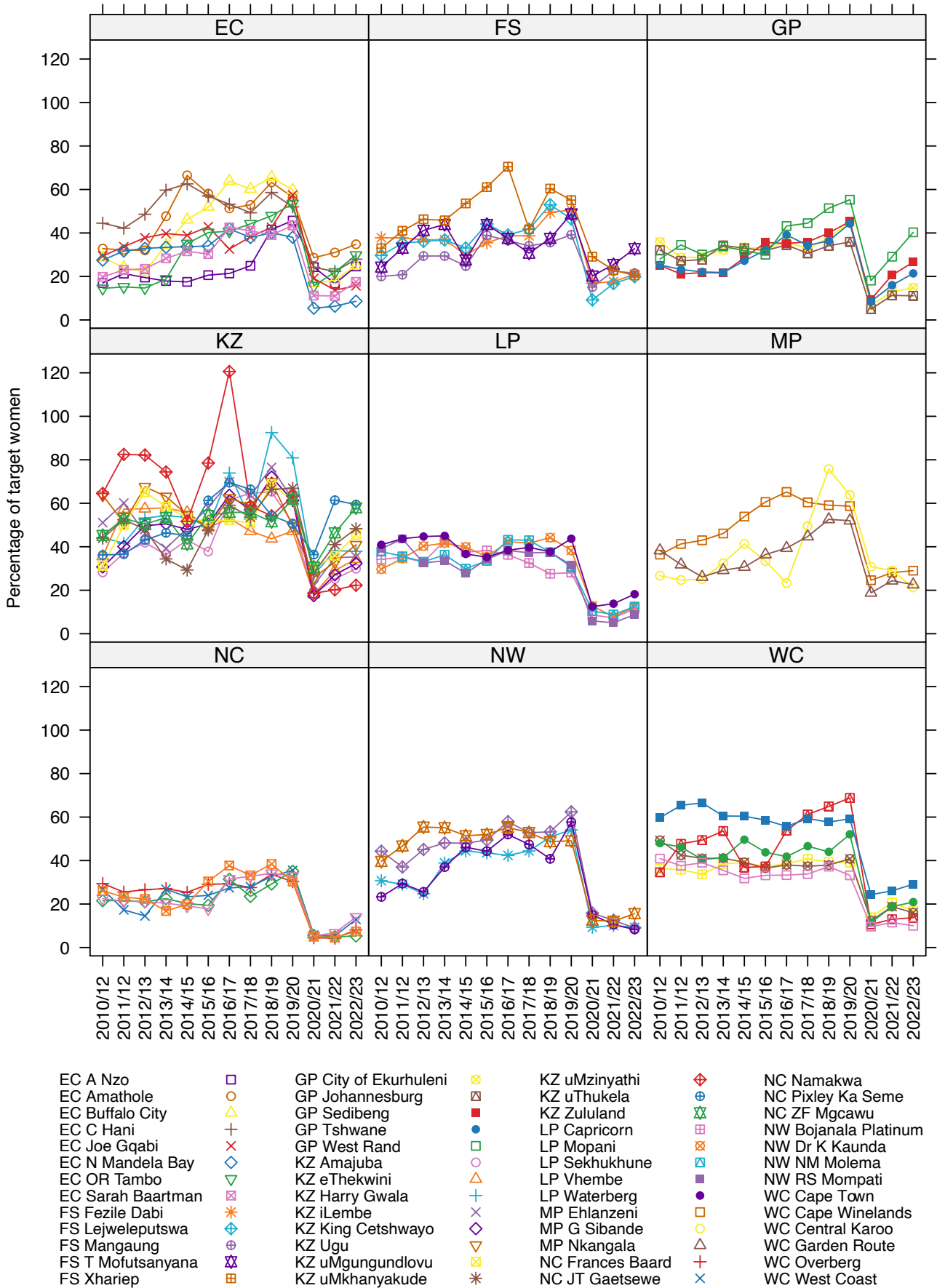
After an improvement in screening coverage in 2018/19, there was a significant drop observed across all districts. This possibly reflects the impact of the COVID-19 pandemic. While recovery is evident in a few districts, the majority are still lagging behind. A sharp rise in screening noted for KwaZulu-Natal in 2016/2017 reflects the activation of screening campaigns. However, this was not sustained, even in the pre-COVID-19 era. (Figure 5).

Only 13 districts had an increase in the cervical cancer screening coverage in 2022/23, with the highest increase of 7.8 percentage points in Gert Sibande (MP) followed by Cape Town (WC) with 3.9 percentage points. The

increases among these districts varied between 0.2 and 7.8 percentage points. The districts with the highest drop in coverage were Zululand (KZN) (11.5 percentage points) and West Rand (Gauteng (GP) (11.2 percentage points).

In the period 2018/19 to 2022/23 only two districts had an increase in coverage, namely Zululand and uThukela (both KZN) of 6.4 and 5.1 percentage points respectively. The districts with the highest decrease in cervical cancer screening coverage were Harry Gwala (KZN), Gert Sibande (MP) and Central Karoo (WC), with respective decreases of 54.6, 54.4 and 51.2 percentage points.

Figure 5: Annual trends: cervical cancer screening coverage by province and district, 2010/12–2022/23



Source: DHIS

Recommendations

- To reach the WHO 2030 goals, the district health system has to be strategic in the implementation of the Cervical Cancer Prevention and Control Policy.⁹ The strategic points mentioned in the policy should be constantly monitored and evaluated. Lessons can be taken from other priority programmes such as HIV.
- The National Department of Health should benchmark best practices from counties that have managed to reduce the cervical cancer burden and contextualise this to SA. The provinces that are not doing well such as the North West and Northern Cape should be prioritised.
- Intra-provincial district teams must collaborate to reduce significant gaps between districts in the same province, for example Gauteng where there is a great variation between the district performances.
- Cervical cancer screening services should be available at all health facilities, including hospitals.
- Capacity building on cervical cancer screening should be strengthened for the entire health workforce not only those managing women's health programmes.
- Detailed assessments must be undertaken to ensure the optimal implementation of policies and guidelines, and address barriers and facilitators to service delivery for the cervical cancer prevention programme.
- The cervical cancer guidelines and policy should be updated in line with newer approaches to screening (e.g. HPV testing which can be client administered).
- The current proxy indicator needs review to include the full treatment cascade of cervical cancer.
- A recovery plan needs to be put in place as most of the provinces have not yet recovered from the effects of the COVID-19 pandemic.
- Sustainability measures need to be built into the campaign models in order to avoid relapse of the programme after campaigns.
- The system needs to be intentional and employ a proactive approach. The budget for prevention services should be increased, which will eventually reduce the expenditure on cervical cancer treatment in the long run.

⁹National Department of Health. Cervical Cancer Prevention and Control Policy. Pretoria: NDoH; 2017.