The state of caesarean sections in South Africa: Challenges, unknowns and the way forward

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The scarcity of safe and timely caesarean sections in much of Africa contrasts with SA's paradox of having one of the world's highest rates of caesarean section in the private sector – approaching 80% – yet persistently high maternal and perinatal mortality in rural public hospitals. This article addresses three challenges: (*i*) inequitable access to safe caesarean sections; (*ii*) high and rising caesarean section rates without evidence of better outcomes, raising concerns about overservicing, costs and respectful care; and (*iii*) research and data gaps. Closing these gaps requires action from all stakeholders to ensure equitable, high-quality and life-saving care for all.

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Caesarean section can be a life-saving procedure for both mother and child. Poor access to timely surgical obstetric care is associated with an exponential increase in maternal mortality.[1] Currently, Africa struggles to provide enough caesarean sections: experts recommend 19 caesarean sections per 100 live deliveries, yet the continent provides only 5 per 100 live deliveries.[1]

South Africa (SA), however, has made considerable progress in maternal health since 2010.[2] In contrast to other countries in the region, its private health sector has one of the highest rates of caesarean section in the world, at around 77%,[3,4] with a rate of 28 - 30% in the public sector.[2] While medically indicated caesarean section confers benefits for both mother and child, there are several concerns around excessively high caesarean section rates. First, no evidence indicates any benefits of a caesarean when it is not medically necessary.[3] In fact, women and babies who undergo caesarean section without obstetric indication are at increased risk of morbidity and mortality,[5] with maternal mortality three times higher for caesarean sections than normal vaginal deliveries (NVDs).[3] These outcomes are often related to the obstetric indication for which the surgery was performed. However, complications of anaesthesia and surgery have become major causes of maternal death.[6]

Economically, unnecessary caesarean sections place strain on the health system and divert scarce resources from other essential care. The Council for Medical Schemes, which regulates SA's private health sector, found that the average cost of caesarean deliveries between 2015 and 2018 was at least 75% higher than that of NVDs.[4] In 2016, SA spent an estimated USD16.8 million on caesarean sections that fell above the World Health Organization (WHO)'s expected rate of 15%.[5]

There are also ethical issues linked to excessive caesarean sections. Most healthy women in SA prefer to give birth via NVD over caesarean delivery;[3,7] a study in Cape Town found that <3% of women preferred caesarean delivery, while 82% preferred vaginal delivery and 15% were unsure.[8] There have also been reports of women being 'coerced or bullied' into having a caesarean section by their providers.[7]

This perspective piece explores challenges of caesarean sections in SA, and presents potential solutions moving forward. The three main challenges are: (*i*) inequitable access to safe caesarean section across health sectors; (*ii*) high and rising caesarean section rates in the private sector; and (*iii*) data shortfalls.

Problem 1: Inequitable access to safe caesarean sections

Fig. 1 demonstrates that access to safe surgery in SA is deeply inequitable. Private sector rates are almost three times higher than public sector rates.[3,13] Accessed by only 16% of the population, the private sector has surgical resources comparable with high-income countries, while the public sector's lack of resources can mirror those of low- to middle-income countries.[14]

In SA's public health system, where the majority of births occur, access to safe caesarean section is also not evenly distributed. Well-resourced urban tertiary hospitals experience high volumes of caesarean sections by skilled specialists, whereas district and rural hospitals frequently lack the staff, theatre capacity, anaesthesia support and blood supplies required for timely surgery.[3] Consequently, women in greatest clinical need, particularly in poorer and more remote provinces, face delays or are unable to access quality emergency obstetric care.[1] Rural provinces such as Limpopo and Mpumalanga have the lowest rates of caesarean delivery, yet experience the highest case fatality rates (CFRs).[6] This is a prime example of the inverse care law – a phenomenon to describe the skewed distribution of quality medical care away from those who need it most.[15]

Systemic barriers to maternity care also disproportionately affect poorer and more remote provinces. Public health interventions, such as maternity waiting homes, emergency transport schemes and strengthened referral networks have sought to reduce delays and reflect in policy,[16] yet need to be continuously strengthened for impact.[6,16] At the same time, facility-based quality improvement initiatives face challenges of weak data systems, fragmented accountability and overstretched providers, undermining efforts to ensure safety and continuity of care;[17,18] although health system solutions are known.[19]

Problem 2: High and rising caesarean section rates

Fig. 1 also underscores that caesarean section rates nationally are above the WHO's recommended range, and are rising in both sectors. Approximately 49 392 caesarean sections performed in SA were considered 'excess' in 2016, assuming the ideal range of 10 - 15%.[5] Of note, the WHO's projections of 10 - 15% only considered mortality,[5] and prevention of maternal and neonatal morbidity would likely require a rate >20%, as demonstrated by recent studies.[3,5] SA's public sector rates of 28 - 30% are appropriate in this context, but the private sector's rate, approaching a staggering 80% as of 2018, is cause for concern.[3,4]

It remains less clear what drives high and rising rates of caesarean section in SA. Existing literature suggests that monetary incentive, fear of litigation and individual models of care influence the private sector.[20] In the private sector, fee-for-service schemes can incentivise obstetricians to perform caesarean sections over NVDs without medical justification.[7] Inefficient and inappropriate spending raises costs for those able to afford the private sector, and draws resources away from the public sector, further limiting their access to quality care.[21]

The threat of malpractice claims also looms large over SA obstetricians, possibly contributing to rising rates of caesarean section.[22,23] In the public sector, rising medical malpractice litigation, particularly in obstetrics, is crippling the health service.[24]

Another possible reason for high rates is the private sector's 'individual provider' models of care, compared with the public sector's 'team-based' approach.[20] In the private sector, pregnant patients choose a primary provider who provides continuity of care, often makes all clinical decisions and assumes professional liability.[20] The convenience of a scheduled delivery, shorter time costs and lower perceived legal risks can influence providers to deliver via caesarean section.[20]

Problem 3: Research and data gaps

Fortunately, SA produces up-to-date and reliable data on maternal deaths and caesarean section volume. Consistent reports from Saving Mothers and the District Health Barometer indicate a steadily rising caesarean delivery rate, a declining caesarean delivery CFR and maternal mortality rate and the need for improved surgical care and primary care, especially during the antenatal period.[2,6,25] Although more limited, the Council for Medical Schemes releases similar data on caesarean deliveries in the private sector, highlighting the concerning 77% caesarean section rate, which is predicted to continue increasing without intervention.[4]

Despite this knowledge base, there exists a dearth of research on financing and health outcomes associated with caesarean sections. Lack of transparency in the private sector serves as a major barrier. In 2019, the Health Market Inquiry found that there is little available information on quality, and no information on outcomes, for those with private medical aid coverage.[21] The Council for Medical Schemes likewise reported no data on the proportion of caesarean deliveries that were elective v. medically indicated, nor the maternal and neonatal health outcomes between delivery types.[4] Many articles underscore safety concerns in the public sector, yet there is currently no available information on safety in the private sector, nor respectful care among women undergoing caesarean sections in either sector.[3,21] Beside mandatory reports on all maternal and perinatal deaths and inconsistent annual quality reports, private hospital groups lack strong clinical oversight.[20] Therefore, possible explanations for the high and rising rates of caesarean section in the private sector remain speculative. This is concerning because the ability to perform large numbers of caesarean sections may not lead to increased quality of care and respect provided to each patient.

The implications of SA's public-private health sector disparity and excessive caesarean sections are more pressing than ever, given

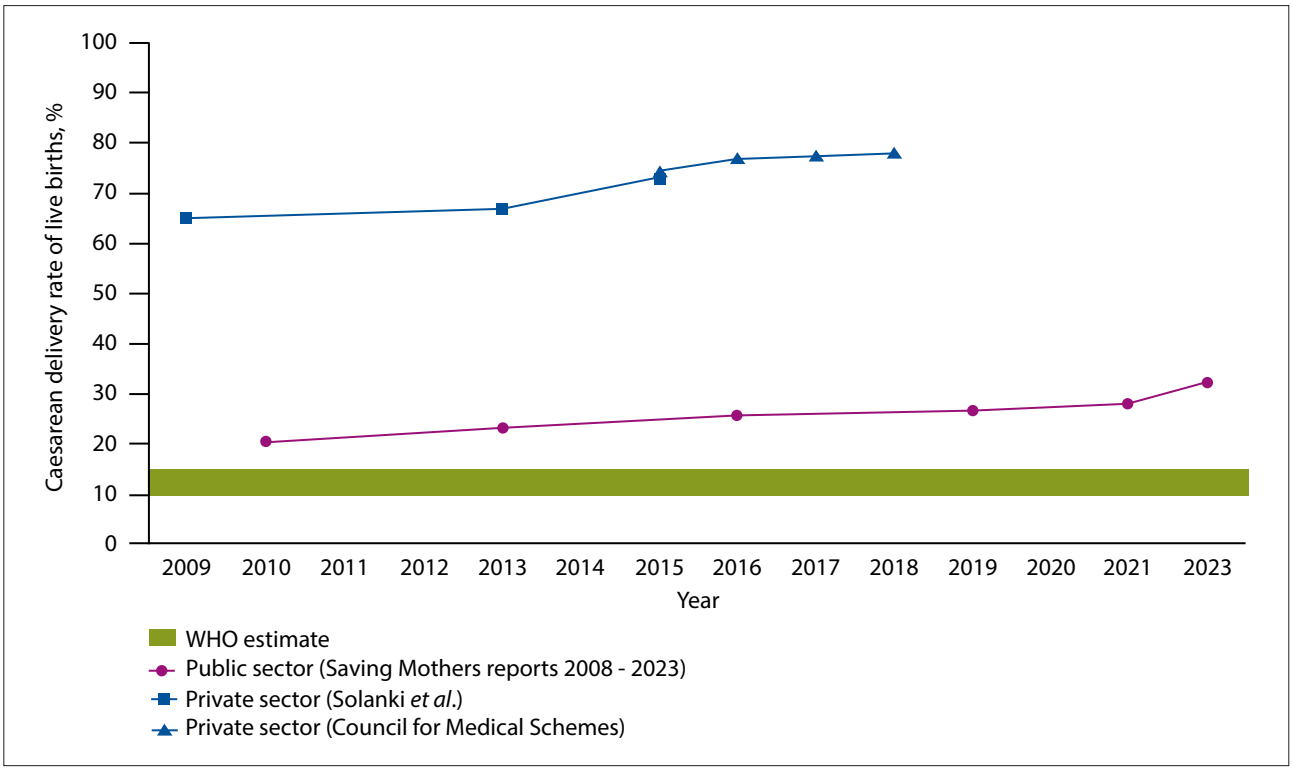

Fig. 1. Average caesarean section rates in South Africa according to dataset. Lines do not signify trends between reports but show overall trends over time. Data sources: Saving Mothers reports,[2,6,9-12] Solanki* et al.,*[3] Council for Medical Schemes.[4]*

**Rates from Saving Mothers reports were entered as the last year of the triennia.*

the government's National Health Insurance (NHI) Bill. Aiming to uplift the public sector while regulating the private sector, NHI will purchase services from both sectors in 'the deliberate, systematic collaboration of the government and the private health sector according to national health priorities'.[26] To determine the right costing model that addresses access, safety and overservicing, policy-makers need to better understand the current landscape of caesarean section care across SA.

The way forward

SA has made tremendous progress in expanding access to safe caesarean sections and reducing maternal mortality.[2] Now, it must act to ensure equitable access, curb overservicing in the private sector and strengthen the evidence base to guide effective solutions.

Ultimately, we must ensure access to safe caesarean section for all women in SA, regardless of health sector or geographical location. Saving two lives in one operation, caesarean sections are fundamental to safe surgery and to universal health coverage.[27] SA must close gaps in access, especially in rural district hospitals, where preventable maternal and perinatal deaths linked to the unavailability of caesarean sections remain highest.[2] Public-private partnerships that standardise clinical guidelines, promote multidisciplinary maternity care teams and connect private sector resources with struggling public sector facilities could be valuable approaches going forward.[28-30] Further dialogues between private sector and public sector practitioners and the National Department of Health are essential.

Moreover, the NHI Act offers an opportunity to more safely, equitably and optimally allocate obstetric resources in SA. Policy-makers must capitalise on the push for NHI by capturing the strengths of each health sector without perpetuating their unique challenges, to ensure better service provision.

Finally, SA needs to invest in more research to tackle these problems. Current understanding around the drivers of high caesarean section rates in the private sector and rising rates for both sectors relies largely on subjective and experiential knowledge.[20] To identify solutions, these drivers need to be backed by rigorous evidence. Closing this research gap is urgent, particularly to inform NHI planning, and requires greater transparency and robust data from the private sector. The private sector has the resources and infrastructure in place to collect and report these data – it must be done. Only then can policy-makers attempt to structure health plans that equitably allocate surgical resources and deliver the highest quality of pregnancy care.

The growing rates of caesarean section show that SA has the resources to expand access to safe and timely obstetric care. However, high rates do not necessarily equate to high-quality or equitable services – nor do they guarantee better maternal and perinatal health outcomes, or reflect what women want. More research will be needed to overcome these challenges. Success depends on whether policy-makers, surgeons and communities commit to prioritising need over profit, equity over convenience and evidence over status quo.

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1. Biccard B. Safer Surgery for Africa: Challenges and Solutions. Cape Town: Biccard Press, 2024.
2. National Department of Health, South Africa. Saving Mothers: National Committee for Confidential Enquiry into Maternal Deaths: Annual Report for 2023. https://www.health.gov.za/wp-content/uploads/2024/10/Saving-Mothers-Report-2023.pdf (accessed 18 February 2026).
3. Solanki GC, Cornell JE, Daviaud E, Fawcus S. Caesarean section rates in South Africa: A case study of the health systems challenges for the proposed National Health Insurance. S Afr Med J 2020;110(8):747. https://doi.org/10.7196/samj.2020.v110i8.14699
4. Council for Medical Schemes. Epidemiology and trends of caesarean section births in the medical schemes' population, 2015 - 2018: Policy, Research and Monitoring. CMS, 2020. https://www.medicalschemes.com/files/Research%20Briefs/Caesarean%20section%20births%20-%20Research%20Brief%201%20of%202020.pdf (accessed 11 February 2026).
5. Wu ML, Nichols PM, Cormick G, Betran AP, Gibbons L, Belizan JM. Global inequities in cesarean section deliveries and required resources persist. Eur J Obstet Gynecol Reprod Biol 2023;285:31-40. https://doi.org/10.1016/j.ejogrb.2023.03.036
6. National Department of Health, South Africa. Saving Mothers Triennial Technical Report 2017 - 2019. https://www.health.gov.za/wp-content/uploads/2023/11/Saving-Mothers-2017-2019-Technical-Report-FINAL-2-1.pdf (accessed 8 August 2025).
7. Choonara S, Eyles J. Out of control: Profit-seeking behaviour, unnecessary medical procedures and rising costs of private medical care in South Africa. BMJ Glob Health 2016;1(1):e000013.
8. Naudé N, Horak TA, Fawcus S, Stewart CJ, Lindow SW. Preference for mode of delivery in a low-risk population in Cape Town, South Africa. Eur J Obstet Gynecol Reprod Biol 2020;254:259-265. https://doi.org/10.1016/j.ejogrb.2020.09.028
9. National Department of Health, South Africa. Saving Mothers 2008 - 2010. Pretoria: NDoH, 2010. https://www.hst.org.za/publications/NonHST%20Publications/savingmothersshort.pdf (accessed 8 August 2025).
10. National Department of Health, South Africa. Saving Mothers 2011 - 2013: Sixth report on the confidential enquiries into maternal deaths in South Africa: Short report. Pretoria: NDoH, 2013. https://www2.kznhealth.gov.za/mcwh/Maternal/Saving-Mothers-2011-2013-short-report.pdf (accessed 8 August 2025).
11. National Department of Health, South Africa. Saving Mothers 2014 - 2016: Seventh triennial report on confidential enquiries into maternal deaths in South Africa: Short report. Pretoria: NDoH, 2016. https://anaesthetics.ukzn.ac.za/Libraries/Obstets3_2019/Saving_Mothers.pdf (accessed 8 August 2025).
12. National Department of Health, South Africa. Saving Mothers Annual Report for 2021. Pretoria: NDoH, 2021. https://www.health.gov.za/wp-content/uploads/2023/09/Saving-Mothers-Report-2021.pdf (accessed 8 August 2025).
13. Council for Medical Schemes. Annual Report 2017/2018. CMS, 2018. https://www.medicalschemes.com/files/Annual%20Reports/CMS_AnnualReport2017-2018.pdf (accessed 8 August 2025).
14. Dell A, Kahn D, Klopper J. Surgical resources in South Africa: An analysis of the inequalities between the public and private sector. S Afr J Surg 2018;56(2):16-20.
15. Tudor Hart J. The inverse care law. Lancet 1971;297(7696):405-412. https://doi.org/10.1016/S0140-6736(71)92410-X
16. National Department of Health, South Africa. South African maternal, perinatal, and neonatal health policy. Pretoria: NDoH, 2021. https://knowledgehub.health.gov.za/system/files/2024-02/SA%20MPNH%20Policy%202021.pdf (accessed 8 August 2025).
17. Kredo T, Cooper S, Abrams AL, et al. 'Building on shaky ground' – challenges to and solutions for primary care guideline implementation in four provinces in South Africa: A qualitative study. BMJ Open 2020;10(5):e031468. https://doi.org/10.1136/bmjopen-2019-031468
18. Matahela SR, Adekola AP, Mavhandu-Mudzusi AH. Exploring quality standards implementation at a South African municipality's health facilities. Curationis 2023;46(1):e1-e9. https://doi.org/10.4102/curationis.v46i1.2416
19. Odendaal W, Chetty T, Goga A, et al. From purists to pragmatists: A qualitative evaluation of how implementation processes and contexts shaped the uptake and methodological adaptations of a maternal and neonatal quality improvement programme in South Africa prior to, and during COVID-19. BMC Health Serv Res 2023;23(1):819. https://doi.org/10.1186/s12913-023-09826-5
20. Solanki GC, Doherty T, Brijlal V, Daviaud E, Fawcus S. Towards developing new private sector obstetric care and contracting models in South Africa: Insights from public hospitals using private general practitioners to provide caesarean deliveries. S Afr Med J 2024;114(4):e1531. https://doi.org/10.7196/SAMJ.2024.v114i4.1531
21. Nkonki L, Bhengu N, Ramokgopa M, Fonn S. The Health Market Inquiry and its potential contribution to improving health systems functioning in South Africa. S Afr Health Rev 2019:81-88. https://www.hst.org.za/publications/South%20African%20Health%20Reviews/07%20SAHR_2019_The%20Health%20Market%20Inquiry.pdf (accessed 8 August 2025).
22. Taylor B, Van Waart J, Ranchod S, Taylor A. Medicolegal storm threatening maternal and child healthcare services. S Afr Med J 2018;108(3):149. https://doi.org/10.7196/samj.2018.v108i3.13139
23. Snyman LC. The incessant escalation of medico-legal challenges of South African healthcare professionals. Afr J Obstet Gynaecol 2024;2(3). https://hdl.handle.net/10520/ejc-afjog_v2_n3_a1 (accessed 8 August 2025).
24. Standing Committee on Appropriations. Status of the medico-legal claims and service delivery implications (with Minister and Deputy Minister). Pretoria: Parliamentary Monitoring Group, 2024. https://pmg.org.za/committee-meeting/39467/ (accessed 8 August 2025).
25. Health Systems Trust. District Health Barometer 2023/2024. Report No. 17. Durban: HST, 2025.
26. Solanki G, Daviaud E, Fawcus S, Brijlal V, Doherty T. Models using private general practitioners to provide caesarean deliveries at five South African district public hospitals: Insights for public-private contracting for obstetric care in rural areas. Glob Health Action 2023;16(1):2241811. https://doi.org/10.1080/16549716.2023.2241811
27. Maswime S, Jayaraman S, Alaba O, Robalo M. Universal access to surgical care – a global public health priority. PLoS Glob Public Health 2025;5(4):e0004326. https://doi.org/10.1371/journal.pgph.0004326
28. National Committee on Confidential Enquiries into Maternal Deaths. Setting minimum standards for safe caesarean section in South Africa. Obstetr Gynaecol For 2015;25(3):41-44. https://hdl.handle.net/10520/EJC174707 (accessed 11 February 2026).
29. Doherty T, Solanki G, Daviaud E, Bartmann Y, Hawkridge A, Fawcus S. Utilisation of private general practitioners to provide caesarean deliveries in five rural district public hospitals in South Africa: A mixed-methods study. BMJ Open 2023;13(3):e067663. https://doi.org/10.1136/bmjopen-2022-067663
30. Doherty T, Fawcus S, Brijlal V, Solanki G. Towards developing new private sector maternity care models in South Africa: Results from a deliberative stakeholder dialogue. Glob Health 2025;21(1):50. https://doi.org/10.1186/s12992-025-01145-0

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