



**BROADREACH**

# **Private GP Provider Adherence Model**

**90-90-90: Achieving Optimal Treatment Outcomes**

Shuabe Rajap

31 May 2016

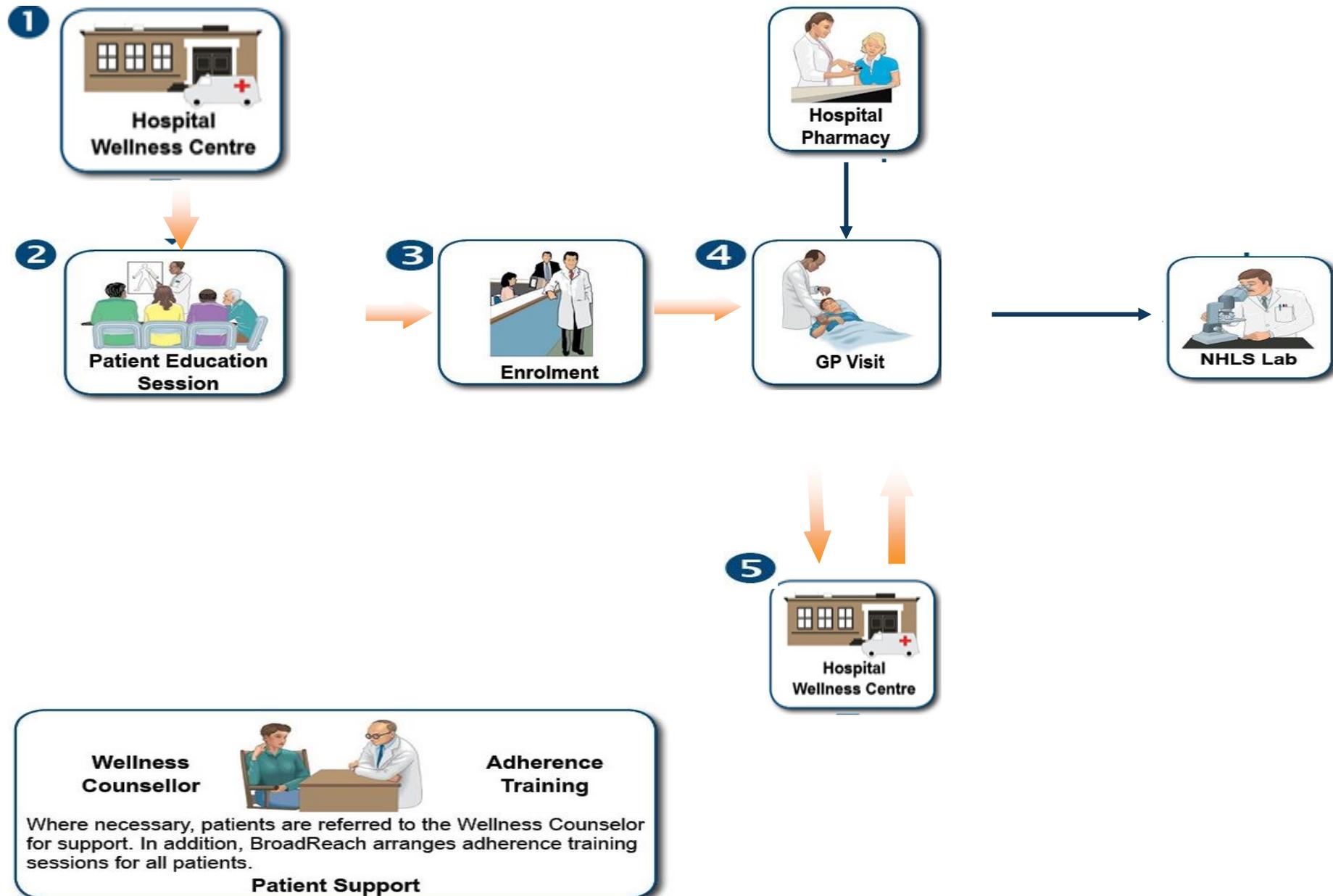
# Executive Summary

- About 6.4 million South Africans are living with HIV; over 2.5 million are on ART; and approximately 2 million more are eligible for ART but not yet on treatment
- Sustaining the successes of the HIV/AIDS response programme in the last decade will require more people to be placed on treatment at higher CD4 counts
- This will place an even greater demand on South Africa's finite, and already over stretched, human resources for health
- The ideal solution will be to train and deploy the required number of health workers but, this takes time, immense cost and there is no guarantee of staff retention
- The GP Model is sustainable to meet the gap by reaching 4.5 million patients utilising the services of 23% of registered GPs
- This is a workable solution that has been in operation for 10 years with the assistance of the Koshmed network of GPs in Klerksdorp and dedication of DoH staff such as Prof Variava

# The Rationale

- Why was this model introduced?
  - In 2005 few hospitals were initiating HIV patients onto treatment
  - Access was limited to hospital initiation (not PHC's)
  - Follow up patient visits began to bottleneck the system
  - Hospitals were stressed to breaking point
  - Waiting lists & long delays meant patients were unable to access critical care
- The model was therefore introduced to:
  - Unlock capacity by tapping into Private Sector General Practitioners to alleviate the burden
  - Provide access treatment for patients within their communities
  - Provide a complimentary model whilst building public sector capacity
  - Be sustainable with minimal external financial support in that costs are shared between BroadReach and the Department of Health: Patient medicines and lab services are provided by NW DoH while BroadReach pays GP fees and oversees programme operation.

# How the BroadReach Healthcare GP model works



# Effectiveness of the GP model

**Programme Performance** as at 31 March 2016

	No of Patients	Suppression	Retention
Klerksdorp	1919	92.7%	90.9%
Mafikeng	254	88.8%	94.8%
Potchefstroom	516	96.9%	96.6%

- The programme has been scaled up at the request of the GPs and the DoH to include comorbidities such as Diabetes and Hypertension

# Cost effectiveness of the model

- A cost-effectiveness study on the GP model found it to be relatively cost-effective when compared to a model down-referring patients to public sector clinics (PHC Model)
- The studies also compared incremental cost effectiveness ratios (ICER) which measures the marginal cost of including another patient with successful viral suppression in down referral care for an additional month

## GP and PHC Model Cost Comparisons

Model	Total cost of model	Average cost per patient per month	ICER (per patient in down referral care)
GP model (n=234)	R2,153,233 (US\$281,259)	R545.38 (US\$71.24)	R505.20 (US\$65.99)
PHC model (n=234)	R1,556,591 (US\$203,318)	R439.47 (US\$57.40)	R724.00 (US\$94.57)

- Navario (2009) show that the private GP model incurs higher total and average costs per patient (largely attributable to higher patient retention) but lower ICER costs relative to the public PHC model
- Leisegang et al. (2013) found that the GP model had similar outcomes but lower costs than the public-care program, largely due to lower visit frequencies

# Success factors

- A number of factors have contributed to the success of the GP model for example:
  - The patient-provider relationships that were established and strengthened over time; patients consistently deal with one health provider versus meeting a different provider on each visit; and the doctors often go “beyond the call of duty” to ensure comprehensive patient support resulting in improved patient outcomes and general wellbeing
  - Government has lead the negotiated rates for GPs
  - Improved patient access to service provider, as a result of the longer opening hours of private practices and their proximity to where patients live/work which eliminates patients’ travel costs and risk of loss of income from clinic visits during working hours
  - Effective adherence support through a combination of methods in the model

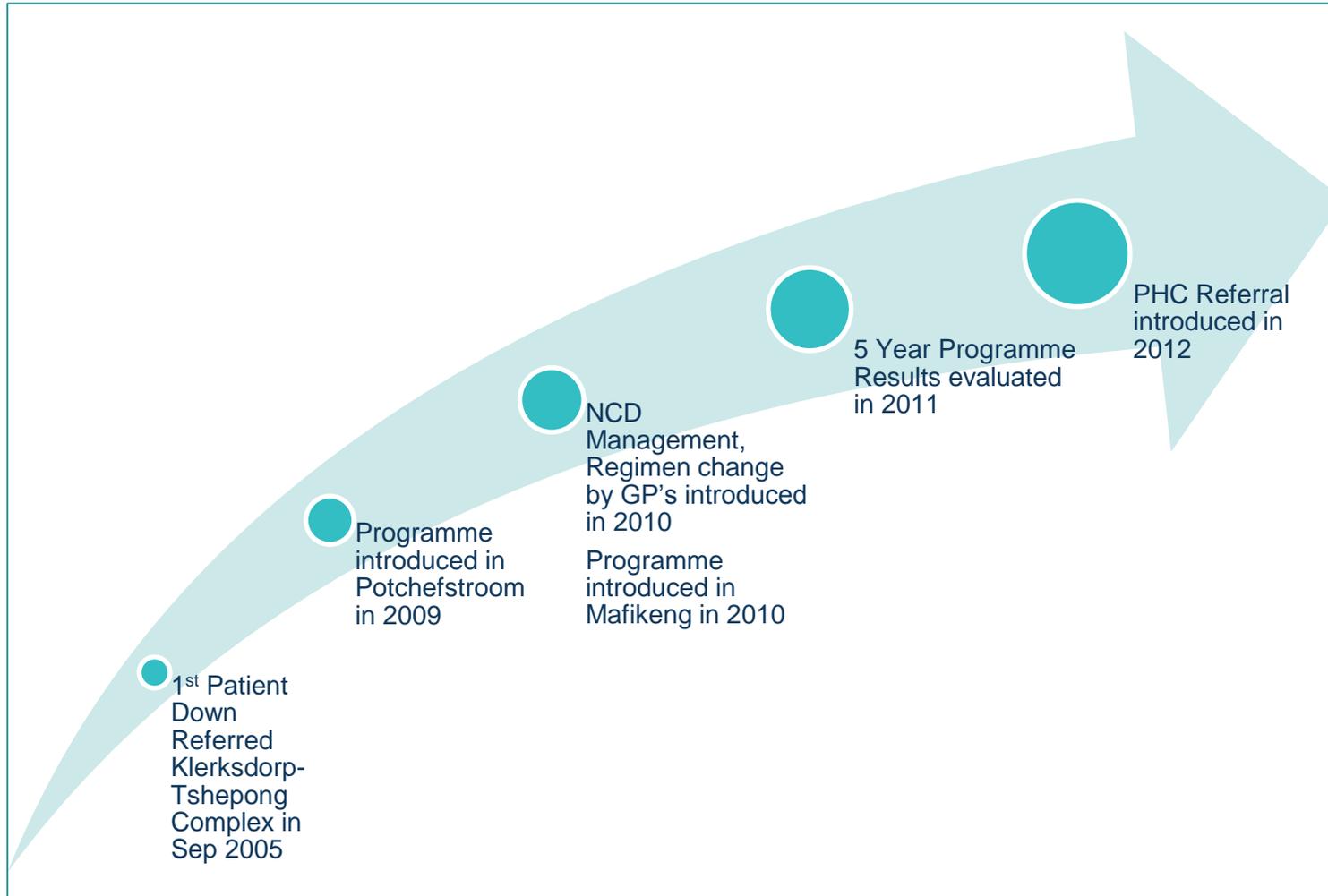
# Additional patients that can be accommodated by private GPs

## Number of Patients that can be Accommodated by GPs

Location	Number of registered private GP practices	Current maximum ART treatment gap	Range of the total additional patients that can be accommodated if 12 GP visits required per year	Range of the total additional patients that can be accommodated if only 6 visits required per year	% of total existing registered private GPs needed to meet the gap at 6 visits per year*
North West Province	509	133,000	122,500 – 235,000	245,000 – 470,000	28% – 54%
South Africa	9,544	2,000,000	2.3 – 4.4 million	4.5 – 8.8 million	23% – 44%

- Higher percentage is recommended in order to maintain low patient-doctor ratio

# Programme Milestones



# Requirements for programme scale-up

- In addition to ensuring the success factors listed earlier are implemented the following considerations should also be addressed for programme scale-up:
  - All practices in the current GP model had the infrastructural capacity to manage the expected increase in patients visiting for treatment pick-up and routine monitoring
  - Continuous professional training and/or an information dissemination mechanism to keep the private sector staff informed of changes in clinical management and guidelines
  - The continued use of appropriate information technology to monitor quality of care, clinical compliance and overall programme efficiency

# Plans

1. NW DoH requested to expand programme throughout the Province as part of the CCMDD programme
2. Province budgeted for the programme and below are projected patient numbers per district:

## Projected Number of Patients per District

DISTRICT	TOTAL CURRENT # PATIENTS	PROJECTED # OF PATIENTS
Dr KK	2484	6233
NMM	248	1760
Bojanala	---	5000
Dr RSM	---	500

3. Expansion will be in the order of the CCMDD priority districts: NMM, Bojanala and Dr RSM

# Lessons Learnt

- The most pressing challenges over the years have been the following:
  - Back and forth referral of patients to Wellness for blood draws
  - Patient dissatisfaction at having to go to PHC for pap smears, simple ailments etc. that could be addressed by GP in “HIV” visit
  - Laboratory turnaround time in processing tests & inaccuracy of reports
  - Staff movement within DoH requiring re-training on the GP model

# Summary of Key Points

- The GP Model is sustainable to meet the treatment ART gap by reaching 4.5 million patients utilising the services of only 23% of registered GPs
- This is a proven solution that has been in operation for 10 years with the assistance of private networks of GPs and dedication of DoH staff such as Prof Variava
- The subject of two independent studies, it is proven to be a successful example of NHI in action, producing cost-effective clinical and programmatic results : Average 92.8% Suppression Rate and 94.1% Retention Rate
- The model supports good governance with excellent controls

## Key Recommendations:

Achieve 90-90-90 targets by:

- Integrating the cost-effective and sustainable GP Model in the CCMDD Programmes to include other chronic conditions
- Increasing ARV collection points
- The continued use of appropriate information technology to monitor quality of care, clinical compliance and overall programme efficiency on patient level data

# Studies and Evaluations

- Existing research reports on the GP model have shown it to result in more effective patient retention with some evidence of greater viral suppression when compared to a government PHC down-referral model
- Navario (2009) found that 88.4% of the patients had suppressed viral load (defined as HIV-1 RNA <400 copies/ml) at 48months.
- Patient loss to follow up was found to be about 47% less in the GP model when compared to a government PHC model (Navario, 2009) (5/47)
- The studies also show that the probability of patient survival in the GP model at 12 and 48 months was 99% and 89% respectively and retention at 48 months remained high at 94%
- Patients in the GP model have also shown similar probability of survival regardless of the year they were enrolled into the model

# Acknowledgements

## Acknowledgements

1. Prof Variava, Chief Specialist, Tshepong Hospital
2. Mr Mokatsane, Tshepong-Klerksdorp Hospital Complex CEO
3. Ms Mojanaga, Dr Kenneth Kaunda District Chief Director
4. Mrs Randeree, Director: Hospital Services
5. Dr Nagpal, NW NHI Director
6. Mrs Mlambo, HAST Director
7. Mrs Lebeko, Tshepong Wellness Manager
8. Ms Van Reenen, District Pharmacist, Dr KK District
9. Mr Senne, ex-Chief Director: Provincial Hospitals
10. Koshmed
11. BroadReach Staff
12. USAID

## USAID Disclaimer

The creation of this material was made possible by the support of the American People through the U.S. Agency for International Development (USAID) under the Cooperative Agreements Nos. AID-674-A-12-00016 and AID-674-A-12-00038. The contents are the responsibility of BroadReach and do not necessarily reflect the views of USAID or the United States Government.

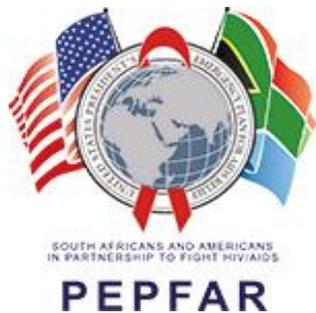
## BroadReach

BroadReach is a global healthcare solutions company dedicated to developing and implementing large scale solutions to expand access to healthcare services across the globe. We apply our expertise in global health across five core service areas: distribution networks; health systems strengthening; patient education and community mobilisation; public-private partnerships; and strategic consulting. Across each of these service areas, our work combines best practices from the public sector with business efficiency and private sector discipline to address international health challenges and opportunities. Our hybrid public/private approach has helped BroadReach create a portfolio of innovative health projects for a diverse client base including multinational corporations, small and medium enterprises, bilateral donor agencies, multilateral development banks, and other civil society organisations.

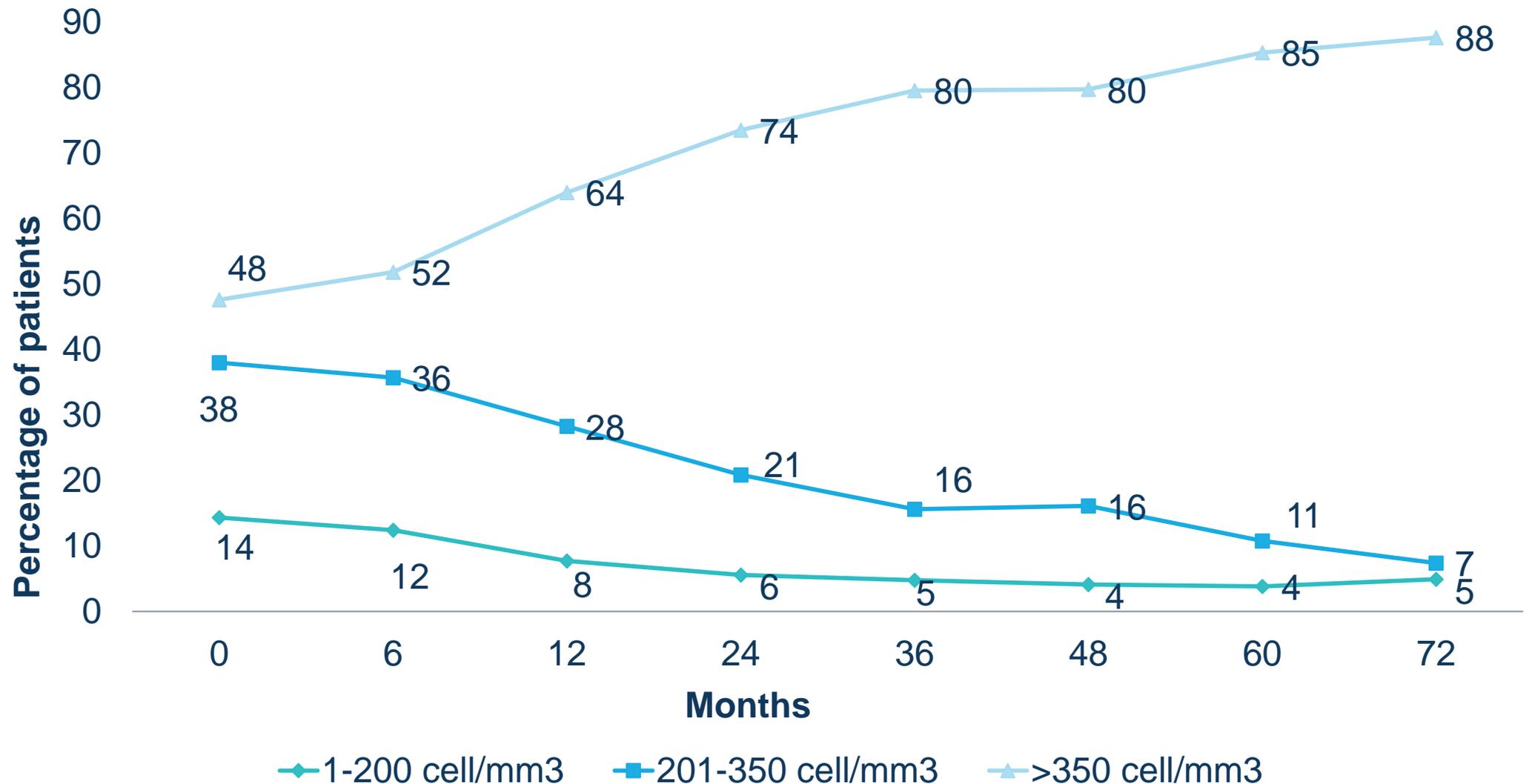
BroadReach has offices in Washington, DC; Cape Town and Johannesburg, South Africa; Nairobi, Kenya; Shanghai, China; and Zurich, Switzerland. Visit [www.brhc.com](http://www.brhc.com) for further information.

Cape Town Telephone: (021) 514 8300

Johannesburg Telephone: (011) 727 9500



# Patient CD4 counts from 0 to 72 months in the GP model



The graph shows progressive increase in the proportion of patients with CD4 counts over 350 cell/mm<sup>3</sup> from time of down-referral to the GP programme and 72 months on ART.