inPractice® Africa

Information *in*time | Education *in*depth

Edward King
Chief Innovation Officer
Clinical Care Options, LLC

inPracticeAfrica.com

Who we are

CLINICAL CARE OPTIONS®

A global leader in the development of innovative, interactive, online, and live CME/CE-certified continuing education programs and proprietary medical education technologies for healthcare professionals

*in*Practice®

Launched in 2009, *in*Practice® is a continually updated point-of-care clinical reference tool that can also be used for structured learning. Available for multiple therapeutic areas: HIV; oncology; oncology nursing; rheumatology; viral hepatitis

*in*Practice® Africa

Information *in*time | Education *in*depth

Launched in April 2013, a version of *in*Practice developed specifically for use in resource-constrained settings, with unique technology and content features

Challenges in medical education in resource-constrained settings

- In settings where the Internet is unavailable, unreliable, and/or costly, clinicians are deprived of digital tools
- Even in resource-constrained settings (RCS) that do have Internet access, most digital medical resources do not reflect the realities of those settings (eg, diagnostics, treatments, equipment, personnel)
- Consequently, much medical education in RCS comprises in-person training sessions
  - Requires thinly stretched clinicians to travel lengthy distances and be absent for multiple days from the patients who require their care.
- In addition, many resources are produced in offline formats such as printed manuals, CD-ROMs, or PowerPoint slidesets that cannot be updated when treatment options or guidelines change, so outdated information circulates long after it has become redundant.

Our response: *in*Practice® Africa

- Adaptation of *in*Practice to address the identified needs
- South African partners:
  - Foundation for Professional Development
  - University of the Witwatersrand
- Public-private alliance for grant support

*in*Practice Africa: key features

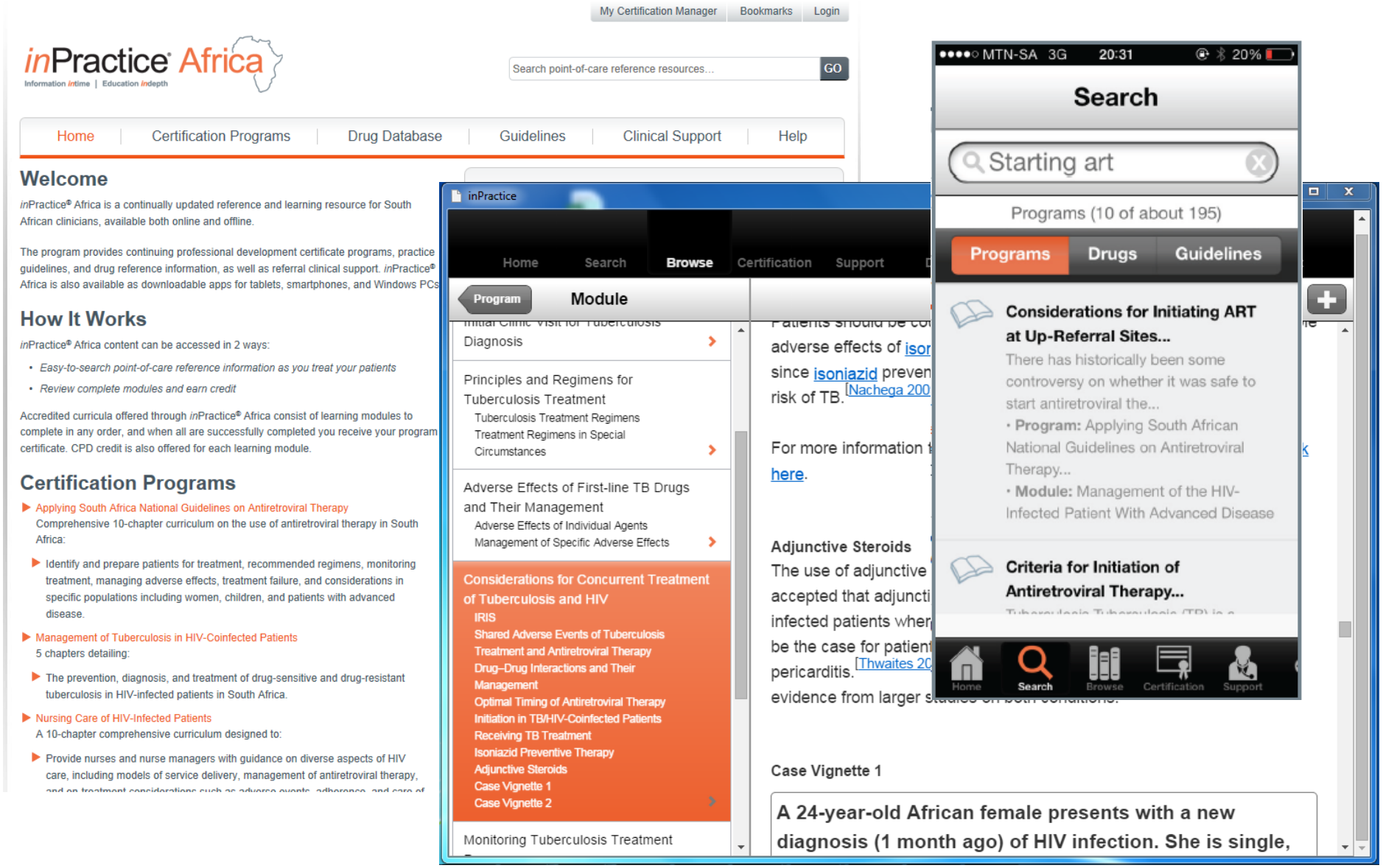
- Web site adapted for low-bandwidth settings
- Offline as well as online functionality
- Use for structured education or to search for info at the point of care
- 3 new curricula created with South African faculty
  - Applying national guidelines on antiretroviral therapy (10 modules)
  - TB in HIV-infected patients (5 modules)
  - Nursing care for HIV (10 modules)
- Reference database of HIV and TB drugs used in South Africa
- Full-text South African and WHO practice guidelines
- South African CPD certification, plus certificates recognizing curriculum completion

Offline apps for Android, Apple, and Windows

- Available for Windows (XP and later) via CD-ROM as well as Android and Apple phones and tablets
- Installed once and can then be used everywhere, regardless of Internet availability
  - Includes full text of 25 modules, drug database, and guidelines
  - Interactive case studies and CPD tests can be taken offline
  - Multitenancy: multiple users can share the same device with their own “local account”
- If connected to Internet, content updates are downloaded, test results and participation metrics are uploaded for all users

Tracking and reporting

- Metrics recorded for each participant include
  - Number of visits
  - All searches
  - Responses to case vignettes within each module
  - CPD tests completed
  - Curriculum certificates earned
- Can be used for basic assessment of educational gaps
- Provides data required for countries that are formalizing their accreditation process and allows reporting of progress to the MOH and other bodies



inPracticeAfrica.com

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CLINICAL CARE OPTIONS®

Welcome, Edward King
My Certification Manager
Bookmarks
Logout
inPractice Africa
Information intime | Education indepth
Search point-of-care reference resources...
GO
Home
Certification Programs
Drug Database
Guidelines
Clinical Support
Help
Welcome
inPractice® Africa is a continually updated reference and learning resource for South African clinicians, available both online and offline.
The program provides continuing professional development certificate programs, practice guidelines, and drug reference information, as well as referral clinical support. inPractice® Africa is also available as downloadable apps for tablets, smartphones, and Windows PCs.
How It Works
inPractice® Africa content can be accessed in 2 ways:
Easy-to-search point-of-care reference information as you treat your patients
Review complete modules and earn credit
Accredited curricula offered through inPractice® Africa consist of learning modules to complete in any order, and when all are successfully completed you receive your program certificate. CPD credit is also offered for each learning module.
Certification Programs
Applying South Africa National Guidelines on Antiretroviral Therapy
Comprehensive 10-chapter curriculum on the use of antiretroviral therapy in South Africa:
Identify and prepare patients for treatment, recommended regimens, monitoring treatment, managing adverse effects, treatment failure, and considerations in specific populations including women, children, and patients with advanced disease.
Management of Tuberculosis in HIV-Coinfected Patients
5 chapters detailing:
The prevention, diagnosis, and treatment of drug-sensitive and drug-resistant tuberculosis in HIV-infected patients in South Africa.
Nursing Care of HIV-Infected Patients
A 10-chapter comprehensive curriculum designed to:
Provide nurses and nurse managers with guidance on diverse aspects of HIV
How to Get Started
First, register with inPractice® Africa, then access content and download applications. Click here to register.
To take tests or receive certificates, you must be registered with the Foundation for Professional Development (FPD). Click here to get an FPD student ID.
inPractice® Africa includes apps for iOS (Apple), Android tablets and smartphones, and for Windows PCs. Click here to download the app.
Start learning now. To search for the information you need, enter a search term in the main search bar in the upper right-hand corner. To study the curricula, click on the title of one of the 3 accredited programs above.
Need technical support? Forgot your FPD student ID? Click the help link above to access technical or program support.
For more information on how to use this site, click here.
inPractice® Africa at a Glance
The mission of the inPractice® Africa program is to provide physicians, nurses, and other healthcare professionals in both resource-rich and resource-constrained settings with relevant, practical training and certification to support and improve the existing healthcare infrastructure, clinician education, and patient outcomes. It is currently designed to support South African physicians and nurses in the management of HIV-infected and HIV/tuberculosis-coinfected patients.
Browse to curricula, drug database, and guidelines
Training modules written by country experts
A single search queries all of the content
Referral to existing support services
inPractice®
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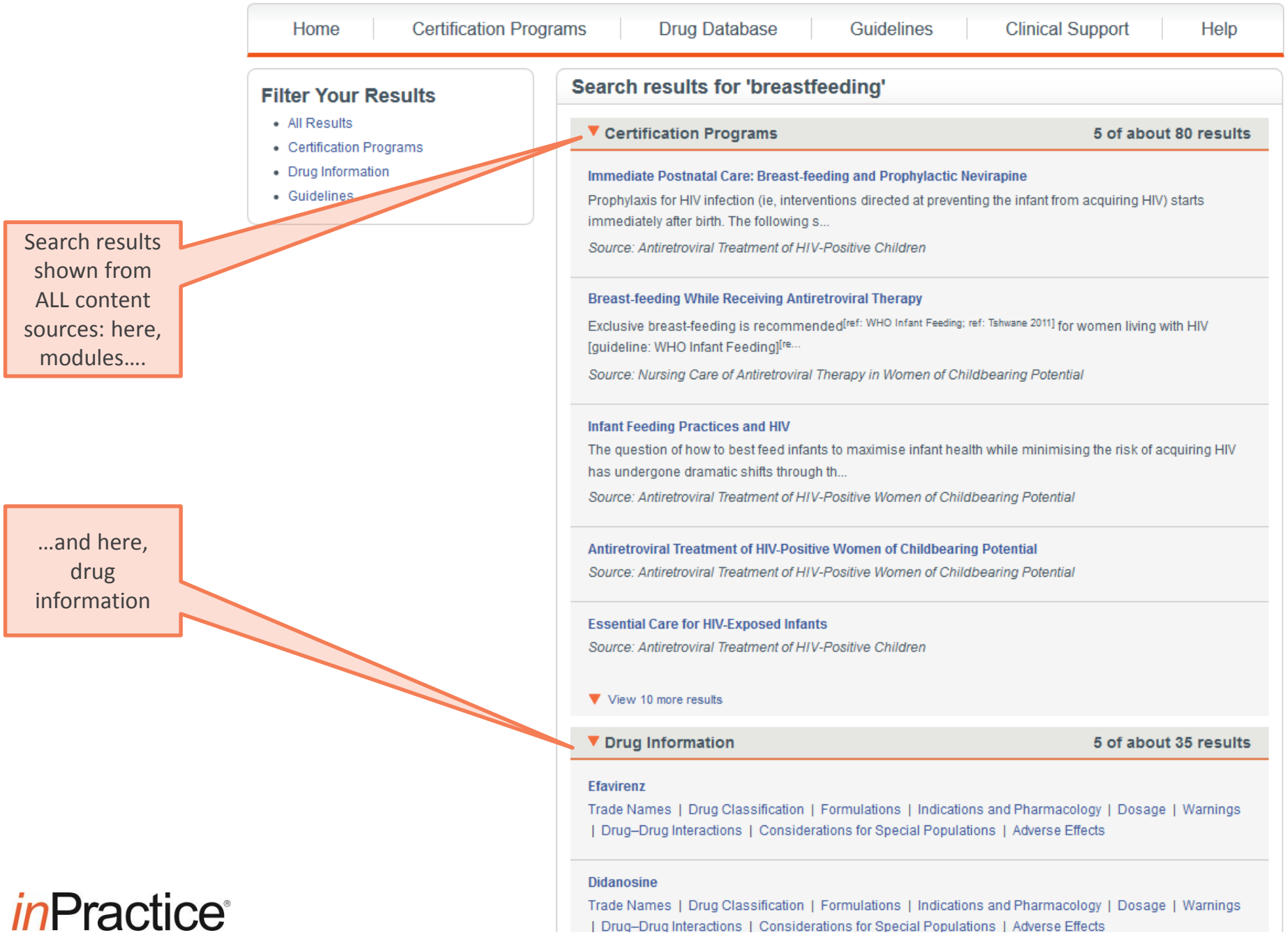

Search results shown from ALL content sources: here, modules….

…and here, drug information

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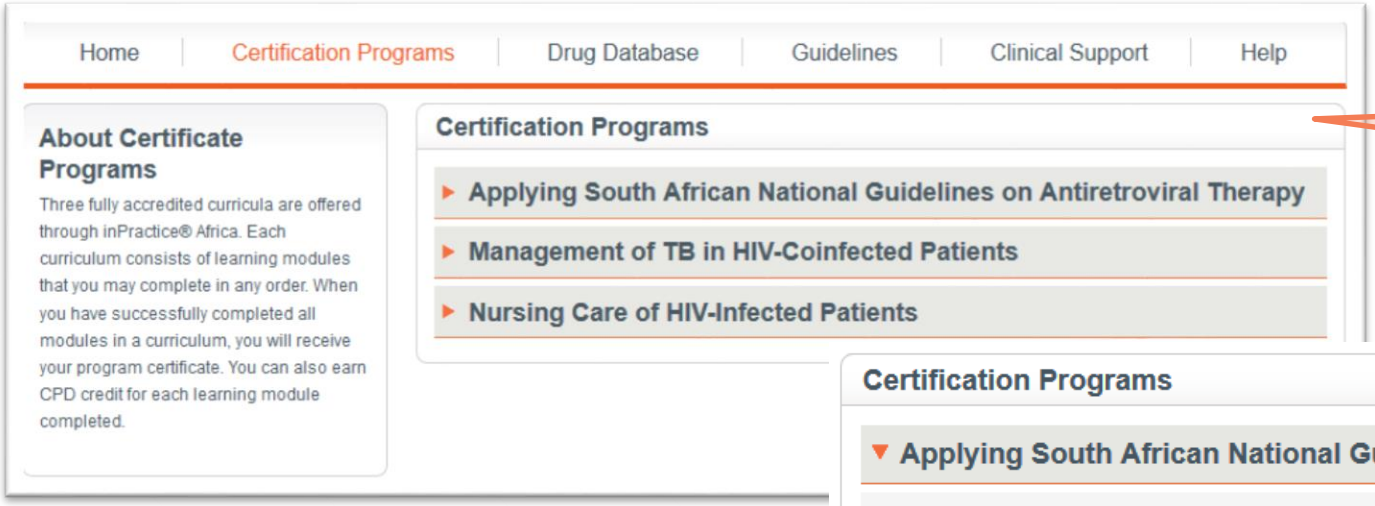

3 different curricula available…

…each containing multiple CPD modules…

…updated whenever key information changes

inPractice®

Hyperlinked TOC always available

Drug names all linked to drug information

References all linked to source information

CPD credit available

Guidelines all linked to full-text PDFs

Tables and figures included

Table of Contents

Antiretroviral Treatment of HIV-Positive Children
- Introduction
- HIV-Exposed Infants
  - **Breast-feeding and Nevirapine**
  - Assessment and Referral
  - Case Vignette 1
  - Cotrimoxazole Prophylaxis
  - BCG Vaccination
  - Vaccinations
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  - Developmental Problems
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  - HIV Disclosure
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- Adolescents
- Module Test
- Module Evaluation
- Tables and Figures

Applying National Guidelines on ART - ART for Children

Authors: Mark Cotton, MD; Louise Kuhn, PhD
Editor In Chief: Ian M. Sanne, MBBCH, FCP(SA) (More Info)

Last Reviewed: April 26, 2013 (What's New)

CREDIT INFORMATION

inPractice® Africa's Continuing Education Unit (CEU) provider, FPD, offers clinicians 3 CPD points for completing this individual module. To learn more on how to earn CPD credit, click here.

Recommend 0

Immediate Postnatal Care: Breast-feeding and Prophylactic Nevirapine

Prophylaxis for HIV infection (ie, interventions directed at preventing the infant from acquiring HIV) starts immediately after birth. The following steps should be taken within 1 hour of delivery (Management Guidelines for NDOH Policy):

- Infants born to HIV-infected women should receive skin-to-skin contact with their mothers, regardless of infant feeding choice.
- All infants should start feeding (exclusive breastfeeding is recommended).
- HIV-exposed infants should receive nevirapine prophylaxis immediately after birth or very soon after (within a 72 hour window).
- After delivery and prior to discharge, a complete treatment plan should be developed for the mother-infant pair.[SA NDOH PMTCT] Ensure that the mother understands the planned course of treatment and that the road-to-health booklet (RTHB) is completed prior to discharge. Completion of the RTHB should include a record of prenatal HIV treatment and prophylaxis, maternal illnesses, any HIV prophylaxis received by the infant and the intended method of feeding. Should the mother/caregiver become concerned about an infant's health due to poor feeding, jaundice, or lethargy, they should be counselled to return to a health care facility immediately.

Table 1 includes the postnatal care provided to mother and infant from birth to 18 months of age. See subsequent sections of this chapter for a more complete discussion of infant care.

For more information on postnatal care for the HIV-infected mother, click here.

Table 1. Postnatal Care for HIV-Infected Women and Their Infants to 18 Months of Age*[SA NDOH HIV]

	First 6 Wks	EPI Visit Wk 6	EPI Visits Wks 10 and 14	Visits at Mos 6 (EPI), 9 (EPI), 12, and 18 (EPI)
Mother†	Any postnatal visit • ART	• Cervical screening	• Evaluate adherence to ART	• If still breast-feeding, continue ◦ Counsel to

Hyperlinks open in bubbles so you don't lose your place….

…but let you drill into detailed information when you need it

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Recommend 0 | Claim Credit | Save | Share | Print

◀ Previous Section

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Nevirapine

- Trade Names
- Drug Classification
- Formulations
- Indications and Pharmacology
- Dosage
- Warnings
- Drug–Drug Interactions
- Considerations for Special Populations
- Adverse Effects

Drug Detail

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Nevirapine

Last Updated April 26, 2013

Trade Names

- Nevirapine: *Viramune, Aspen Nevirapine, Auro-Nevirapine, Cipla-Nevirapine, Adco-Nevirapine, Sonke Nevirapine;*
- Stavudine/lamivudine/nevirapine: *Triomune-30, Triomune-40*

Drug Classification

Nonnucleoside reverse transcriptase inhibitor antiretroviral.

Formulations

- Nevirapine: 200 mg tablets; 50 mg/5 mL suspension;
- Stavudine/lamivudine/nevirapine: 30/150/200 mg and 40/150/200 mg tablets

Indications and Pharmacology

Indication: treatment of HIV infection in combination with other antiretrovirals, reduction of perinatal transmission of HIV.

Mechanism of action*: binds directly to reverse transcriptase, which interferes with HIV viral RNA–dependent DNA polymerase inhibiting viral replication.

Pharmacokinetics: metabolized in the liver by CYP 3A4 and 2B6. CYP 3A4 and 2B6 inducer. Half life: 25-30 hours; autoinducer.

Dosage

Adult Dose: 200 mg once daily x 14 days, then 200 mg twice daily.

- Omit lead-in phase if patient is receiving rifampicin.†

Prevention of mother-to-child transmission: 200 mg to mother at onset of labour.

Use in Renal or Hepatic Insufficiency:

- No dose adjustments needed in renal insufficiency.*
- Use with caution in hepatic impairment or porphyria. Avoid if significant hepatic impairment or active hepatitis B or C.†

Use in Pregnancy and Breastfeeding: Category C. Excreted into breast milk. Safety in lactation not established.

Home | Certification Programs | Drug Database | Guidelines | Clinical Support | Help

Mobile Applications

Click on the links below to download your inPractice® Africa application.

iPhone/iPad

Android

Apps for phones and tablets

Take inPractice® Africa With You Everywhere You Go—Online or Offline!

Take tests, earn credit, reference drugs, and get clinical support in your clinical setting right from your smartphone, tablet, or PC. With each app you get:

- Point-of-care reference resources at your fingertips
- Regularly updated modules by and for South African clinicians
- 3 continuing professional development certificate programs
- Ability to take tests and earn credit in your clinical setting
- South African practice guidelines
- South African drug reference information
- Referral clinical support for clinicians

All inPractice® Africa apps offer the ability to operate when not connected to the Internet—in offline mode—allowing you to use almost all of the features of the application when not connected to the Internet.

Technical Support

Having trouble downloading the application? Forgot your user name and password? Email techhelp@inpracticeafrica.com to access technical support.

For inPractice Africa telephone assistance, please call +27 (0)11 083 7130. Our team will return your call in 24 hours.

For any other help, click here.

Windows version available on CD

Installable versions can be used entirely offline. If they go online, updates are downloaded and usage metrics are uploaded

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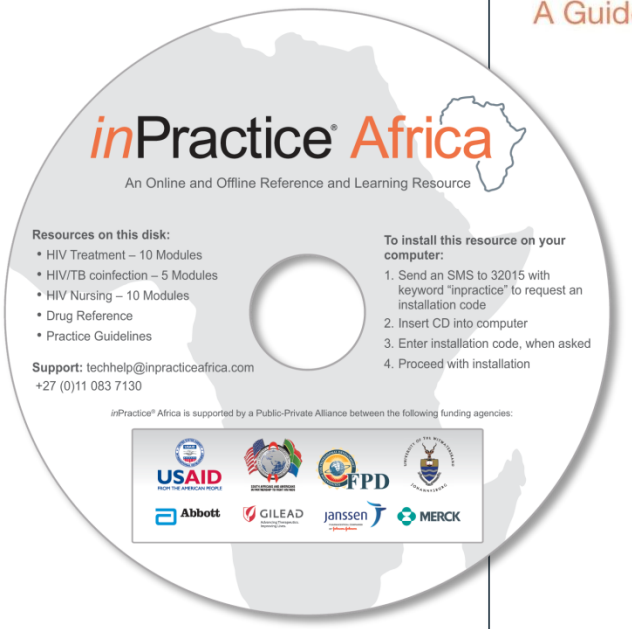
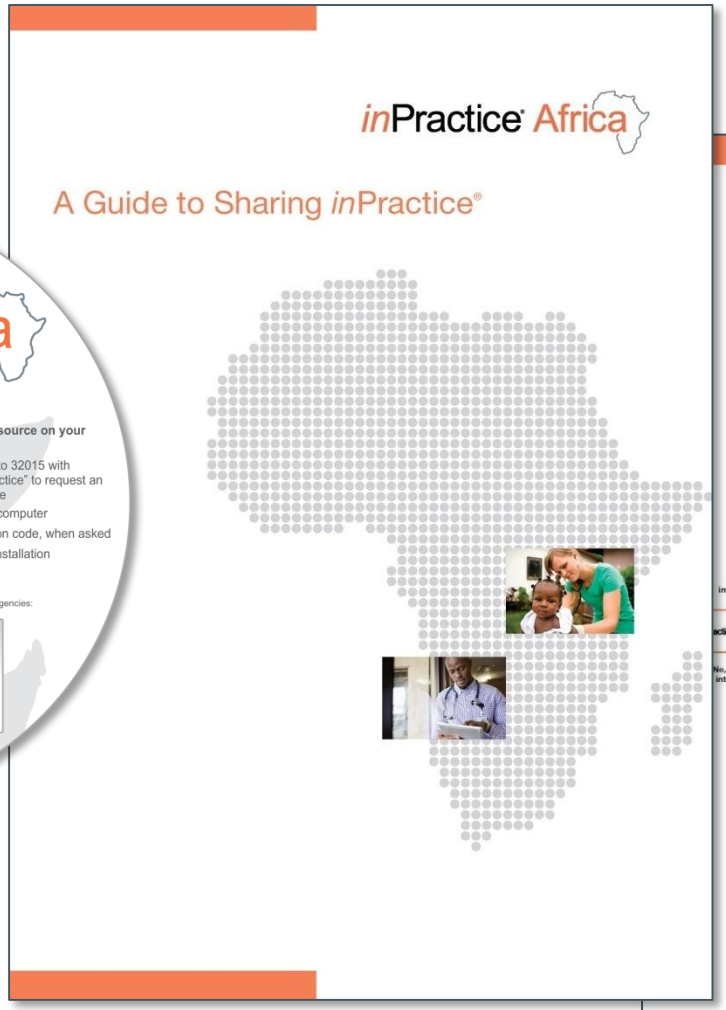
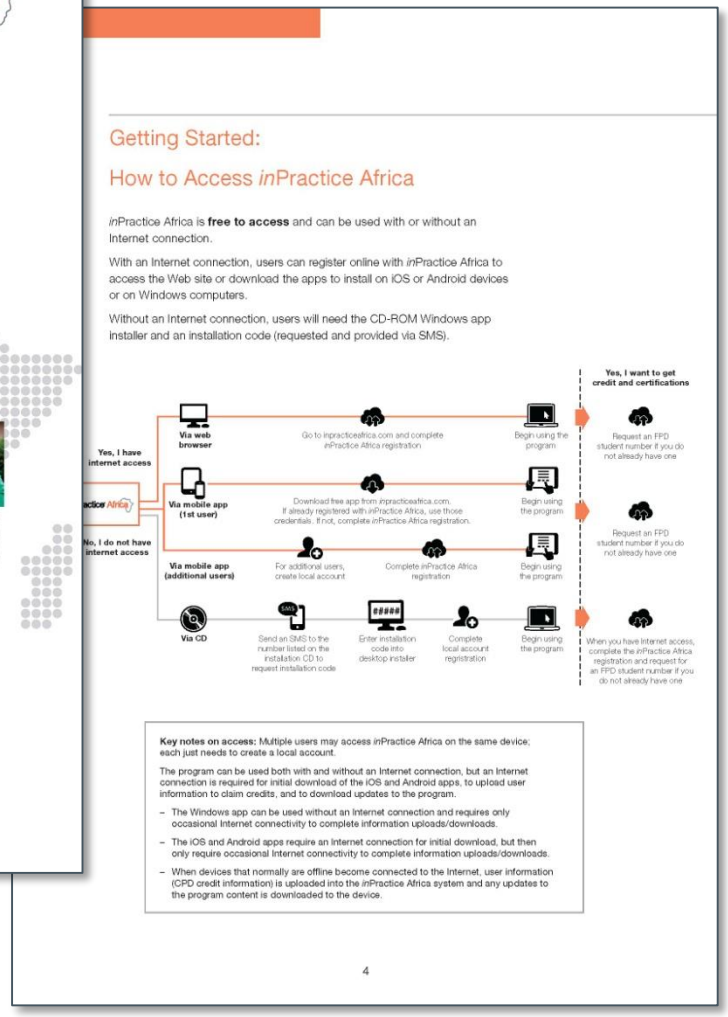
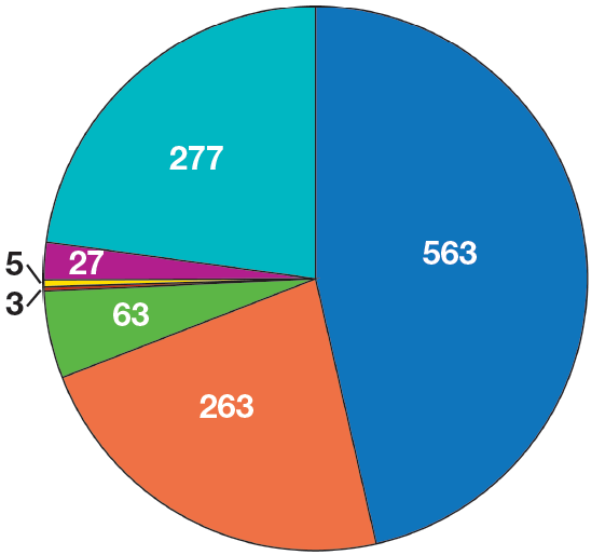
Training guides





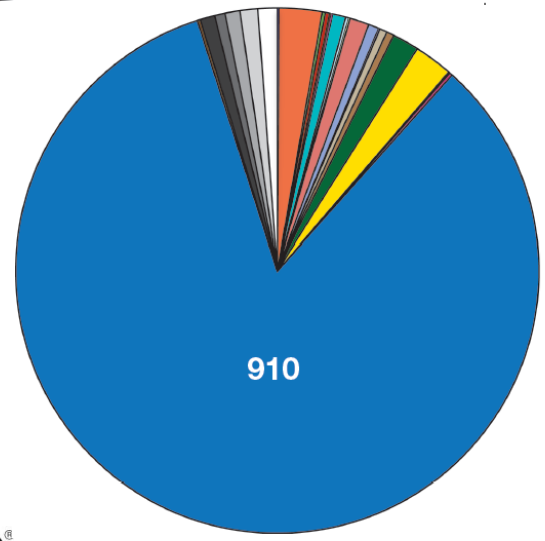


Current users (as of July 2014)



Users by Profession (Total users = 1,213)

- Physicians
- Nurses
- Pharmacists
- Nurse practitioners
- Physician assistants
- Other healthcare professionals
- Non-healthcare professionals



- Algeria
- Botswana
- Cameroon
- Congo
- Côte D'Ivoire
- Egypt
- Ethiopia
- Ghana
- Guinea
- Kenya
- Lesotho
- Libyan Arab Jamahiriya
- Malawi
- Mozambique
- Namibia
- Nigeria
- Papua New Guinea
- Rwanda
- **South Africa**
- Sudan
- Swaziland
- Tanzania
- Uganda
- Zambia
- Zimbabwe

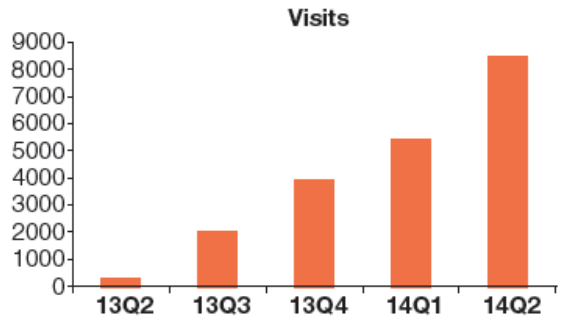
*in*Practice Africa: A Unique Offline and Online Interactive Training and Point-of-Care Resource to Provide Digital Medical Education in Settings With Limited or No Internet Access. USAID/PEPFAR-Funded Pilot Program

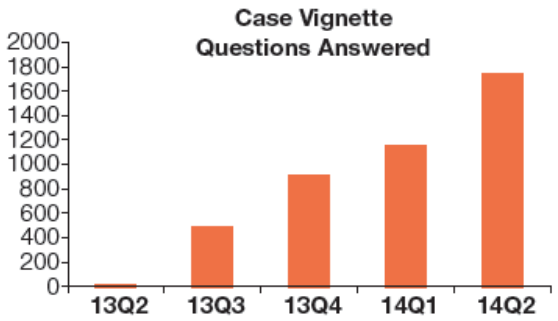
Dual Use: Point-of-Care Decision Making and Structured Education

Curricula	Unique Users	CPD Credits Earned
Applying South African National Guidelines on Antiretroviral Therapy	595	1587
Management of TB in HIV-Coinfected Patients	363	642
Nursing Care of HIV-Infected Patients	219	588

In 1 year:

- 2817 module credits were claimed
- 939 module certificates were earned
- 73 curriculum certificates were earned





Mobile Applications

Use of the Apple, Android, and Windows apps

- 140 unique users of the apps
- 719 unique visits via the apps
- 53 searches
- 171 questions answered

King E, et al. 20th International AIDS Conference. Abstract WEPE419.

Key learnings: Partnerships

- Outreach to clinicians on what the resource is and how to use it is critical
  - Need multiple avenues for reach and distribution
- Local partnerships are a key cornerstone to success
  - Academic oversight from Wits and involvement of leading South African authors and editors provides significant credibility
  - FPD brought a significant network of trainees for the program and offered many outlets for outreach and recruitment through their existing programs
  - SAHIVCS endorsed and recommended the program to their members and we set up accounts for them

Key learnings: Technology

- Users report that offline functionality is indeed critical to minimize real-world barriers to use
- Need to support multiple different platforms
  - At this conference, we have installed software for users on Windows, iPhone, iPad, Android phone, and Android tablets!
  - Users may need help in understanding their device itself (eg, how to install apps), not just in using the inPractice software
- Need to generate metrics, integrate with existing systems is essential but adds some complexity
  - eg, to track participation, users must set up an account and sign in
  - eg, to earn CPD credits, users must register with the provider

Conclusion

- Digital education can be successfully extended to resource-limited settings through technology that works both online and offline
- An appropriate technology platform can provide both structured training and a resource to enable clinicians to find answers to specific management questions at the point of care
- Partnerships with local organizations to provide distribution and training are essential to ensure effective engagement
- We are currently completing evaluation and final report to USAID
- Discussion ongoing with USAID and other funders/partners regarding program expansion within South Africa and new projects in other countries in Africa