Making savings in HIV Care delivery: Are nurse led initiatives the future?

Thembi C Moyo ~ Churchill Fellow 2016

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Abbreviations and acronyms

ART	Antiretroviral therapy-combination of up to three medicines that stop the HIV virus multiplying.
CPD	Continuing Professional Development
DOH	Department of Health
FPD	Foundation for Professional Development
HIV	Human immunodeficiency virus
MSM	Men who have sex with men
NHS	National Health Service
NIMART	Nurse Initiated and Managed ART
PLWHIV	People living with the HIV virus
POCT	Point of care test
PrEP	Pre (HIV) exposure prophylaxis- a combination of antiretroviral medicines taken before possible exposure to HIV to prevent infection
SDP	Shared Delivery Plan
SWOT	Strength Weaknesses Opportunities Threats
TB	Tuberculosis

The Author

Thembi Moyo RGN,BA Cur (UNISA)Care and Management HIV/AIDS, Dip Women's Health & Contraception, Non-Medical Prescriber (King's College, London). I am a Clinical Nurse Specialist HIV at Lewisham Hospital, London. Lead in Women and Sexual Health research and I have a keen interest in delivering a service which, not only empowers patients to take an active role in their care but also to see development of a competent, motivated, autonomous expert clinical HIV nursing practitioner role which could be a viable solution to the National Health Service (NHS) fiscal pressures by delivering cost-effective high quality health care.

My nursing work experience spans more than 30 years both in Africa and England, working in the HIV field for the last 15 years. I also volunteer with a UK based HIV charity JUSTRI (The training and resource initiative) conducting skill building weekend workshops with HIV/Infectious Diseases Nurse colleagues in the Eastern Europe, Middle East and North African region.

Executive Summary

In the thirty years since the start of the HIV pandemic, significant medical advances have been achieved, particularly the development of antiretroviral therapy (ART), such that HIV is now a chronic condition that can be managed with medical treatment and care. This is a brilliant state of affairs but unfortunately it means HIV is no longer as high a political priority as it once was, and has to 'compete' for limited resources against many other services within the NHS.

The department of Health (DOH)'s annual report and accounts (2015-16) announced the shared delivery plan (SDP) to create a health and care system, milestones and metrics, that will deliver the NHS Five Year Forward View whose objectives includes, to name a few;

- Creating the safest, high quality healthcare service,
- Improving performance against core standards whilst achieving financial balance,
- Supporting innovation BUT against a backdrop of a £2.45 billion deficit!
- The HIV budget also had a 2-3% cut 2015/16.

The Churchill Fellowship enabled me to travel and explore how two financially challenged developing countries, Malawi and South Africa, have responded to the huge challenge posed by very high numbers of HIV infected populations, and have successfully rolled out HIV treatment programmes through investing in extending the role of nurses enabling them to manage and deliver quality HIV care and treatment to patients.

The project's intention is to demonstrate the possibility of making similar savings in delivering HIV care in the UK, whilst still maintaining high quality, by investing and developing the nursing workforce. I gathered information through observation, shadowing nurses in clinics, enquiring about different concepts, interviews and sharing of knowledge and experiences with the clinical teams at The Lighthouse Lilongwe, Malawi and at the Ivan Toms Clinic, Woodstock Hospital, Anova Health Institute project Health4Men Initiative.

While the two regions that I visited operate under a different healthcare system and are a very different environment to the NHS, the care delivered is integrated, provided largely by nurses, and the patients receive quality care making efficient use of limited resources. The project will enable me to demonstrate the huge capacity that nurses have to case manage and deliver safe comprehensive care to patients infected with HIV, and my vision is that nurses in the UK will be motivated to develop the role and scope of practice that reflects their clinical expertise, case management and leadership skills (which they already have) for maximum effectiveness. The question I wanted to answer was: *Making savings in HIV care delivery; Are Nurse-led initiatives the future?*

Major findings

Patient needs and challenges are similar in South Africa and Malawi. The HIV epidemic in both countries evolved to become one of the major causes of mortality and morbidity in the 21st century and placed a very high demand on the health care system and economy. One of the pragmatic responses by both governments was to develop strategic plans to deliver HIV care within a very short time (UNAIDS 2015). In both South Africa and Malawi, nurses are the largest group of healthcare professionals in direct contact with patients, and are well positioned to implement new developments.

The model of care of HIV care before 2010:

- Centralised
- Hospital-centred
- Doctor-driven
- Stand-alone ART clinics

Because of urgent need both the Malawi and the South African governments, together with national and international funders, developed a strategy that would build capacity, strengthen the existing systems and achieve the current model of HIV care.

The current model of HIV care

- Decentralised
- Primary healthcare-centred
- **Professional Nurse driven**
- Integrated into the primary healthcare model.

The strength and backbone of this model hinges on extensive training and mentorship of the professional nurses, as well as other healthcare professionals; an accountable public sector health care management culture, and effective leadership.

The foundation for professional development (FPD) developed a five day NIMART training course that included a revision of basic HIV and opportunistic infections in adults and children, the appropriate investigations, diagnosis and treatment of HIV, TB and STIs. The theory was reinforced by case study discussions and role-play exercises.

The Lighthouse in Lilongwe Malawi is a training and assessment centre for the healthcare personnel working with patients living with HIV nationally.

In both countries, it is mandatory that any nurse working in HIV care is trained in the specialty before commencing work and all nurses are sent for the appropriate training as part of their induction.

Major recommendations

The same investment in nurses needs to be made by the NHS/UK HIV teams, as nurses can play a crucial role in achieving the proposed cost savings. We, the UK HIV nurses, need to scope the current nurse-led service:-

- Service summary
- Patient experience
- Current SWOT analysis
- Gap analysis
- Case load and evidence of activity
- Trust wide development plans
- Nurse service key performance indicators
- Best practice guidance

And then influence workforce redesign as identified in the audit (Apollo Nursing Resource).
I will share my Fellowship visit findings with colleagues, our teams in and around London clinics, and at the national nurses HIV conference and I will apply to speak on the HIV study days.

Introduction

England's HIV services have a track record of outstanding clinical outcomes, among one of the best in the world. People living with HIV can now live long productive lives and can have the same life expectancy as anyone else, if treatment is started early. Therefore the future of HIV care services must be designed to reflect the long-term prognosis of people living with HIV. Around 101,200 people are estimated to be living with HIV in the UK (PHE 2015), of which 6,095 were new diagnoses in 2014.

As people with HIV now live into old age, they are likely to develop additional long-term medical problems and HIV teams are increasingly required to adapt their services to embrace the increasing numbers they care for, and the growing needs of their population, in a sustainable way. However, this adaptation is occurring within the constraints of severe financial challenges faced by the NHS, and currently rising healthcare costs are unmatched by funding (Keogh, 2014).

In June 2015, there was a government announcement that the HIV budget was to be cut by 2-3%. This prompted me to look at how other countries have dealt with similar health challenges and their different models of care, in particular nurse-led delivery and management of HIV positive patients. The World Health Organization has termed the nurse-led delivery model as "task shifting". Task shifting is a practical, sustainable and cost effective healthcare delivery method that is appropriate for most healthcare services. It was initially developed to alleviate the acute and crippling shortages of medical personnel, particularly in developing nations. Importantly, the WHO guidelines identify and define the key elements of task shifting with the emphasis that care should remain safe, efficient, effective, equitable and sustainable (Don de Savigny & Adams 2010). A South African study (Wood R et al 2009) has demonstrated that nurse monitored ART can achieve these key elements of task shifting and is non-inferior to doctor-monitored therapy, as long as the nurses are appropriately trained.

UK Context

The current financial pressures in the NHS and the changes in how healthcare is costed and delivered have all had significant consequences across all diseases and all pathways. Specialist nurses are able and skilled experts in their field and, with investment of further leadership, workforce development and shared governance, can help design models of care that can effect cost improvement without compromising on quality.

My hospital Trust

The Lewisham and Greenwich Trust Operating Plan (2017-18) is keen to work with local service development and locally agreed quality and safety improvement initiatives to improve pathways focusing on

- Safety-to ensure the right systems and staff in place
- Clinical effectiveness-to provide the highest quality care whilst also being efficient and cost-effective
- Caring and responsive-to meet our patients emotional as well as physical needs.

This is an opportunity for HIV nurses to take the challenge and develop the service in the way that will meet patient needs cost effectively. Other chronic disease areas already have nurses working at these advanced roles in post and provide efficient, high quality and cost effective care that achieve the desired outcomes.

A call for nurses to be creative

In the context of this project, the role of a nurse specialist within a UK context is as follows: Nurse specialists are experts in a particular aspect of nursing care and demonstrate refined clinical practice either as a result of significant experience or advanced expertise or knowledge in a branch or specialty. This specialist role is given different titles, which are used interchangeably;

- Nurse Practitioner
- Clinical Nurse Specialist
- Specialist Practitioner
- Advanced Nurse Practitioner

HIV nurses (Clinical Nurse Specialist (CNS) or Advanced Nurse Practitioner (ANP) guide patients through their most vulnerable and life changing moment of an HIV diagnosis and literally, as well as metaphorically, hold the patient's hand throughout their journey. Specialist Nurses working in HIV care have a wide and deep knowledge of their specialty and therefore nurse delivered care should be a recognized and integral part of the multidisciplinary approach to patient management.

The potential role of HIV Specialist nurses

The NHS Five Year Forward View (2014) has provided new and real opportunities for specialist nurses to lead, integrate and develop efficient and effective care for people living with HIV (PLWHIV). The BHIVA Standards of care for PLWHIV Standard 11(2013) states that 'People living with HIV should be receiving care overseen by a consultant physician specialist in HIV

and provided by practitioners with appropriate competencies within suitable and recognized governance and management structures.' Nurses working in HIV care are well placed to respond to that challenging call.

The aims, objectives, and purpose of the project

The main aim of the project is to encourage specialist nurses in the UK to innovate, design and adopt pathways, which will adequately respond to the ongoing need of PLWHIV in their care, who are in need of safe, high quality; well-coordinated, patient-centred care and which delivers value for money. Tools are already in place to support the development and/or implementation of the nurse led role into the broader HIV healthcare delivery system. Through the dissemination of this report, I hope to encourage nurses to take up the challenge and develop more nurse-led roles within HIV care.

The objectives of my visit were to talk to the nurses in Malawi and South Africa and find out:

- How their role has evolved and embraced the added demand on the already overstretched resources
- What was extent of the educational preparation which has enabled them to fulfil the role, the challenges and pitfalls
- Governance
- Mentoring
- What are the tools which assist them in their clinical decisions making care pathways and algorithms
- How much support they have from the medical teams-clinical supervision
- The extent of their continuous professional development
- What audits, measure of success and quality standards are completed

Findings

Malawi

Demographics in context:

- Population 18.3 million (2016)
- Life expectancy 63.80 (2016)(World Population Review 2016)

HIV status at a glance

The first HIV case was diagnosed in 1985. The epidemic has now affected all sectors of society children, the youths, adults, men and women.

UNAIDS (2015) statistics:

Number of people living with HIV

- 980 000 [900 000 - 1 100 000]
  9.1 prevalence rate

Adults aged 15 and over living with HIV

- 890 000 [820 000 - 970 000]

Women aged 15 and over living with HIV

- 540 000 [500 000 - 590 000]

Children aged 0 to 14 living with HIV

- 84 000 [75 000 - 92 000]

Deaths due to AIDS

- 27 000 [22 000 - 31 000]

Orphans due to AIDS aged 0 to 17

- 530 000 [460 000 - 590 000]

Malawi overview

Malawi has a severe shortage of doctors and healthcare is mainly provided by clinical officers and nurses, (Brugha, R et al). More than 95% of HIV care in the capital city Lilongwe is

delivered at The Lighthouse Trust, Kamuzu Central Hospital and Martin Preuss Centre at Bwaila Hospital. It is delivered by clinical officers and nurses, which is not unique and the same pattern of using clinical officers and nurses rather than doctors has been adopted nationwide. In 2003, there were 2 doctors and 6 nurses to 100,000 population (Hornby and Ozcan, 2003). As a result of such small numbers of medical personnel, and a high disease burden from the HIV/AIDS epidemic, a pragmatic healthcare human resource development had to urgently be implemented by the Malawi Ministry of Health (MOH) with the assistance of World Health Organization (WHO) using the health systems framework tool.

The building blocks of this health system framework are:

- An effective service delivery
- An efficient healthcare workforce
- Provision of timely accurate information/policy/guidelines
- Adequate medical supplies
- Adequate financing
- Good governance and accountability of the leadership

The system components interact at different levels with the aim of achieving the shared purpose of delivering:

- Equitable improved national health
- Responsive to the nation's need
- Improved efficiency
- Social and financial risk protection (WHO 2009).

The setup, organization and function of The Lighthouse Trust, where I spent part of my Fellowship, reflects a transparent health system approach and has been awarded several awards of excellence by the Ministry of Health.

Figure 1Ministry of Health award for excellence

The Lighthouse Trust

Figure 2 The Lighthouse courtyard garden

The Lighthouse history

The Lighthouse Trust is a WHO recognised Centre of Excellence and it works in close coordination with the MOH to operate the two large integrated HIV testing, treatment and care clinics; one on the campus of Kamuzu Central Hospital and another at Bwaila Hospital under the Lilongwe District Health Office. The Lighthouse was the first specialist centre in Malawi for the care and support of PLWHIV and AIDS, providing a comprehensive range of services. In 2002 The Lighthouse Trust was among the first public clinics to provide life-serving ART for HIV infected patients. (Phiri. S 2004)

The ambitious vision and mission of The Lighthouse Trust, which was started in 1997, reflect on the humanitarian crisis at the start of the epidemic, and the need to create an environment where PLWHIV received support, care and compassion and met a dignified death. Since the availability of ART, the centre has developed to be a centre of excellence in HIV care.

Lighthouse Vision

To be a recognised leader in the provision of high quality HIV services and to improve the lives of people affected and infected with HIV.

Lighthouse Mission

The Lighthouse Trust contributes to Malawi's national response to HIV as a model in providing a continuum of high quality care and building capacity in the health sector.

Core Values

Compassion, Confidentiality, Innovation, Integrity, Equity

The Lighthouse: organisation of care and patient flow:

The care is integrated; patient centred and according to the patient's needs. During my visit to the centre, I participated and sat in with different healthcare workers following the whole patient journey including the home visits with the Community Nurse's team. More time was spent with the different nurses in clinics i.e. in consultation, contraception and cervical screening clinic, the phlebotomy and other point of care tests (POCT) and investigations desk (POCT- results are awaited in order to make clinical decisions), so that I could fully appreciate the magnitude of their work and contribution to HIV care.

Reception

Patients arrive and start queuing from as early as 07:00 am for a 09:00 clinic start.
They are issued with a numerical number in order to manage the queue. On 06/03/17, my first day, 706 patients accessed care in the 9 hours that the clinic was open.
The clinic operates a walk in service except the patients attending the day care centre for procedures.
The receptionist retrieves the patient's paper notes, which are handed to the patient to take with them throughout the different steps in the consultation process for easier recording and documentation of all processes and observations. The receptionist signposts the patients to the different clinics according to need;

- to the nurse's consulting rooms (75-80% of the patients), who are stable , asymptomatic and new; or
- to the Clinical Officer's consulting rooms for review, procedures and those with any symptoms.

All patients go through the Vital signs station. Patients attending for day care procedures are admitted directly to the day care unit, also staffed by 2 nurses under the direct care of a Clinical officer.

Vital signs and Nutrition monitoring and assessment.

Blood Pressure measurement, weight, and height are taken and recorded on the patient's notes and body mass index (BMI) is calculated electronically using the patient's age. If the BMI is low and the patient needs nutritional input, the patient is issued with another number to join the nutritionist consultation queue and will be called in according to their numbers, first come first served, into the Nurse or Nutritionist consultation. Any patients deteriorating whilst in the queue or whose vital signs are out of range are immediately put through to a nurse for a fast track assessment and triage. The patients are then ushered into the waiting lounge.

The Waiting lounge.

Whilst waiting to be called in, the patients listen and participate in several health promotion programmes, distribution of the insecticide treated bed nets (for the prevention of malaria), announcements of meetings, educational and income generating projects and, most importantly, recruitment of patients into the Expert Patient the Peer Support and Mentoring Programme (Ndife Amodzi). This is a great opportunity for disseminating information and discussing health promotion messages. Patients are called into different consultation rooms from the waiting lounge.

Nurse Consultation.

The Nurse reviews all the asymptomatic stable and well patients, this is 75-80% of all patients accessing care at the Lighthouse. The consultation includes assessment of;

- Social aspect, is he/she working/source of income?
- Capture the vital signs onto the electronic patient record
- Document and explore if there are any present complaints and refer as appropriate
- Ask if patient has any symptoms of tuberculosis (proforma used)
- Ask about adherence and calculate adherence level (proforma used)
- Identify and introduce the concept of Expert Patient if eligible
- Ask about contraception need and if applicable (proforma used), start or re supply if already on a method

- If it is a mother with her baby-infant follow up is done as well.
- Issue Isoniazid prevention therapy, cotrimoxazole preventive therapy, ART supply, count of the remaining tablets and refill with a maximum of 3 months.

The ART, Isoniazid and cotrimoxazole preventive treatment and contraceptive pills are prescribed and dispensed from the Nurse consulting rooms to avoid patient congestion at the pharmacy/dispensary. Liquid ART (because of a shorter shelf life) and second line HIV treatments are obtained from the pharmacy.

Symptomatic and unwell patients are signposted to be seen by the Clinical Officer for review. Clinical officer cadre was developed to alleviate the critical shortage of medical personnel. Following training which lasts 3-4 years, he/she is a licenced practitioner of medicine (and surgery) trained and authorised to perform general and specialised medical duties such as diagnosis and treatment of disease and injury, ordering and interpretation of tests and perform medical and surgical procedures as well as referring to the centre's Medical Advisor (Dr Heller) and/or make decisions to admit patients either to the day care unit within the Lighthouse or in the main KCM hospital for inpatient stay. They work closely with the nurses and are the backbone of healthcare delivery not only at the Lighthouse Trust but nationally.

The Lighthouse: Nurse educational preparation for HIV care in Malawi

The Lighthouse is a centre of excellence, a Ministry of Health certified training centre for HIV/AIDS management and also a medical Council of Malawi and Nurses council certified Continuing Professional development (CPD) centre. Therefore the nurses at the Lighthouse have an easier access to the HIV courses. In fact, the course 'ART for health Professionals' and 'HIV testing and counselling' form part of the induction package before one starts work after appointment into a nursing post at the Lighthouse. Some of the nurses are also 'Family Planning/Sexual and reproductive Health' trained in order to provide a comprehensive and fully integrated service.

Decision making tools and support

The guideline 'Clinical Management of HIV in children and adults; Malawi Integrated Guidelines and Operating Procedures for Providing HIV services' (2016) is an integral part of the nurse's consultation. It is very prescriptive, and it is with a warning that "deviation from these guidelines is not supported by the Ministry of Health" There is a copy in every consultation room and it is referred to all the time. There are also Flowcharts, Algorithms on the wall, pictorial diagnosis aids on the tables for reference and assistance in clinical decision-making (Appendix 1). The use of proformas also prompt the nurse to be detailed in her/his

consultation and contribute towards good data quality. The Clinical Officers are available all the time for a second opinion. The nurses refer or may walk across to the Clinical Officer's consulting room for a second opinion.
If the case is complex, the Clinical Director is available on his mobile and will also examine and give opinion if he is within the centre or give advice on the phone if he is elsewhere in the city to assist in the decision-making.

Mentorship and continuous professional development (CPD)
All newly appointed nurses are allocated a mentor for a period of time and are supported until they feel confident and competent to work independently. The period varies according the nurse but the Mentor continues unofficially to be her/his clinical supervisor.
Annual appraisal is not strictly adhered to, one of the nurses had not had an appraisal in two years. The Clinical training department hosts Smart Weekends, a weekend clinical skills-development training workshop. The course content includes clinical assessments and decision making, presentation of case studies and practical sessions in reading X-rays, HIV and the Skin, Tuberculosis etc. To facilitate the CPD, the nurse selects up to 5 areas she/he identifies as learning needs see (appendix 2). A training plan is then put together, if the course is available within the Lighthouse Training centre, the training team is notified in order to organise it otherwise if staffing permits, the training may be on line or at the nearby University College.

Quality and Patient safety
The Monitoring and Evaluation team collect data from the electronic patient records and analyse it as a measure of implementation, quality and coverage. I did not have a chance to see any audit of the impact of direct care rather than the measure of different programme implementation.

Governance
Unlike the Community nursing team, the nurses in clinic did not seem to have much input on decisions that make or shape their practice and work environment. I though it may be because they are overwhelmed by the daily number of patients and the relentless workload. There was shortage of staff resulting in overwork and long waiting times for the patients, which may lead to erosion of satisfaction with work and staff burnout.

Nurse–led Community ART programme
In this programme, stable adult patients who live within the Lighthouse catchment area receive reviews and refills of their ART from the Community Health Nurses (CHN) within their communities. The criteria for enrolment onto this programme are:

- Good adherence to the ART and a good response evidenced by a suppressed HIV viral load
- Be registered with the Lighthouse Trust's clinic either at the KCH –Lighthouse clinic or at Martin Preuss Centre- Bwaila Hospital.

This initiative encourages and gives an opportunity for peer support, called Ndife Amodzi (see Appendix 3), it also eliminates the transport costs to the HIV centres and the time spent queuing at the health facilities. It improves adherence as it ensures a continuous supply of medication. The concept is such that as long as the patient remains well, they will not need to visit the health facility for review, except for viral load monitoring test every 2 years. The Lighthouse is a model site for interventions and this innovation, which they piloted, was very successful and will be introduced to other HIV Clinics nationally. The Community Nurse Teams displayed greater satisfaction with their work, they have autonomy, a varied scope of practice, a varied work pattern and more opportunities for advancement. One of the nurses is enrolled on an e-learning module on Palliative Care at a University.

The nurse-led community ART initiative really inspired me and I can see how a similar concept could be implemented in the UK as 1 in 3 people accessing HIV care in the UK is now aged 50 or over with 5% over the age of 65 (NAT 2015). In the very near future an increasing number of patients will be unable to attend health facilities for their HIV care due to various reasons such as frailty, disability, in care in Nursing homes, terminally ill, mentally unwell or substance misuse. In order to avoid therapy interruption and /or disengagement from care, this is an opportunity for HIV Specialist nurses to innovate and provide a similar service for our patients.

South Africa

Demographics in context:

- Population 55.908.900 (2016)
- Life expectancy 57.44 years (2016)

HIV status at a glance

South Africa has a generalized epidemic with a national antenatal prevalence of around 30%. South Africa also currently ranks the third highest in the world of the Tuberculosis (TB) burden with has increased by 400% over the past 15 years, possibly driven by the immunosuppression of undiagnosed and untreated HIV infection.

UNAIDS (2015) Statistics

Number of people living with HIV
- 7 000 000 [6 700 000 - 7 400 000]

Adults aged 15 to 49 prevalence rate
- 19.2% [18.4% - 20.0%]

Adults aged 15 and over living with HIV
- 6 700 000 [6 400 000 - 7 200 000]

Women aged 15 and over living with HIV
- 4 000 000 [3 800 000 - 4 300 000]

Children aged 0 to 14 living with HIV
- 240 000 [210 000 - 260 000]

Deaths due to AIDS
- 180 000 [150 000 - 220 000]

Orphans due to AIDS aged 0 to 17
- 2 100 000 [1 800 000 - 2 400 000]

South Africa overview

The analysis of the South Africa 'Know Your Epidemic' report and other epidemiological reports have guided the response to the epidemic, the key strategic response addresses four key areas:

- HIV Counselling and testing (HCT)
- ART
- TB

- Prevention of mother to child transmission (PMTCT)

It was not until 2008 that South Africa's department of health National Strategic Plan started focusing on providing HIV related services for men who have sex with men (MSM)(Anova Health Institute, 2013). Rebe et al (2015), in the article The Health4Men Initiative highlight that countries that have both generalized heterosexual epidemics and key population epidemics, like South Africa, will see benefits in their general heterosexual HIV rates if they provide targeted key population services too. The South African MSM population has an HIV prevalence rate of up to 39% (Burrell et al, 2010) whilst up to 50% of surveyed MSM in Soweto reported they had female partners (Lane et al, 2009).

My visit

My visit to South Africa was to the Ivan Toms Clinic located at The Woodstock Hospital in Cape Town which is an MSM targeted health service. An innovation, termed the Health4Men Initiative was developed and implemented to address the needs of MSM who were found to be reluctant in accessing healthcare services because of real or perceived stigma from health providers because of their sexual behaviours. This project of the Anova Health Institute, is funded by PEPFAR/USAID and is now in partnership with the National Department of Health (DoH). It also conducts training and mentorship of MSM-competence in South Africa's Public Clinics (see Appendix 4). The Health4Men Initiative is completely Nurse-led with the 2 medical officers overseeing the overall running of the whole national project and leading on Research activities. The doctors are there to advise but are available for consultation in complex cases and they also conduct a complex clinic for the patients referred to them by the nurses.

Key Components of the Health4Men Initiative provided at the Ivan Toms Clinic include;
In-house services:

- Direct HIV services; HIV testing, start of ART and follow-up refill and monitoring
- HIV prevention strategies
- STI screening and treatment including Hepatitis A and B vaccinations.
- Mental health assessment and intervention
- Harm reduction counselling and signposting
- Research
- PREP (from April 2017)

Outreach services:

- Community engagement, outreach and peer education activities to stimulate community awareness of sexual health issues and the Health4Men initiative

- Training and mentoring of state sector healthcare workers in MSM sensitivity and skills competency

Nurse education preparation for HIV care-South Africa

After graduation from the Professional Nurse Qualification, only nurses with the NIMART qualification and a dispensing license can work independently and autonomously in HIV delivery. The Nurse initiated and maintenance of antiretroviral therapy (NIMART) 5 day comprises of

- Revision of the basic HIV
- Opportunistic Infections, their presentation and management in adults and children
- Appropriate investigations at diagnosis and treatment of HIV, TB and STIs
- Case Studies and role play
- Assessment of knowledge is by a 60 question multiple choice open book test conducted also as practice for the nurses to be familiar with finding information from the study material they would be using as aids for their clinical decision making.
- Follow up mentoring to the different health facilities where the nurses are coming from.

The Foundation for Professional Development facilitated the NIMART course that started in October 2010 and by the end of March 2011- in 6 months 1736 nurses had attended the course, the national figure from all other training providers, by June 2011 was 7492. All participants, as a reference and for information to assist in clinical decision-making are given;

- Study manual containing the lecture notes
- All the current guidelines for the management of HIV, TB, IPT
- Guidelines on prevention of mother to child transmission (PMTCT)
- Sexually Transmitted Infection (STI) Guidelines
- A pocket guide of drug interactions
- A service directory of health resources in each province.
- A laminated card with the telephone number of the HIV helpline- a free service which gives access to the pharmacist for clinical questions.

And provided with follow-up after the course which includes:

- Weekly mentoring until confident to work independently usually for six months
- Complete a workbook with various types of scenario to be initiated and managed
- Submit a portfolio of evidence to the training unit

- Competency assessment is conducted
- Mentoring was either by a trained Nurse or the local HIV doctor (Cameron et al 2012)

South Africa has 69 doctors and 388 nurses per 100 000 population as a result;

- Task-shifting from doctors to professional nurses for initiating and maintenance of ART is a logical strategy to meet the need of increased access.
- Nurse initiation and maintenance of antiretroviral therapy (NIMART) improves access, is cost effective, is not inferior to doctor-managed ART.
- NIMART achieves similar outcomes of viral suppression, adherence, toxicity and death (Callaghan et al 2010).

Tools that assist in decision-making

Besides the ART training programme, which equips the nurses in their clinical care, the centre's senior clinical advisor conducts weekly clinical training and topics of discussion are received from the clinical team according to the challenges identified in the week and also the discussion of complex cases.

Topics include:

- review of a subject ie. substance misuse, mental health, Cardiovascular risk, Renal assessment
- Review of a published paper
- Tuberculosis management including, reviewing X-rays
- Sexually transmitted infection, aetiology and management
- Hypertension
- Announcement and discussion of new circulars or amendments to guidelines by the DoH

This is another area where I think we do not do enough of in the UK. Experienced clinicians need to invest more time to impart knowledge to their nurse colleagues.

PrEP Project, Health4Men Initiative

NHS England was recently ordered by the high court to fund PrEP (The Guardian, 2016), outside of the clinical trial stages, although it has not yet been provided to the general public. A PrEP Impact trial is currently recruiting 10,000 participants from 232 sexual health clinic sites in its initial phase before roll out nationally. This is a pragmatic assessment which England would like to know; how many people attending sexual health clinics need PrEP?, Of these , how many actually start it and finally how long the person needs the PrEP for

(prepimpacttrial.org). The aim of the PrEP impact trial is to accurately determine future commissioning of its availability.
My Fellowship visit to the Ivan Toms Clinic coincided with the South African national DoH official launch of countrywide provision of PrEP, this was a good opportunity and experience because the NHS lost their appeal against the court judgment and PrEP will soon be provided as standard of care in the UK according to need.

PrEP stands for Pre-Exposure Prophylaxis, and is the use of anti-HIV medicine that keeps an HIV negative person from getting the infection even if they have been exposed to it. The PrEP Clinic in South Africa was completely nurse driven. Prior to the launch, Ivan Toms Clinic was one of the pilot sites for The PrEP Demo Project, so the nurses have good experience and expertise of the monitoring process. The Health4Men Initiative HIV prevention strategy is to test and treat any person who tests HIV positive and subsequently test and offer PrEP to any person who tests HIV negative, see PrEP algorithm (Appendix 4).

The sexual health promotion and HIV prevention for MSM intervention strategies for the South African MSM could be replicated in the UK because of the same similarities of MSM issues and behaviours: - they are implementing a combined approach of biomedical, socio-behavioural and structural interventions

- Condom use
- PrEP
- Screening and treatment of STI
- Risk reduction counselling
- Promotion of healthy lifestyles
- Male medical circumcision
- Post-exposure prophylaxis
- ART for partners living with HIV

There was keen interest and uptake of PrEP by the Cape Town MSM community.

Reasons the nurse-led PrEP intervention works:
The nurses expressed satisfaction with their work. There is clear communication in the team, their input is valued and before implementation of any projects their opinion is sort out, they are invite into high level discussions even at ministerial level. They then have ownership of the programme and are motivated to drive it to its success. There are clear job responsibilities,

with supervisor support, opportunities for further education and they have more control over their work activities. The nurses are valuable members of the healthcare delivery. Annual appraisal and ongoing professional development is mostly online and e-learning modules. This is the standard practice most probably due to the staff shortage therefore class attendance is reduced to absolute bare minimal or attendance is in the evening or weekends.

Conclusion

My Churchill Fellowship enabled me to visit two countries that, driven by an urgent need, had to innovate and equip the nursing profession to deliver HIV care. The visit displayed the full reliance of nurses in the delivery of most of the aspects of HIV care, HIV testing, treatment and follow up care, adherence counselling and monitoring and more. While the two countries operate under a different health system and environments to the NHS, the care delivered is integrated and the patients receive quality care making efficient use of limited resources. At the Lighthouse in Malawi up to 80% of the patients and >90% of the patients at the Ivan Toms Clinic are seen by nurses. Investment and practical tools are in place to enable the nurses to make clinical decisions; the medical teams make sure they give dedicated clinical cases study discussions time ensuring that the nurses deliver safe quality patient care.
My question was answered: savings can be made with nurse-led initiatives.

Recommendations

Our newest publication, the document Advanced Nursing Practice in HIV Care: Guidelines for nurses, doctors, service providers and commissioners (2016) supports the development of innovative models of care which are person-centred and embraces the global need of the person beyond the interpretation of blood test results. The guideline document also sets out the competence and educational requirements for advanced nursing practice; which is a valuable resource in our assessment and decision of next steps.

In the UK HIV positive patient group, complex needs are emerging, which are extending beyond just taking ART, which indicates whether the HIV virus is well controlled. These include:

- Multiple co-morbidities, cardiac disease, renal impairment, non-HIV malignancy, hypertension
- Ageing
- Frailty
- Deterioration in executing activities of daily living
- Mental health challenges
- Cognitive deterioration
- Strengthening prevention and early interventions- promoting healthy lifestyles, supporting people to manage their own health and address wider social factors that influence health

- Recreational drug use including chemsex and associated sexual risk behaviours

We are also expecting an increase in numbers of new patients as we start to implement increased HIV testing and starting treatment early. The two major ongoing changes in HIV services- the changing needs of PLWHIV, and the need to reduce cost of delivering care, require Integration of our services, and seamless comprehensive coordinated treatment and care across specialist HIV services including other specialist care, primary care and social care, and Nurses could play a crucial role in this as they traditionally have a unique insight into a patient's holistic needs and would be able to anticipate potential gaps therefore ensuring that effective systems and services are in place throughout the patients' journey.

The results from my Fellowship propose service improvements which include increasing nurse-led initiatives for routine monitoring, empowering patients to self-manage and integration of health and social care for people with complex needs (NHS Outcome Framework, 2012). In the wake of my Fellowship travel, and the growing demand for nurses to assume a new place within the NHS, it is my plan to evaluate our own clinic specialist nurse's post and job description, performances i.e. clinical activity (Workforce planning). The Advanced Nursing Practice in HIV (2016)' summary of the steps in the role development and implementation is how I would like to take the next steps:

- Clearly define CNS the role
- Create environments that support advanced nursing practice role development within the healthcare team, practice setting and broader healthcare system (Input from management)
- Support the development of a nursing orientation to practice characterized by patient-centred, health-focused and holistic care(Input from management)
- Promote full use of advanced nursing practice knowledge, skills and expertise in all role domains.
- Provide ongoing and rigorous evaluation of advanced nursing practice roles related to predetermine outcome-based roles.

The continued professional development courses, which are mandatory, should support the strengthening of advanced practice to continue building on the knowledge to ensure competencies are kept up to date.

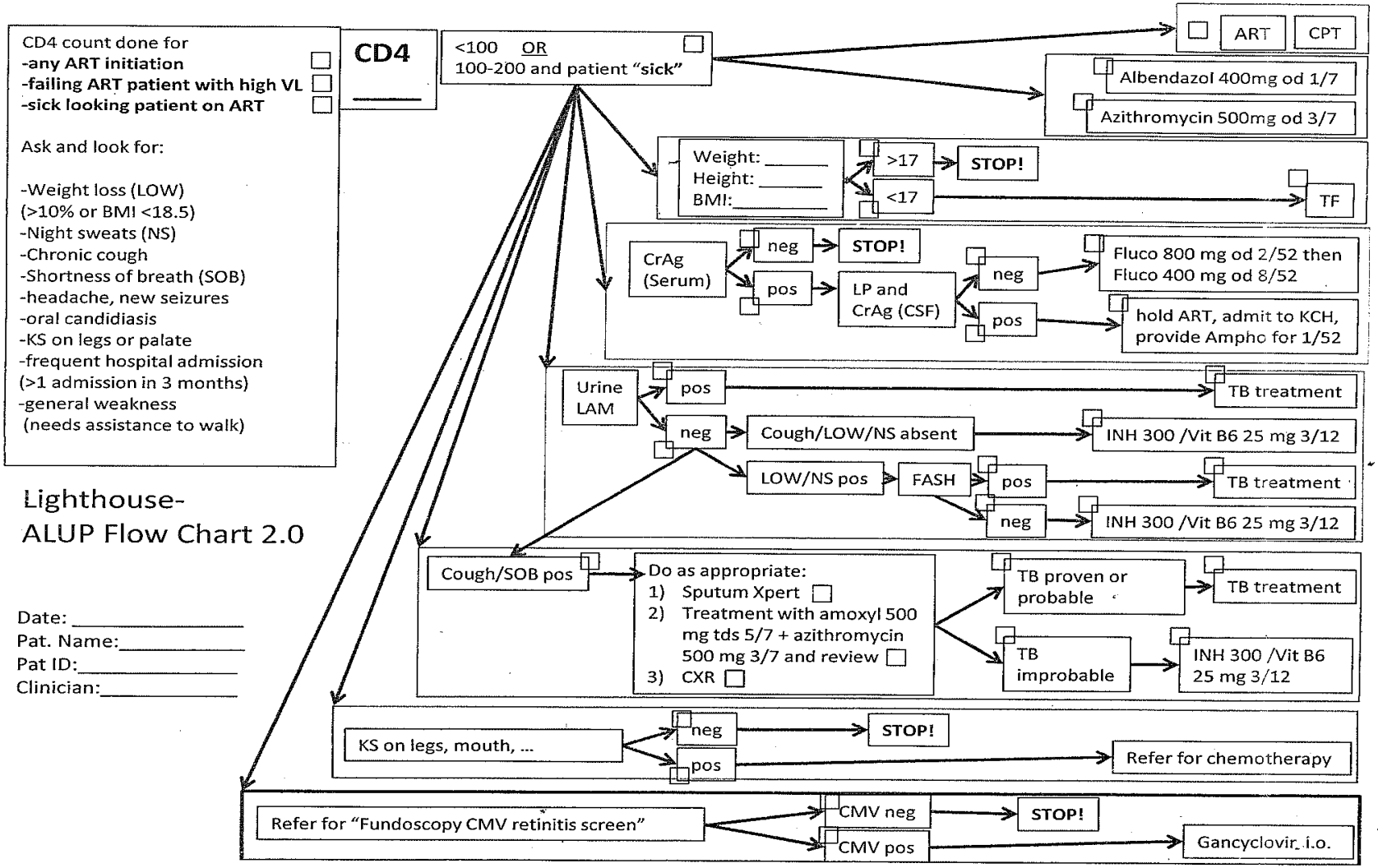
Dissemination and implementation plan

- I have been allocated a slot on the department meeting on the 20/09/17. I reported on my Fellowship visit. This meeting was well received, the Fellowship flyers were all taken up. The questions were not only about the nursing issues but about when the next window of applications would open.
- Following which will be an in depth meeting with the Matron and the Directorate Lead to present my proposal. This meeting has not taken place because of structural changes in the nursing leadership.

- Discussion with the National HIV Nurses association secretariat about the project.

  Meet and discuss the role with HIV Clinical Nurse/Advanced nurse colleagues. A meeting has been planned and scheduled for the 24th May 2018 with the South East HIV Nurses Network.

  I will submit an abstract to the NHIVNA conference due in June 2018.



Appendix 1 - New Patient Assessment Algorithm

Appendix 2 – Nurse CPD assessment form

Clinic Needs Assessment Form (2017)

What skills would you like to improve?

.....

.....

What areas would you like to learn more?

.....

.....

Tick the first five areas which you wish to acquire knowledge and skills in 2017

Internal Medicine	Pharmacy Operations Refresher	Sharing Different Case Studies (H/C,KCH ,UNC and LH)	Chemotherapy	Nutrition Care for PLWHIV
Infection Prevention	HIV Basics	Anemia	Hypertension	Diabetes
Facilitation Skills Ref (Recap/Attitude)	Basic facilitation skills	Advanced Facilitation Skills	Youth Friendly Services(TOT)	Communication skills with Adolescents
Family planning	Visual inspection using Acetic Acid	Palliative Care refresher	Adherence Counseling	Customer care
Quality Management	Risk management	Leadership skills	Data Interpretation	Basic Statistics
ART Refresher	Intentional Programming Child Centered	Youth Friendly Health services	Pup Smear Training	
Mentoring				

What other trainings would you like to have in 2017?

.....
.....
.....

What trainings would you like the prototype facilities to be offered?

Appendix 3 – Ndife Amodzi Programme

Ndife Amodzi Program

Lighthouse's "Ndife Amodzi" program is a community-led project that provides ongoing educational, treatment adherence and psychosocial support to stable ART clients in Lilongwe City. "Ndife Amodzi" means "we are all one" in Chichewa, the local language in Malawi, and highlights the central concept of the program: a community working together to support persons living with HIV (PLHIV) with greater involvement of PLHIV in providing this support. This support is provided by volunteers within each community, under the guidance of Lighthouse Community Care Supporters. Unlike traditional Home Based Care (HBC) models, Ndife Amodzi Programme focuses on psychosocial, rather than medical support, provided by community based volunteers with minimal training.

Lighthouse collaborates with local Community Based Organizations (CBOs) to accomplish this program. Enrolment is facilitated by community volunteers that have desks in the waiting areas of Lighthouse clinics and three health centres located in the city; Kawale, Area 18 and Area 25. These volunteers sensitize patients to the program and complete the necessary referral paperwork after clients themselves choose a volunteer from their community using a binder with a list of volunteers, along with their pictures, categorized by neighborhoods.

Since the program started in November 2005, 11485 clients have been enrolled in Ndife Amodzi as of March 2016. By March 2016, 73% of the enrolled clients were active in the program and 96% of them were on ART.

Meaningful Involvement of people living with HIV as Expert patients

Lighthouse through its Community Health Services program has established 17 support groups of people living with HIV (PLHIV). Some of the members are volunteers from the CBOs. Lighthouse has trained such PLHIV as expert patients and involves them in conducting group education sessions in the community as well as at Lighthouse clinics since 2011 to promote ART adherence and prevention of opportunistic infections among PLHIV.

This approach is providing a human face to the pandemic, thereby promoting acceptance of one's HIV+ sero-status, treatment adherence, disclosure and reduction of work load for already overwhelmed professional staff.

Linkage of Ndife Amodzi and Back-to-Care (B2C)

One of Lighthouse's most innovative programs, the Back-To-Care (B2C) program, is aimed at reducing lost to follow-up (LTFU) in the ART. Community Care Supporters who are the community facilitators of the Community Health Services program strengthen the B2C program by following up clients that are presumed LTFU from the ART program at the two Lighthouse clinics.

Appendix 4 – MSM Competence

A sex-positive approach for working with MSM

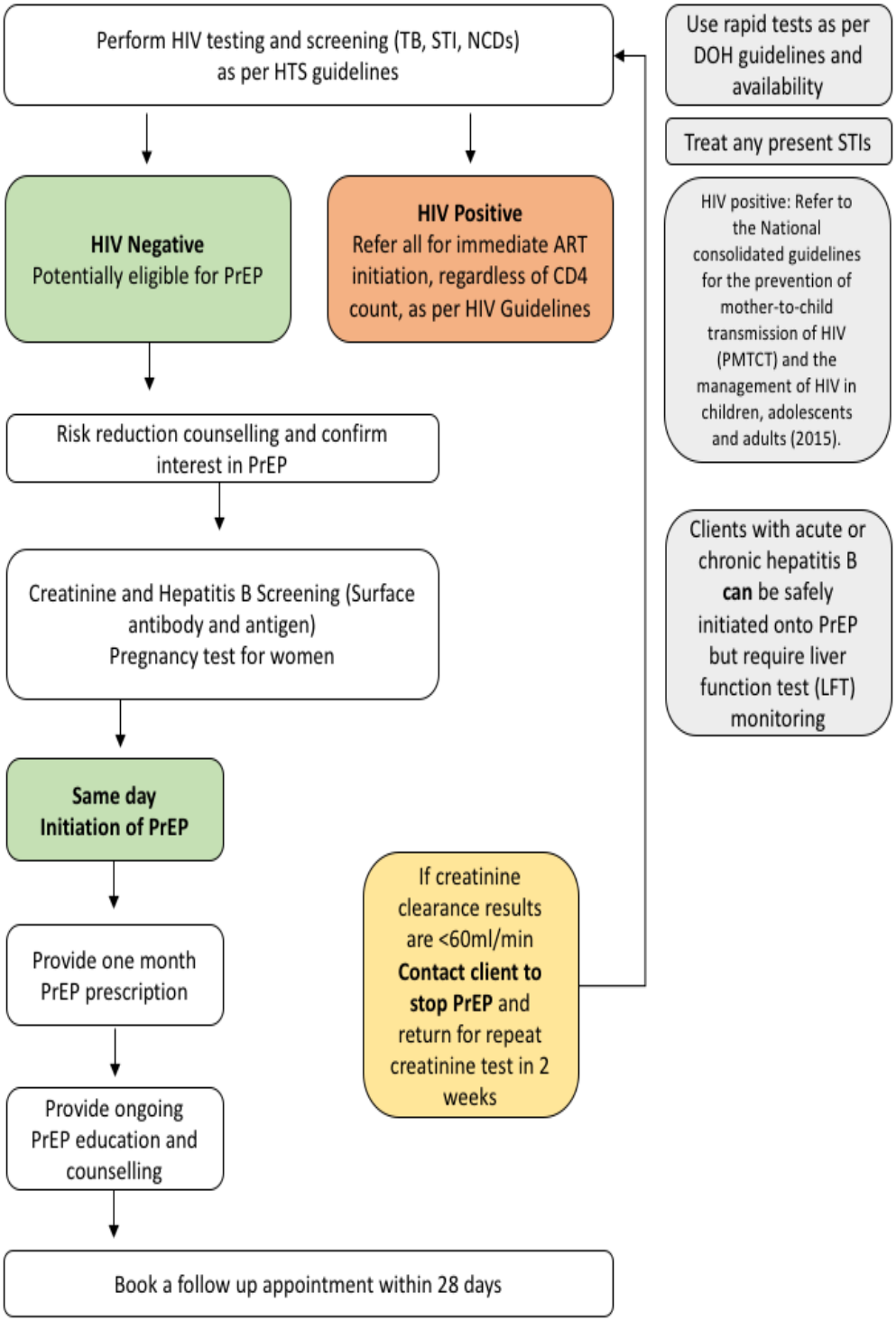
The sex-positive approach has been developed by Anova Health Institute's Health4Men project, and is based on the need for MSM to experience their sexuality in a positive manner, in spite of hostile attitudes by others, in order to assume responsibility for their own sexual health. The approach draws on the experience of the project, and seeks to establish a framework for effective sexual health messaging and HIV and STI prevention and management.

Men who are made to feel guilty or ashamed of their sexuality, by either explicit or implicit negative attitudes conveyed by society at large and healthcare providers in particular, cannot be expected to be honest when discussing their sexual health needs with medical personnel. Indeed, such men are unlikely to assume responsibility for their own sexual health if they consider their own sexual impulses or behaviours to be bad. Provided the behaviour is between consenting adults, all sexual interactions should be equally valued. For the purposes of this model, the following principles are upheld:

- HIV is not caused by sex – it is caused by a virus.
- HIV is not spread through sex – it is spread through body fluids transferred from one partner to another, particularly semen and blood.
- People need to be educated about the risks associated with specific body fluids and do not need moralising around their sexuality.
- Moralising merely distances people and is a barrier to education about responsible sexual behaviour.
- By having HIV transmission explained biologically, as opposed to referring to specific sexual acts, MSM are less likely to feel they are being judged and will become less defensive to messaging and more open to learning about sexual health.

Appendix 5

PrEP Algorithm



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