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# EXTENDING ESSENTIAL CARE

Integrated  
Management of  
Adolescent & Adult  
Illness



World Health Organization

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# EXTENDING ESSENTIAL CARE

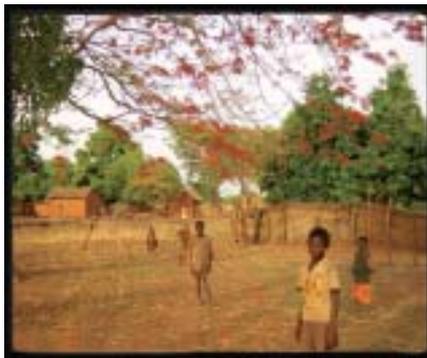
## INTEGRATED MANAGEMENT OF ADOLESCENT & ADULT ILLNESS



World Health Organization, Geneva 2003

## 1. RATIONALE

*Each year millions of adolescents and adults die prematurely or needlessly suffer from illnesses that could be prevented or treated with simple health interventions.*



Each year millions of adolescents and adults die prematurely or needlessly suffer from illnesses that could be prevented or treated with simple health interventions. When patients seek treatment they are generally tested and treated for specific conditions, and most health programmes tend to focus on single diseases. Increasingly, however, health experts are challenging this as the most effective treatment methodology, reflecting a trend towards a more integrated approach to health care.

There are several reasons for this: first, for many adolescents and adults a single diagnosis may not be immediately apparent: often, people seeking treatment have a range of symptoms. The precise nature of the condition is not clear, and overlap is common. The Integrated Management of Adolescent/Adult Illness (IMAI) will extend the benefits of integrated essential care, which is already available for children and pregnant women, to the relatively neglected adolescent and adult groups. Since there are more conditions affecting adults than children (and more measures to prevent or treat them), an integrated approach based on standardized guidelines is even more important to assist health workers to identify and efficiently manage the most common problems.

Further, it is vital that preventive interventions and the detection and management of

chronic problems are not neglected. Also with the rapid spread of HIV/AIDS, especially in Africa, and an unprecedented demand on primary health care, it is more important than ever to streamline existing services and ensure that treatment is available to as many people as possible.

IMAI is a health care strategy that addresses the overall health of the patient. It focuses on the main clinical conditions that account for most adolescent and adult deaths and disability across the world, and integrates the prevention of illness and care of the adolescent and adult in a single health care package. This includes pneumonia, malaria, sexually transmitted infections, key women's health issues, mental health disorders and the detection and care of priority chronic conditions that can be prevented or treated with cost-effective measures, for example for epilepsy, TB and HIV. HIV care particularly needs an integrated approach since it manifests itself in several ways.

One of IMAI strategy's distinctive elements is its focus on the management of chronic disease and prevention rather than just the treatment of acute illness to reduce mortality rates. It adopts a long-term sustainable approach and invests in preventive measures that reduce major adult risk factors, for example tobacco use and unsafe sex. It will be a central part of

the shift from an exclusively acute care model of health service delivery to a chronic care model, reflecting the increase in chronic problems as people live longer.

Most health programmes for adolescents and adults have tended to concentrate on antenatal care, family planning, and sexually transmitted diseases, and have neglected preventive measures and the detection of chronic problems during clinic visits for acute care. Unlike most current clinical practice, IMAI also integrates important but neglected areas into the overall health care model, including alcohol abuse and mental health disorders; these account for a significant portion of the burden of disease among adolescents and adults.

Key tools to implement the strategy include six outpatient guideline modules with training materials and a special guide to improve health care for adolescents. These are for use by nurses and general health workers in first-line health facilities where most people in the developing world seek treatment (public or private out-patient clinics, health centres and dispensaries, health posts and peripheral facilities at village level). The guidelines (currently in draft) provide for systematic assessment and classification of the problem and offer a choice of simple cost-effective preventive measures and treatments for the main illnesses affecting adolescents and adults.

Guidelines are also being developed for clinicians at district hospitals who care for patients referred from the first-level facility, either because they are severely ill or because they have a chronic problem that requires an accurate diagnosis and treatment plan. These patients can then be referred back to first-level facilities, close to their homes, for support and clinical monitoring based on this treatment plan.

The strategy streamlines existing services so that, even where resources are scarce, the health system can function more efficiently, by simplifying and standardizing health care delivery. This will bring cost savings and ultimately provide a better standard of care for adolescents and adults. The role of families and communities in health care delivery is central. This is particularly the case in the areas of chronic and palliative care at home, TB treatment, outreach to protect adolescent girls, and home-based interventions to recognize illness and prevent the onset of chronic disease.

It is expected that IMAI will prove to be an efficient way to deliver essential health services at first-level facilities in rural and urban areas. It will be key to ensuring that existing services can respond to the large increase in demand for services resulting from the HIV epidemic and the growing importance of chronic diseases in low resource settings.

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## THE IMAI STRATEGY

## BENEFITS OF INTEGRATED MANAGEMENT

- **Addresses the major adolescent and adult health problems.** The strategy systematically extends essential care to cover the most important causes of illness and death among two relatively neglected health groups – adolescents and adults (both women who are not pregnant and men).
- **Responds to demand.** Every day millions of adolescents and adults visit hospitals, health centres, and clinics. IMAI addresses at least 80% of the reasons for seeking primary care. With the increase in HIV infection, demand from this age group is growing.
- **Links HIV care and prevention.** IMAI focuses on ways to detect and treat people with HIV and on preventive strategies with a special emphasis on adolescents. These are intended to improve quality of life and extend lives and are crucial to controlling the epidemic. It provides a range of treatments, preventive interventions and support, and allows eventual clinical monitoring of antiretroviral (ARV) medication by nurses, in close collaboration with a district clinician.
- **Improves care for both HIV-positive and HIV-negative adolescents and adults.** Placing HIV care in the context of primary care improves the overall care of both HIV-positive and HIV-negative adolescents and adults. Common infections occur more frequently in HIV-positive patients. Improving their case management through IMAI improves care for all patients regardless of their HIV status.
- **Balances prevention and care.** As well as its focus on treatment, IMAI also provides the opportunity for, and emphasizes, preventive interventions for adolescents and adults.
- **Balances attention to acute and chronic care.** IMAI will help the health system and health workers to be ready for the added burden of chronic noncommunicable disease, at the same time as they shoulder the huge burden of chronic HIV care. Similar principles of good chronic care can be applied to both.
- **Addresses special needs of adolescents.** Making first-level health facilities adolescent-friendly is a key to better use of the services by this group. IMAI addresses this need and includes special considerations for care of adolescents, and prevention of illness.

## OF ADOLESCENT AND ADULT ILLNESS

- **Invests in care in the community.** Health workers based in dispensaries and health centres at village level play a key role in caring for adolescents and adults and providing support to community-based care for TB and chronic illness as well as palliative care at home.
- **Promotes cost savings.** Inappropriate management of adolescent and adult illnesses wastes scarce resources. Although increased investment will be needed initially for training health workers, the IMAI strategy (as with the Integrated Management of Childhood Illness – IMCI) should result in cost savings and efficiencies through shared knowledge and skills and programme management, drugs and supervision. Using the same format as IMCI allows efficiencies, especially in training.
- **Will probably prove to be cost-effective.** IMAI combines many known cost-effective interventions. Detecting and treating patients early and providing palliative care at home reduces the number of cases that need specialized care in hospital. Brief interventions to stop smoking and to reduce harmful alcohol use have been shown to be cost-effective. The Practical Approach to Lung Health (included within IMAI) has been proved to reduce the wasteful use of antibiotics.
- **Builds the health sector.** Coordination and integration with health programmes in the areas of child and maternal health strengthens the network of primary health care facilities and builds their capacity. Referrals are made to district-level hospitals where appropriate.
- **Serves health sector reform.** Capacity-building at first level and district level contributes to the decentralization of health service management, which is a fundamental aspect of health sector reform.
- **Improves equity.** Nearly all adolescents and adults in industrialized countries have ready access to simple and affordable preventive and curative care, which protects them from illness and death from both acute and chronic conditions. Millions in the developing world cannot get this life-saving care. The IMAI strategy addresses this inequity in global health care through large-scale implementation of minimal essential health care. It also promotes access for neglected groups.

## 2. BACKGROUND

*The guidelines build on lessons learnt from vertical programmes for individual diseases in the last two decades and combine many disease-specific strategies into an “integrated” approach.*



In the early 1990s, WHO and UNICEF took an important step in the integrated approach to health care with the development of IMCI. This pioneered an integrated strategy for the management of childhood illnesses and a holistic approach to the overall health of a child. IMCI combines improved management of key childhood illnesses with aspects of nutrition and immunization. The aims of the strategy are to reduce death and frequency of illness and disability, and to contribute to improved growth and development.

Based on experience with IMCI and building on the Practical Approach to Lung Health (PAL) materials for adults, the pioneers of these strategies are today turning their attention and efforts to developing an “adult IMCI”. This is precipitated mainly by the urgent need to tackle the growing HIV problem among adult and adolescent populations and ensure that primary health care to prevent HIV infection and treat HIV-associated illness is available to as many adolescents and adults as possible.

In 2000, during a consultation on Good Practices in Outpatient HIV Prevention and AIDS treatment, the Rockefeller Foundation established a working group to focus on “syndromic” management of common outpatient conditions in settings in sub-Saharan Africa with high levels of HIV. They

estimated that, by identifying “syndromes” such as cough, diarrhoea and skin problems early enough and effectively treating diseases such as TB and bacterial pneumonia, the quality of life of HIV patients could be significantly improved. Most HIV-infected people seeking primary health care have a very good chance of recovery from intercurrent infections. As antiretroviral drugs become more widely available, strategies will evolve, but the identification and prompt treatment of common serious infections (which occur more frequently and with greater severity in HIV patients) and opportunistic infections will remain very important.

While the focus widened to include all adults and adolescents regardless of their HIV status, this marked the beginning of the development of an integrated strategy to tackle the main clinical conditions that account for most adolescent and adult illness in both HIV-positive and HIV-negative adults in low-resource settings. As a first step, WHO has begun developing clinical guidelines for general health workers in first-level health facilities in low-resource countries with a high prevalence of HIV infection. The guidelines build on lessons learnt from vertical programmes for individual diseases in the past two decades and combine many disease-specific strategies into an “integrated” approach.

### 3. A FLEXIBLE SET OF INTERVENTIONS

IMAI simplifies and integrates guidelines, to allow an efficient approach to implementing a large number of interventions. For acute care, it uses an initial triage of patients to ensure that people with severe illnesses are quickly identified, given emergency treatment and referred, followed by a simple integrated acute care algorithm to help the health worker to assess the patient's symptoms, classify the condition, then identify the treatments, counselling and preventive interventions that the patient needs. For chronic care, it provides guidelines for case detection, referral to district hospital/clinic, then follow-up at the first-level health facility using a treatment plan developed at the district hospital/clinic, together with support for self-management.

The IMAI guidelines are based on key clinical symptoms, thus making it a "syndromic" approach. They need little laboratory support, can be used where resources are scarce, and are designed for adaptation to different conditions. As with IMCI, a country adaptation process will be carried out during which countries will be able to select and adapt the core interventions that are appropriate to their particular health problems. It is important that

IMAI becomes a priority for the health ministry and is "owned" and thoroughly adapted locally. Moreover, the main interventions of the global IMAI strategy may evolve as new findings on the global burden of disease and on adolescent and adult health emerge.

#### *Adaptation to the country, then the district*

- *IMAI is an integrated, flexible set of interventions in several compatible formats. It is not a fixed package.*
- *Country adaptation is an essential step before use.*
- *Adaptation involves the choice of interventions to address the priority needs of the country and modification of the guideline content to take account of cultural differences, local disease conditions, the health system, the essential drug list, etc.*
- *After country adaptation, districts may decide to use some or all of the modules and, within the chronic care module, which diseases to tackle first.*



*A country adaptation process will be carried out during which countries will be able to select and adapt the core interventions that are appropriate to the health problems in their country.*

# THE IMAI OUTPATIENT GUIDELINES

## *Preventive interventions within IMAI*

Provide key information on HIV  
Voluntary HIV testing with  
counselling and informed  
consent

Counsel on disclosure

Counsel on sexually  
transmitted infections

Syphilis testing

Counsel on safer sex

Brief interventions against:

- harmful alcohol use
- smoking
- inactivity
- poor diet

Special adolescent preventive  
interventions

Insecticide-treated nets

Tetanus vaccination

Blood pressure screening

Links to:

Interventions to prevent mother-  
to-child transmission of HIV

Family planning

Early antenatal care

**Acute care** of the adolescent/adult covers disease classification and treatments for acute illness such as pneumonia, diarrhoea, fever and sexually transmitted infections. All patients are asked about cough or difficult breathing (to ensure a high level of TB case detection) and checked for malnutrition and anaemia. The health worker is prepared to respond to other volunteered problems such as fever, diarrhoea and symptoms suggesting mental illness. Brief interventions to help patients stop smoking and reduce harmful alcohol use are included, as well as key interventions against HIV transmission and other preventive measures.

**Chronic care** of the adolescent/adult gives the general principles of care of chronic illness, stressing how to involve patients in managing their own illnesses, helping them adhere to treatments, and reducing risk, for example through physical activity and a healthy diet. The module covers epilepsy, asthma, chronic obstructive pulmonary disease, prevention of rheumatic heart disease, hypertension, diabetes mellitus, leprosy and the chronic management of depression and psychosis. Countries will choose which chronic illnesses to include initially and which to add at a later stage.

**HIV care** of the adolescent/adult describes a simplified approach to the treatment and follow-up of the HIV patient, including man-

agement of HIV-related syndromes, counselling and prevention. The guidelines will include information on adherence support and clinical monitoring of antiretroviral therapy once it is available at district clinical level (where the decision to initiate treatment and laboratory support will be available). The acute and palliative care modules also provide many interventions relevant to HIV care.

**Palliative care** of the adolescent/adult covers both the management of key symptoms (during acute or chronic illness) and terminal care, and works on the basis that family and community carers will provide most care at home with back-up by health workers. An illustrated booklet summarizes how families can provide effective home care. Health workers can use this to educate families and community carers. This will counter the tendency to rely too much on medication. At the same time, the guidelines provide health workers with the expertise to provide effective relief of pain and other symptoms when medication is necessary.

**Tuberculosis care** of the adolescent/adult provides simple directly observed treatment guidelines to peripheral health workers at the first-level facility, which extends treatment beyond the district hospital and allows more patients to be treated at home. As such it is

an essential component of the DOTS expansion strategy. Cases are detected using the acute care algorithm and the chronic HIV guidelines (ensuring that patients with HIV are systematically checked for TB at each visit). The module describes a simplified system for TB management, including initiation of treatment for patients who are sputum-positive, clinical follow-up for all types of patients and directly observed treatment using a clinic, work place or community TB treatment supporter.

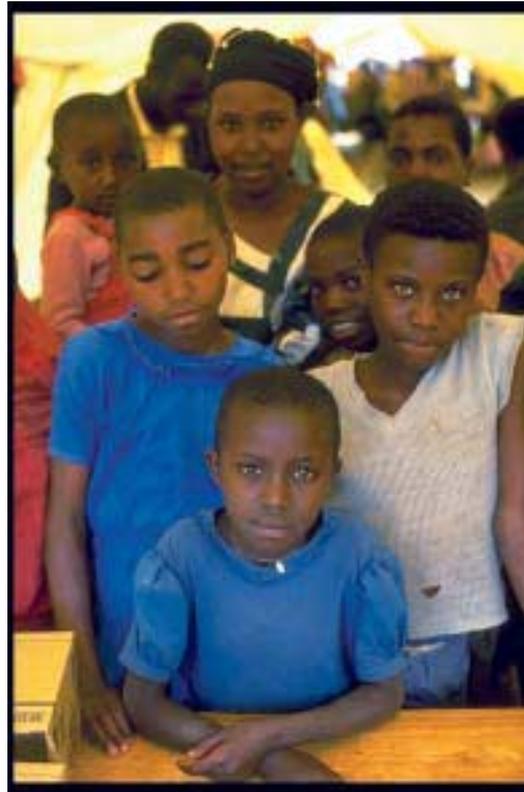
**Quick check and emergency treatments** of the adolescent/adult cover the triage assessment and emergency treatments for severe medical illness, trauma and common psychiatric emergencies. The guidelines are intended to provide the health worker with simple procedures for the initial treatment of conditions such as shock and convulsions, which can be life-saving, and reduce the number of patients surviving with serious disabilities. These include interventions such as intravenous fluids, airway management, simple splinting, and burn care. This equips first-level facility health workers with the skills to recognize severe illness and provide emergency treatments that can stabilize patients before referral to hospital.

## THE GUIDELINES



## THE HEALTH CARE “TRIANGLE” VISION

*The fact that most of the interventions that a general health worker can deliver at this level are included makes concrete district level health sector planning possible.*



Coordinated, prioritized and standardized evidence-based guidelines with training materials will provide the health worker and manager with an efficient integrated approach to case management, disease prevention and health promotion across age groups. These flexible sets of intervention tools will be readily adaptable to individual country needs and priorities, focusing on the needs of underserved populations.

IMAI completes the health care “triangle” for the first-level facility, which includes IMCI and IMPAC (Integrated Management of Pregnancy and Childhood). IMCI provides integrated health care for children under five, while IMPAC provides a package of preventive and clinical care for the pregnant woman at the first-level health facility, for labour and delivery, and for the care of newborns. By using a similar integrated approach to prevention and care of the child, adult (male and female) and pregnant woman, with linkages to family planning and immunization guidelines, almost all of the priority interventions for the first-level facility health worker are covered. Access to these interventions is efficiently expanded by sharing the same approach and many of the same skills. The fact that most of the interventions that a general health worker can deliver at this level are included makes concrete district-level health sector planning possible.

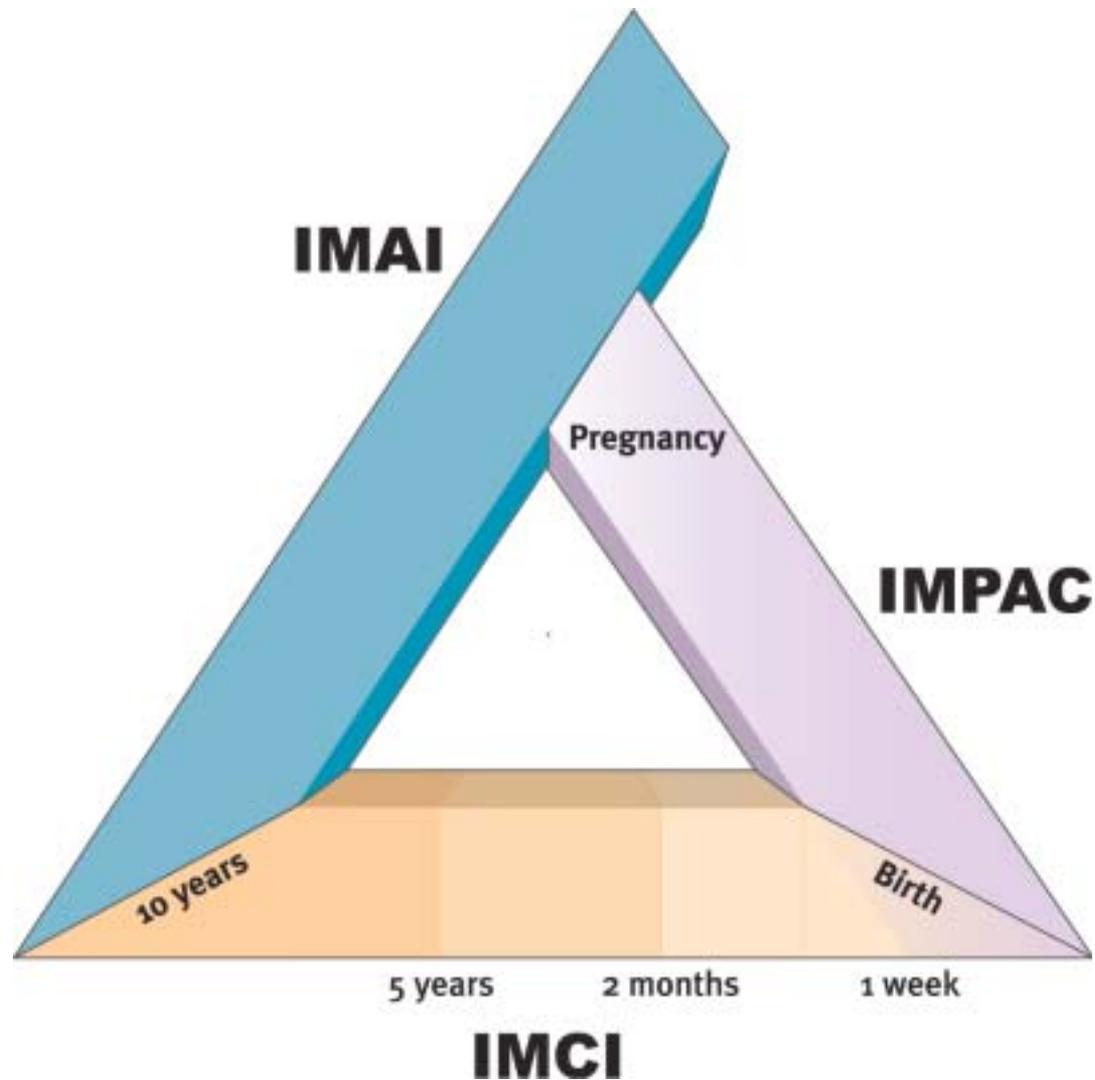
### Acute care – Outpatient case management skills shared by IMCI and IMAI:

- Case management process – assess, classify, treat, counsel
- Assess using minimal number of key clinical signs, all used for action
- Use severity classification tables – colour-coded according to action
- Choose treatments
- Use treatment summary boxes for doses, treatment instructions
- Pre-referral treatment and referral counselling
- Reconcile treatment choices if the patients have more than one disease
- Deliver key preventive interventions during acute care visits
- Communication skills – ask, praise, advise, check
- Counsel on when to seek care
- Follow-up
- Decide which advice has priority if there are several messages
- Skills in teaching patients and mothers

### Chronic care – New approaches in IMAI:

- Involve patient in goal setting and treatment planning
- Train patients in self management
- Support patient adherence to treatment
- Integrate motivation and behavioural skills training
- Referral and back referral between first level facilities and district hospital, based on a treatment plan.

## THE HEALTH CARE “TRIANGLE”

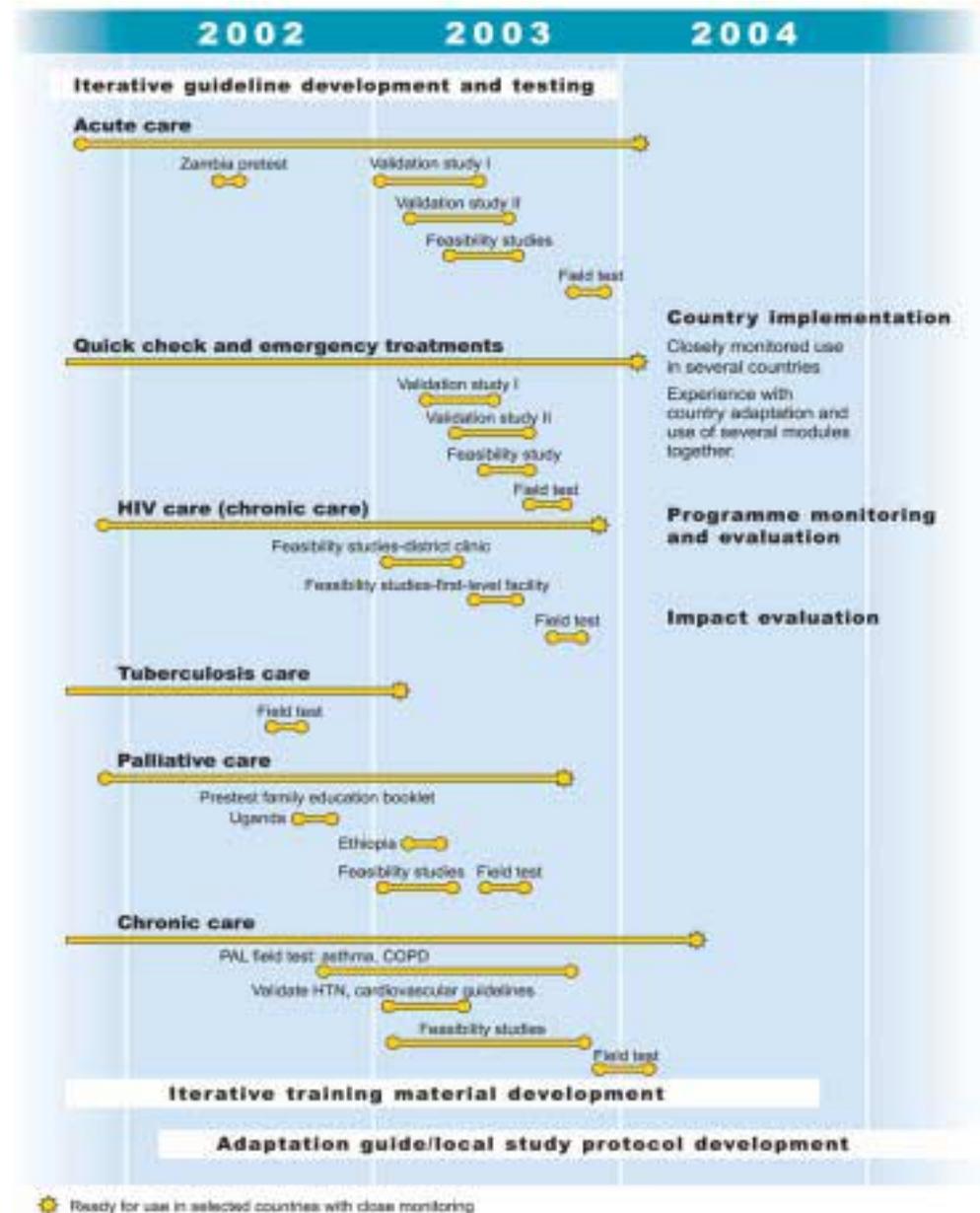


## 4. NEXT STEPS

The IMAI is a long-term strategy for strengthening health systems and improving the quality of patient care in developing countries. As IMAI is implemented in individual countries, it should bring demonstrable health benefits for the population. Key steps towards a significant widespread public health impact are:

- Research and development well advanced by end of 2003.
- Introduction into priority countries over a four-year period from 2004.
- Evaluation of public health impact beginning in 2004.
- Progressive implementation in countries world-wide from 2008.

## IMAI PROVISIONAL TIMELINE





**WHO departments and special programmes involved in IMAI:**

Child and Adolescent Health and Development  
Communicable Disease Control, Prevention and Eradication  
Communicable Disease Surveillance and Response  
Cooperation and Communication  
Cross Cluster Surveillance  
Essential Drugs and Medicines Policy  
Evidence for Health Policy  
Gender and Women's Health  
Health Service Provision  
HIV/AIDS  
Injuries and Violence Prevention  
Management of Noncommunicable Diseases  
Mental Health and Substance Dependence  
Noncommunicable Disease Prevention and Health Promotion (Oral Health)  
Nutrition for Health and Development  
Reproductive Health and Research  
Research and Training in Tropical Diseases (TDR)  
Roll Back Malaria  
Stop TB  
Tobacco Free Initiative  
Vaccines and Biologicals

WHO Regional Office for Africa

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