



IMPROVEMENT STRATEGIES MODEL: FACILITY INFRASTRUCTURE

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CORE PRINCIPLES OF FACILITY INFRASTRUCTURE

Facility infrastructure captures the physical availability and physical quality of facilities, including facility density and distribution, facility design, facility amenities, and safety equipment and precautions.

Facility density and distribution

Ensuring that all populations have timely, geographic access to care requires sufficient facility infrastructure (1). The density and distribution of primary care facilities refers to the physical locations of primary care facilities and their spread relative to the population. The number and type of facilities needed in a country or region depends on two categories of factors. The first is population needs, including burden of disease and population distribution. The second is models of care, including the [availability of services at facilities](#), [staffing of facilities](#), and referral expectations. Because a range of factors and needs influence facility density and distribution, there are not specific global guidelines for making these decisions. Instead, it is important for countries to assess their own facility density and distribution needs and [set targets that respond to these needs and the local context](#) (1). Note: Geographic access from the patient perspective is explored in the [Geographic Access module](#).

Facility design

One of the guiding principles behind the design of health facilities is being able to meet the most common problems in a community. This is achieved in part through close understanding of the health status and needs of community members (2). [Person-centered care begins in large part with facility design](#). The close attention to patient-centeredness in primary health care facilities means that their design is, or should be, quite different from other kinds of health care facilities. Facility design is a critical component to achieving high quality, person-centered care, but is often not taken into consideration - or is thought to be a “luxury” in resource-constrained settings. Additionally, much of the research on evidence-based facility design has focused on hospitals rather than PHC settings (3). However, patient-centeredness is core to PHC and needs to be included in PHC facility design from the start. Evidence has shown that patient-centered design can facilitate improved [access](#), improve the waiting experience, privacy, and [physician/staff-patient communication](#), reduce patient anxiety, and reduce the risk of infection (4). More on person-centered care can be found in the [Person-centered Care module](#).

Facility amenities

Facility amenities are the most basic essential features and utilities that enable primary care facilities to be ready and able to provide quality, person-centered primary health care. [Facility amenities are a core component of a health facility’s readiness to provide services](#) (5).

According to the WHO Building Blocks of Health Systems, essential facility amenities include electricity, safe water, exam rooms with privacy from sight and sound, light sources, sanitation facilities (such as flush or pour toilets to piped sewer system or septic tank, pit latrines, and/or composting toilets), communications equipment (such as cell phones, landline telephones, and/or shortwave radios), computers with internet or network connectivity, and access to emergency transportation (1,5).

Standard safety precautions and equipment

[Standard safety precautions and equipment](#) are the processes and materials that support safe primary care service delivery and prevent transmission of communicable diseases. Standard safety precautions and equipment, sometimes called standard precautions on prevention of infections, are a core component of health facility readiness to provide high-quality services and ensure the safety of patients and providers (5).

Standard safety equipment and precautions include basic safety tools such as sterilization equipment, safe final disposal of sharps and medical waste, sharps boxes or containers in exam rooms, waste bins with lids and liners in exam rooms, surface or environmental disinfectant, single-use standard disposable or auto-disposable syringes, bar or liquid soap along with running water or alcohol-based hand sanitizer, latex gloves, and guidelines for standard precautions against infection (1,5).

RELEVANCE TO PHC

When done effectively, improvements in adjustment to population health needs can contribute to an array of downstream effects, including: Ensuring access to thoughtfully designed, safe, and well-equipped facility infrastructure is an important step to providing high quality primary health care.

In spite of their importance, gaps still remain in ensuring sufficient facility amenities, safety precautions, and equipment. An important step for prioritizing health infrastructure needs and priorities is to gather data that describe current conditions, including what health care systems and facilities are *lacking* in addition to what they *have*. Assessment tools that can be adapted to specific country contexts have been developed to measure the critical areas of service availability, readiness, and provision. As more countries take part in these assessments, the data they gather can be used to help prioritize facility infrastructure needs as specifically as in a single health care facility and as broadly as in a whole region. Researchers at [The Water Institute compiled data for an array of indicators of health center environmental conditions and standard precaution items from LMICs](#), representing 58% of the total population of LMICs and 129,557 health care facilities between 2007-2016. These data found that 59% of health care facilities lacked reliable energy services, 50% lacked piped water on premises, and 33% lacked improved sanitation facilities on premises (6). Further, nationally representative data from a subset of six countries showed that only 2% of health care facilities provide all four of water, sanitation, hygiene, and waste management services. There were statistically significant inequalities in coverage by urban versus rural setting, managing authority, facility type, and subnational administrative unit (6). The study also looked at indicators of environmental conditions and standards at health facilities - including water, sanitation, hygiene, energy, and waste management - and found that more than half of facilities were equipped with disposable syringes (85.2%), latex gloves (76.5%), appropriate storage of sharps waste such as sharps boxes (74.7%), disinfectant (e.g. chlorine solution for decontamination) (63.6%), safe disposal of sharps (63.6%), appropriate disposal of infectious waste (60.9%), and soap for handwashing (60.8%). Conversely, fewer than half had appropriate storage of infectious waste (39.3%), alcohol-based hand disinfectant (29.5%), sterilization equipment (26.8%), and guidelines for standard precautions (26.2%) (6).

A lack of appropriate facility amenities and sufficient safety precautions and equipment exposes people seeking primary health care, the facility staff, and health care providers to greater risk of infection and disease. This can happen through contaminated water, hands, food, medical equipment, inadequate sharps and infectious waste disposal, and potential for unsafe blood transfusions (6). Inadequate facility density and distribution can create issues for a patient's geographic access to care and a health system's ability to deliver services.

Finally, funding, particularly through capital investments, is necessary to ensuring sufficient resources for designing and equipping PHC facilities. Find more on funding for PHC in the Health Financing module, forthcoming.

KEY TERMS

Facility density: The number of primary care facilities per number population. Some indicators base the facility density per 10,000 people, others by 5,000 or 100,000 (1).

Master Facility List: [A Master Facility List is a complete listing of health facilities in a country, both public and private.](#) It is composed of a set of administrative information and data that identifies each facility - such as facility codes, names, types, ownership or managing authority, location, address, and contact information, geographic coordinates, and operational status, as well as services offered, human resources, and infrastructure details such as number of inpatient beds - and is used as a standard mechanism for uniquely identifying health facilities and allowing for information to be compared across time and across data sources for individual facilities (10).

Standard safety equipment: Standard safety equipment are the materials needed to support primary care service delivery and reduce the risk of transmission of bloodborne and other pathogens from both recognized and unrecognized sources (1,11). They are [the basic level of infection control precautions which are to be used, as a minimum, in the care of all patients](#) (11). These include basic safety tools such as sterilization equipment, safe final disposal of sharps and medical waste, sharps boxes or containers in exam rooms, waste bins with lids and liners in exam rooms, surface or environmental disinfectant, single-use standard disposable or auto-disposable syringes, bar or liquid soap along with running water or alcohol-based hand sanitizer, latex gloves, and guidelines for standard precautions against infection (7-9,12,13).

Standard safety precautions: Standard precautions are established [processes that require health care workers to assume that the blood and body substances of all patients are potential sources of infection](#), regardless of the diagnosis or presumed infectious status, in order to provide a high level of protection to patients, health care workers, and visitors (14). Standard precautions include the following practices: hand washing and antisepsis (hand hygiene); use of personal protective equipment when handling blood, body substances, excretions, and secretions; appropriate handling of patient care equipment and soiled linen; prevention of needlestick or sharp injuries; environmental cleaning and spill management; and appropriate handling of waste (14).

WHAT OTHERS HAVE DONE: WHAT HAS BEEN DONE ELSEWHERE TO IMPROVE FACILITY INFRASTRUCTURE

SENEGAL: ONGOING ASSESSMENT FOR INFRASTRUCTURE IMPROVEMENT

Why changes were needed

- Senegal had a history of partnering for national surveys focused on health system performance, dating back to the 1980s, but maintaining access to reliable, up-to-date information has been a challenge

Senegal's approach:

- In 2012 the country worked with USAID to adopt a continuous survey strategy
- This included annual implementation of the Service Provision Assessment, providing information on availability of client services and health care facility readiness
- These annual surveys allow for more rapid programmatic improvements as a result of a quicker feedback loop

Overview

In Senegal, a proactive approach to gathering data through nationally representative assessments has helped the country determine priorities for implementing changes to facility infrastructure and amenities.

Facility density and distribution

Senegal's facility density and distribution is driven by three main sectors: The Ministry of Health (MOH), the private sector, and the country's armed forces. The majority of health care facilities (71%) are managed by the MOH, with more than 90 percent of these health posts managed by a nurse or midwife. The private sector is responsible for another quarter of health care facilities, including private hospitals and clinics; the armed forces operate two hospitals, military base medical centers, and health posts, open to military family members and civilians (15). As Senegal plans to expand its health facility infrastructure through 2023, hundreds of health posts, health centers, and hospitals are expected to open in an effort to increase facility density as well as ensure they are appropriately equipped. These target every region of the country, with number and location prioritized by communities' needs. For example, Dakar, the capital region with the highest population, will add an additional 52 health posts. Tambacounda, a geographically large and more sparsely populated region on the eastern border, will see one of the largest additions, 28 new posts, to help improve equity in facility distribution across the country (16).

Facility amenities and equipment

In 2010, Senegal was one of the two pilot-test countries for the [Service Delivery Indicators survey](#), which measures the availability of key inputs and resources in health facilities (17). That pilot survey found that on average only 39% of PHC facilities reported access to basic infrastructure - electricity, clean water, and improved sanitation - with this lack of resources disproportionately concentrated in rural areas (27% with access compared to 95% in urban areas) (18). About half (53%) of health facilities reported the presence of basic medical equipment - a thermometer, stethoscope, and weighing scale - again with a substantial rural/urban divide: 46% of rural vs. 87% of urban health facilities reported such equipment (19). Two years later, in 2012, the country conducted its first [Service Provision Assessment](#) (SPA) and found that while more than half of health care facilities had basic water services (61%), nearly a quarter (24%) had limited service, and 14% had none. Availability of hand-washing materials was fairly high (86%), as were basic sanitation services (81%), with another 12% piped to sewer. Seventy-four percent of health

care facilities had limited waste management and disposal, and another 23% had safe waste management and disposal (19).

Taking action on infrastructure assessments

In 2012 Senegal became only the second LMIC country to adopt the Continuous Demographic and Health Survey (CDHS) and, in conjunction, a continuous SPA (CSPA) survey (20). Having new data more frequently than five-year intervals helps maintain a better data flow to inform health policy and prioritization (20). The SPA became part of the Senegal Continuous Survey, and the information provided by this survey is the only source that measures how the population assesses quality of health services (20). Supported by the continuous DHS and annual infrastructure assessments, in 2014 Senegal’s Ministry of Health and Social Action embarked on a single, national strategy to harmonize community health programs and initiatives into one integrated approach (21,22). The main goals of the strategy focused on improving coverage and quality of community health services, strengthening community participation in problem solving for health issues, and ensuring sustainability of community health interventions (21). Steps to achieve these goals prioritized improving supply systems for essential medicines and products, harmonizing service packages, and improving equity of access (21).

The assessments reflect continued prioritization and improvement in healthcare facility infrastructure. After the 2012 SPA, Senegal’s Ministry of Health took actions to equip health huts, the lowest level of health system, to provide injectable contraceptives; provide in-service training for health care providers on long-lasting family planning methods; and order malaria diagnostic and treatment supplies be restocked at all health service delivery sites (22). While only 61% of health care facilities had regular electricity or internet access in 2017, that year’s SPA found 94% of health care facilities now had improved water services; 99% had visual and auditory privacy for patient exams; and 99% had latrines or other basic sanitation services for patients (23). The CDHS and CSPA together provide essential health system performance indicators for Senegal, providing data on infrastructure that are for action. As a Government of Senegal representative mentioned in a USAID review of the continuous assessment process, “if the survey shows the coverage isn’t good, we can do something” (20).

SRI LANKA: IMPORTANCE OF AVAILABILITY & READINESS

Why changes were needed

In the last two decades, Sri Lanka’s population has begun to experience increases in education and income - as well as a rising burden of non-communicable diseases.

- Many have begun to bypass primary care facilities for higher-level care facilities, for higher quality and broader availability of services
- This has led to underuse of the primary care system and overcrowding of the secondary and tertiary care systems

Sri Lanka’s approach:

Recent changes to primary care health services and infrastructure have included:

- A national commitment to undertake regular facility and service assessments
- The development of a “dual practice” system that allows providers to work both in the public and private sectors
- Steps to broaden availability and training for NCD prevention and treatment services in public healthcare facilities

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Background

Compared to other countries in the Southeast Asia region, Sri Lanka has relatively high health status, with comparatively high-quality provision of basic health services (24). More than 95% of births in 2018 occurred in a government health care setting, and vaccination coverage was about 99% (24). Free education has led to a high literacy rate, which has translated into higher health literacy through public health sector education (25). The vast majority of households have access to electricity (98.5%), safe drinking water (89.7%), and water-sealed toilets (79%) (25). In 2000, Sri Lanka had a comprehensive network of health facilities and a large primary health care workforce (26). However, the health system has faced important challenges, including limited development of human resources in the peripheral health system - outside the largest cities - and inadequate geographical distribution of providers, who preferred to work in the country's larger urban areas (26). The government had great success prioritizing equity of health care access, but this has led to uneven quality of care. As the population has experienced increases in education and income - as well as a rising burden of non-communicable disease - many have begun to bypass primary care facilities for higher-level care facilities, which has led to underuse of the primary care system and overcrowding of the secondary and tertiary care systems (24).

Facility infrastructure and access

In 2018, Sri Lanka's public health system provided half of all medical treatments, 95% of hospitalizations, and 99% of the preventive care needs of the population (27). Many medical facilities including the majority of secondary and tertiary facilities are open 24 hours per day (28). In an effort to encourage providers to serve non-urban populations, a "dual-practice" system was developed. This allows government sector providers to engage in private practice when off-duty, so they can maintain their public sector employment alongside part-time private practice. This is an incentive for providers to practice in remote areas while maintaining their primary profession in urban areas, and has helped to improve health care access in harder-to-reach areas (25). This has also helped the government retain many of the highly skilled graduates of the country's health education system (25).

Importance of assessing both service availability and service readiness

In 2017, Sri Lanka's Ministry of Health, Nutrition and Indigenous Medicine and Department of Census and Statistics partnered with the Global Fund and WHO to conduct the country's first Service Availability and Readiness Assessment (28). The results showed that most facilities had a high level of basic amenities: a source of improved water supply was available in almost all (99%) health facilities. Sanitation facilities were available in 91% of public health facilities and all private hospitals. More than two-thirds of facilities (70%) had a consultation room with auditory and visual privacy, and just over half (53%) of facilities had a computer with internet access. However, only 51% of facilities had *all* tracer items for basic amenities (28), and while there was generally high service availability, service *readiness* was low for most of the services measured, and particularly with respect to existence of guidelines, staff training in key health service areas, and diagnostic capacity (28).

In Sri Lanka, high levels of facility distribution, equitable access, and service availability has led to comparatively strong health outcomes. However, facility infrastructure assessments have helped to demonstrate gaps in service readiness and determine priorities for the country as it plans for its health system needs going forward. Primary health care facilities are beginning to focus on equipping facilities to prevent, detect, and manage the growing chronic disease burden, continuing Sri Lanka's commitment to equitable care at a low cost to users and to the government (24). As Sri Lanka's health needs and expectations change, adapting the health system to improve quality assurance, improve health care waste management streams, and strengthen health facility infrastructure are increasingly recognized as important steps to improve primary health care (24).

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WHAT TO ASK: WHAT QUESTIONS SHOULD BE CONSIDERED TO BEGIN IMPROVEMENTS?

The questions below may be a useful starting place for assessing facility infrastructure in your context and determining whether it is an appropriate area of focus and how one might begin to plan and enact reforms.

HAS PRIMARY HEALTH CARE FACILITY DENSITY AND DISTRIBUTION IN THE COUNTRY BEEN ASSESSED? ARE THERE DOCUMENTED TARGETS FOR OPTIMAL HEALTH FACILITY DENSITY AND DISTRIBUTION TO MEET POPULATION HEALTH NEEDS?

Having good, up to date information on the ratio of primary care facilities to the population, how the ratios vary between urban and rural settings, how facilities are distributed across regions or districts, and how facility distribution compares to population distribution can inform infrastructure planning and prioritization (1). Regular data collection using reliable sources can also provide information on geographic or facility-level disparities in facility distribution or facility amenities, an important starting point for improving equity in access. For more information on geographic access from the patient perspective, see the [Geographic Access module](#).

DOES YOUR COUNTRY MAINTAIN A MASTER FACILITY LIST?

One of the challenges of using multiple data sources and tools to collect health services information is making comparisons across surveys and synthesizing a wide breadth of data. [A Master Facility List](#) “creates a standard mechanism for uniquely identifying health facilities, and allows for information to be compared across time and across data sources for individual facilities” (10). A Master Facility List is also a fundamental requirement for detailed assessments of service available and readiness, including the [SARA \(Service Availability and Readiness Assessment\)](#) (10). The process of creating a Master Facility List involves establishing institutional arrangements (a coordinating group and an implementation plan); determining what information to include in the List (facility, administrative, and service information); identifying data sources and populating the List; filling in gaps and updating the list; and managing, maintaining, and disseminating it (10).

ARE YOUR COUNTRY’S PHC FACILITY DESIGN AND PLANNING CONSIDERATIONS SPECIFICALLY FOCUSED ON TEAM-BASED CARE AND PATIENT-CENTEREDNESS? IS FACILITY DESIGN RESPONSIVE TO PATIENT NEEDS?

Quality PHC requires much more than basic amenities and safety equipment. Design considerations focusing on patient-centeredness, efficiency, workflow, and the tasks of health care workers can be incorporated from the start. Design considerations around safety include planning for infection control, patient movement, fall prevention, medication safety, behavioral and mental health risk, and security risk (29). Equity and environment of care requirements include ensuring size, layout, and functions of facility structure meet diverse care needs of patients (30) - for example, ensuring patients who are elderly or who have trouble walking on stairs have alternative ways to access waiting rooms and facility spaces. It also includes accommodating patients, visitors, physicians, and staff - for example, making sure facility spaces are large enough and have seating for more than just one or two people. Other important aspects include basic physical environmental considerations, such as ensuring appropriate ventilation and

air flow through facility spaces, using windows, fans, or air systems as appropriate, to satisfy comfort and safety needs. Planning and design requirements include designing to reduce sound and noise, to help patients and visitors find their way through the facility (including clear signage), and emergency preparedness and management (29). Design considerations that support team-based care provision, improving workflow and incorporating new technologies, can also improve quality of care and patient experience (2).

More information on team-based care can be found in the [Team-Based Care Organization](#) module.

DOES YOUR COUNTRY TRACK THE PROPORTION OF PRIMARY HEALTH CARE FACILITIES WITH ALL OF THE IDENTIFIED STANDARD SAFETY PRECAUTIONS AND EQUIPMENT IN PLACE?

Data on variation in availability between subnational areas and facility type can be timed to inform planning cycles. Determining the physical availability of services can be a useful starting point for prioritizing where to begin with improving service delivery and to inform facility-level improvements (5,6). After determining which facilities have low coverage, for example, facility managers, infection prevention and control practitioners, and program managers can collaborate in identifying solutions to make improvements. An intervention study in Kenya found that after portable handwashing stations and simple drinking water stations with drinking water treatment were installed, and health care providers were trained, the stations were used in a sustained way even though there was no access to piped water (6). Collecting information using reliable sources that are updated regularly is integral to getting the full picture of safety precautions and equipment - and using data to drive action.

DOES YOUR COUNTRY ENGAGE IN ANY SURVEYS TRACKING SERVICE AVAILABILITY AND FACILITY AMENITIES, SUCH AS SERVICE AVAILABILITY AND READINESS ASSESSMENT (SARA), SERVICE PROVISION ASSESSMENTS (SPA), OR SERVICE DELIVERY INDICATORS (SDI)?

Health facility assessment data are [useful and important on their own, and can be additionally valuable in combination with population-level data](#) (31). On their own, reliable, timely facility-based information provides insights about what is currently happening at the service delivery level with regards to input, process, costs, output, and quality. This allows for monitoring and improving performance at the facility and larger system level. Further, these performance and quality factors have an impact on whether and how people use available services (31). More information about the service availability and delivery assessments is available in the Resources section; many assessment tools are available online for adoption and adaptation at local or national levels.

RELEVANT TOOLS & RESOURCES

Tags: Guidelines, facility design, facility amenities, data collection tool, facility survey, standard safety precautions, standard safety equipment

DESIGNING SAFETY-NET CLINICS FOR INNOVATIVE CARE DELIVERY MODELS (CALIFORNIA HEALTHCARE FOUNDATION, 2011)

Overview: The design of the physical environment plays an important role in improving health care quality, work efficiency, and cost-effectiveness. Clinic design can have a substantial impact on the effectiveness of innovative care delivery models, but guidelines are limited. This white paper identifies key characteristics of the physical environment design for new care delivery models and provides preliminary design recommendations.

Tags: Guidelines, Facility design

DESIGN SOLUTIONS TO IMPROVE HEALTHCARE ACCESS AND OUTCOMES - A CASE STUDY ON POPULATION HEALTH AT ADELANTE HEALTHCARE, MESA, AZ (THE CENTER FOR HEALTH DESIGN, 2017)

Overview: This case study explores one of the first US health care facilities specifically designed to support patient-centered medical home model and population health by following the principles of evidence-based design. The facility was designed to accommodate multiple PHC-oriented clinical and community services in one location. Quality research, routine data collection, and performance evaluation allow staff to continually adapt the setting and programs through which they deliver health care.

Tags: Facility amenities, Facility design

THE CENTER FOR HEALTH DESIGN INSIGHTS & SOLUTIONS (THE CENTER FOR HEALTH DESIGN, 2019)

Overview: The Center for Health Design is a US-based research, education, and advocacy non-governmental organization that focuses on evidence-based healthcare facility design. The Center develops and shares best-practices tools and resources for improving healthcare environments, including research reports and issue briefs, interviews, case studies, design strategies, lessons learned, key point summaries, and webinars for topics including population health, safety, noise, technology, and infection control.

Tags: Guidelines, Facility amenities, Facility design

SERVICE PROVISION ASSESSMENTS (THE DHS PROGRAM, 2019)

Overview: SPA surveys were developed for national level monitoring of health systems. They look at 1) the availability of different health services in a country; 2) the extent to which facilities are prepared to provide health services; and 3) the extent to which the service delivery process follows generally accepted standards of care. They are conducted in a nationally representative sample of health facilities, covering all types of public and private health service sites.

Tags: Data collection tool, Facility survey, Facility amenities, Standard safety precautions

PROFILES OF HEALTH FACILITY ASSESSMENT METHODS (INTERNATIONAL HEALTH FACILITY ASSESSMENT NETWORK, 2008)

Overview: This report profiles several of the main instruments used for health facility assessment at district and national levels and considers their management utility, including cost and frequency of implementation. It is meant to give users a better understanding of the major assessments and the reports produced based on these assessments' findings. It can also be a helpful aid to determining goodness-of-fit for some of the potential facility assessment tools.

Tags: Data collection tool, Facility survey, Facility amenities

SERVICE DELIVERY INDICATORS (THE WORLD BANK, 2019)

Overview: Service Delivery Indicators is an African-wide initiative that tracks measures of health service delivery. Within health facilities, these include availability of equipment, drugs, and infrastructure. The survey is conducted every two years, designed to fill gaps in the data landscape until standardized facility surveys are repeated with predictable frequency. The indicators are standardized, to allow comparison between nations, across subnational boundaries, and comparisons over time.

Tags: Data collection tool, Facility survey, Facility amenities, Standard safety equipment

CREATING A MASTER HEALTH FACILITY LIST (WHO, 2013)

Overview: This is a practical guide for how to develop and maintain a Master Facility List. The guide describes itself as “a complete listing of health facilities in a country (both public and private)” including administrative information and information that identifies each facility. As a prerequisite for conducting more detailed assessments of service delivery such as the Service Availability and Readiness Assessment, this is valuable guidance on the main considerations and components involved in the creation of a Master Facility List.

Tags: Guidelines, Facility survey, Facility amenities

IMPROVING INFECTION PREVENTION AND CONTROL AT THE HEALTH FACILITY: INTERIM PRACTICAL MANUAL SUPPORTING IMPLEMENTATION OF THE WHO GUIDELINES ON CORE COMPONENTS OF INFECTION PREVENTION AND CONTROL PROGRAMMES (WHO, 2018)

Overview: This manual offers practical guidance, tips, resources, and examples to support guideline implementation, drawing on current evidence for infection prevention and control (IPC). It focuses on the development of a sustainable action plan, informed by the local context, to enact the guideline recommendations. It also explains how to integrate and embed IPC within a health care facility's structure and daily activities.

Tags: Guidelines, Facility amenities, Standard safety precautions, Standard safety equipment

OPERATIONS MANUAL FOR DELIVERY OF HIV PREVENTION, CARE AND TREATMENT AT PRIMARY HEALTH CENTRES IN HIGH-PREVALENCE, RESOURCE-CONSTRAINED SETTINGS, CHAPTER 5: INFRASTRUCTURE (WHO, 2008)

Overview: This chapter focuses on infrastructure interventions important for improving infection control, particularly for decreasing transmission of HIV or tuberculosis. It highlights essential infrastructure requirements - such as space, privacy, and water, sanitation, and hygiene - as well as those needed in

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each area of a health center, and explores how to develop an enabling physical work environment using quality management approaches.

Tags: Guidelines, Facility amenities, Standard safety precautions, Standard safety equipment, Facility design

PRACTICAL GUIDELINES FOR INFECTION CONTROL IN HEALTH CARE FACILITIES (WHO, 2004)

Overview: This guide provides detailed information about infection control practices and programs, environmental management practices, and care of health care workers. The guidelines were developed to help infection control practitioners with management of infection control and prevention and to ensure that staff and managers fully grasp the importance of infection control programs.

Tags: Guidelines, Facility amenities, Standard safety precautions, Standard safety equipment

SERVICE AVAILABILITY AND READINESS ASSESSMENT (WHO, 2019)

Overview: The SARA assessment was developed to assist countries in assessing, mapping, and monitoring services availability and readiness at health facilities. The reference manual includes planning for the necessary steps and factors that must be in place in advance, the data collection process, and the core instrument and indicators index. The implementation guide focuses on the practical steps to implementing the assessment, including budget, sampling, adaptation, guides for data collectors and supervisors, and data processing, analysis, and output.

Tags: Data collection tool, Facility survey, Facility amenities, Standard safety precautions, Standard safety equipment

STANDARD PRECAUTIONS IN HEALTH CARE (WHO, 2007)

Overview: This “aide-memoire” is a reference brief for standard precautions in health care including maintaining a safety environment, hand hygiene practices, personal protective equipment, and respiratory hygiene and cough etiquette. It is for health facility planners, management, and staff, with reminders both on the process (appropriate handwashing) as well as the environment (e.g. encouragement around promoting a safety climate and education of health workers, patients, and visitors). It could be posted in public locations and referenced for planning purposes.

Tags: Guidelines, Facility amenities, Standard safety precautions, Standard safety equipment

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