



Health Care Professionals Information Packet



Global Medical Brigades Healthcare Provider Packet

MEDICAL BRIGADES – Nicaragua

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Global Brigades, Inc.
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Dear Healthcare Professionals:

It is our honor and privilege to welcome you to Global Brigades – the nation’s largest international student movement. By reading this information packet, you are already taking an important first step toward positive social change.

Global Brigades’ operations incorporate hands-on global health initiatives while respecting local culture. Thus, it presents a unique opportunity for you to apply your education, intellect and creativity to help the Nicaraguan, Honduran, Panamanian, and Ghanaian people realize their potential to change the world around them. We encourage students, volunteers, and health care professionals to use this time to build skills, networks, friendships, understanding, and stronger connections to our global community.

Thank you for your interest and leadership in Global Brigades. As a student-led movement, you have the freedom to truly make this experience your own. Ask for more. Share new ideas. Keep the momentum alive. Wherever this experience takes you and your team, we are here to support and guide you every step of the way.

Welcome to the Global Brigades family,

Dr. Shital Chauhan
CEO and Cofounder, Global Brigades

Dr. Jose Espinosa
Medical Brigades Director





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I. HOW TO GET INVOLVED

Join a Medical Brigade

Every medical brigade consists of dedicated student volunteers, medical and dental professionals, pharmacists, and auxiliary staff providing primary health care to rural communities. The group functions as a mobile medical and dental unit, setting up small clinics to diagnose and treat patients at no cost.

If you have any interest in joining one of our university chapters on a brigade, we will connect you with the nearest group whose brigade will coincide with your schedule. Healthcare professionals return from the trip having not only served underprivileged communities, but also having empowered the next generation of professionals to strive for global access to healthcare. We will provide you with all necessary information to help prepare you for a successful brigade in an environment unique to many existing programs.

If you are interested in joining a Medical Brigade, but do not know of a chapter nearby, please email admin@globalbrigades.org

Once you have joined a brigade, Global Brigades will need to verify with the local Ministry of Health that you are a licensed practitioner. In order to do so, an in country Program Associate will request the following documents from you directly:

1. Notarized copy of your diploma*
2. Notarized copy of your license, and any specialization certificates (if applicable)*
3. Passport copy
4. Resume/CV

*Notary must be on the copy of the documents, not on a separate piece of paper

Without these documents, healthcare professionals will not be allowed to practice in Nicaragua. Any medical student who has completed at least his/her fourth year can work as a healthcare provider under the supervision of a licensed professional accompanying the group from their home country or preferably the medical school the student is attending.

For medical students- an in country Program Associate will request the following documents from you directly:

1. A letter from the professor or dean of their school that states your status

Please note that the in-country law requires an in-country physician to accompany all medical brigades, and that this in-country physician will assume all medical liability for treatment received on brigades. We will provide an in-country physician to join your brigade; it is not your responsibility to recruit them.



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Support A Chapter's Brigade Preparation

If you cannot attend a brigade, you can still make a tangible difference by equipping students with the supplies needed for their brigade. It is essential that we have enough medications, anesthesia, and supplies in order to effectively treat as many people as possible. Without donations from members of the medical community, our brigades would not be possible. For a complete list of needed medication and supply donations, please see the appendix.

We also welcome monetary donations. Global Brigades is a non-profit organization, and all donations are tax deductible:

Step 1: Go to <https://fundraise.globalbrigades.org/chapters-map>, and search for the university you'd like to support

Step 2: Select the appropriate brigade you wish to donate towards and click "DONATE"

Step 3: After making a donation, you will automatically be emailed a receipt.

II. How to Prepare for the Brigade

Basic Travel Needs

General list of necessities prior to traveling:

- Valid Passport which must NOT expire within **6 months** of departure from Nicaragua (the end of your trip).
- It is required to bring a vaccination record with proof of the following vaccines: Hepatitis A, Hepatitis B, MMR, DPT, Polio, typhoid fever, and Varicella Zoster.
- Please visit the CDC website for current information on what medications and vaccinations are recommended for travel to Nicaragua: <http://wwwnc.cdc.gov/travel/destinations/clinician/none/nicaragua>
- Any prescription medication currently being taken
- \$10.00 entrance fee to enter Nicaragua and about \$50-\$200 for souvenirs
- A cell phone is not necessary but cell phone service is available in some areas. If interested you will need to contact your cell phone provider for details on international service; sim cards will NOT be available.
- Emergency contact information: Upon your arrival, Global Brigades will send an email to your emergency contact, notifying them that you have arrived safely. This information will be collected via your chapter's president before your departure. This email will also contain in-country contacts and instructions for how to contact you should an emergency situation arise at home.



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Accommodations

Upon your arrival you will be met by a Brigade Coordinator at the airport who will guide you to your bus, organize your luggage, and get you on your way to our accommodations. Our accommodations are one to three hours away from the airport depending on where you are lodging. Once you are settled in, you will be given a tour of the surrounding area until dinner. After dinner, there will be an introduction to the country, your program, and time to address any questions you may have at that point.

We will always try to provide healthcare professionals with room quarters that are separate from students. However, during busy brigade seasons this may not always be possible and therefore we ask that you be flexible. When possible, healthcare professionals will be placed with other healthcare professionals. A twin bed including sheets and a pillow will be provided along with a towel. If you require any additional items, please bring them with you. Running water is available in all accommodation sites, but it is often cold and has low pressure.

Potable water for drinking will be provided. Breakfast and dinner will be communal and served buffet-style at the compound. Packed lunches will be provided in the community at the brigade site. If you have any special dietary needs or restrictions, please inform your group leader in order for our in-country staff to plan accordingly.

Your brigade will travel to the brigade site(s) each morning and return before nightfall. All traveling is done as a group in buses or trucks. Global Brigades ensures that each compound is safely secured by providing armed security around the clock.

Nicaraguan climate is characterized by two distinct seasons—dry and rainy. The dry season lasts from November through April and the rainy season from May through October. Suggested attire is light, airy clothing that can be worn in layers, as the temperature can vary greatly depending on altitude. Some rain gear is also suggested.

Most healthcare professionals bring scrubs to wear during the brigade. Nevertheless, it's best to bring whatever attire you will be most comfortable wearing in warm weather. Laundry facilities are not consistently available.

III. What to Expect on the Brigade

Typical Brigade Format

Global Medical Brigades has treated thousands of patients in hundreds of different communities in Nicaragua. We see each community roughly every six months. During a brigade day, we treat around 300-500 patients in the community.

In our commitment to improving the long-term health of our communities, we visit communities every 6 months, in 3-4 consecutive days. We do this in order to be able to provide a larger range of services and a more focused education component. This arrangement ensures that each patient has the opportunity to spend more time during his or her consultation with a physician or dentist.



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In addition to medical care, patients also have access to dental care. In Nicaragua, we offer restorative care in addition to extractions. We also offer PAP smears to all communities in Nicaragua. The results of these tests, as well as others for which our physicians may order referrals to be conducted at a hospital or clinic, are relayed through nurses or Community Health Workers (see “Community Health Workers” section below). On our brigade, all patients—both children and adults—receive education in basic hygiene and other regional-specific topics, including: dental care, water purification, home remedies, first aid, women's health, and prenatal care.

Spending multiple days in each community also enables us to enter a higher quantity and quality of information into OpenMRS, the patient management program that we use in our Data Informatics System. This information will not only enable us to provide follow-up care, but will also be used as an assessment tool for analyzing the health of communities as a whole and for measuring our impact over time.

Patients typically arrive in family groups and generally all the members have health concerns. These are mostly primary care populations who need wellness check-ups; tropical medicine books are rarely necessary. (For a more detailed list on types of symptoms patients will present, see Patient Consultation Specifics in Appendix). As you practice, your goal is to empower and educate the patients to manage themselves within their local control. While many patients come to the brigades solely to obtain medication, it is also important to provide them with education on how to treat and prevent minor ailments so as to diminish sole dependence on brigades.

Most first-time physicians learn the brigade process as they go, developing a standardized approach to the main complaints that were seen throughout the brigade. This packet will help hasten this process, offer a more standardized approach to our patient population, provide the best care to all, and allow doctors to spend the most time with those in need.

Student Involvement

While it is important to remember that our highest priority is the health of the community members, our second priority lies with our students. To this end, it is important that they feel accomplished and that they gained knowledge in the process. Therefore, we will expect that in addition to providing quality care to our patients, you will act as a teacher to our students. If you have questions or are unsure of how to prepare for this role, we will be more than happy to offer guidance.

Brigade Location and Organization

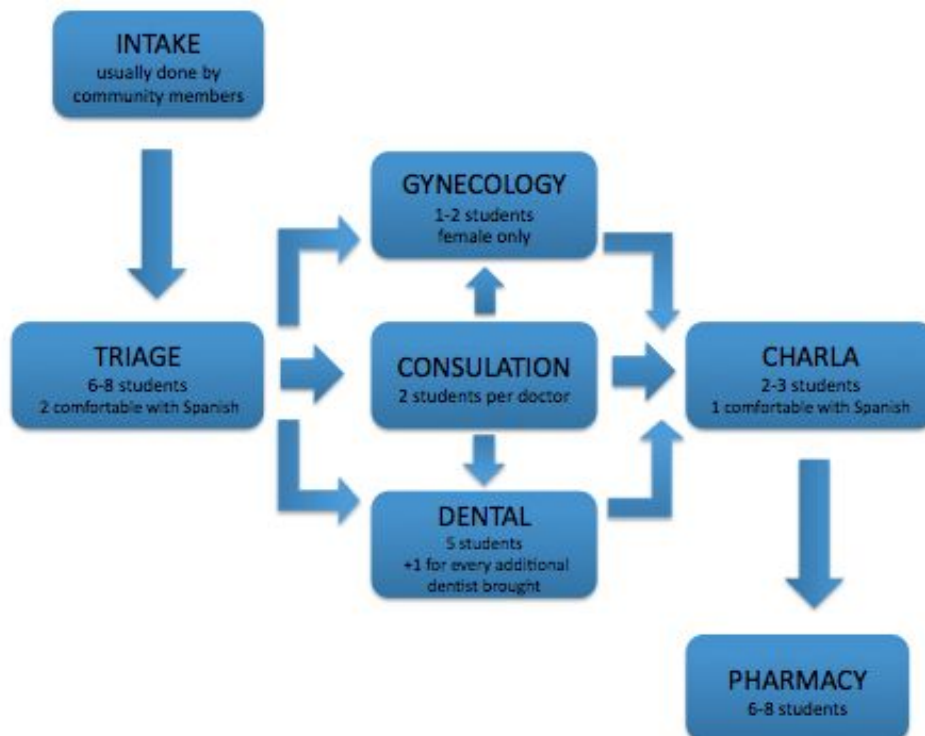
The physical site of the brigade and details of the setup will vary depending on the community and available



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resources. Most often, the site will be a local health center in the community, but could also be in a community's school or church. Spatial areas or different rooms will be designated for distinct functions. Below is the patient flow chart of a typical brigade format. The brigade operates similarly to a traditional hospital. Patients will be transitioning from intake to triage to medical consultation to a gynecology and/or dental consultation (if necessary) and ultimately to the pharmacy. While waiting for their prescriptions to be filled in the pharmacy, adult patients will attend a public health education workshop while pediatric patients will partake in a dental education program. During the dental education program, children will receive a fluoride treatment along with materials and demonstrations for proper teeth brushing and dental and basic hygiene. After receiving their medication, all patients will turn in their patient sheet to staff members turning in the medications. Students will enter data into our OpenMRS program throughout the brigade stations.

Global Medical Brigades is currently working to create and encourage a more sustainable level of care for our communities. Before being treated, each patient is given a form that records demographic information, vital signs, complaints, diagnosis, and prescription information (see parts of form below). Generated reports based on the patient intake forms allow for the health trends of each community/village to be determined. Additionally, they contribute to the understanding of the overall basic medical health needs of Nicaraguans.





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Intake: The first station is intake. Volunteers from the community will be responsible for operating this station and filling out the basic information in the section of the patient intake sheet shown below.

PATIENT INFORMATION		
Name/Nombre	_____	
Date/Fecha	Age/Edad	Sex/Sexo
Community/Comunidad	_____	
Aldea/Caserío	_____	
ID Number/Numero de ID	_____ - _____ - _____	

Triage: After intake, patients pass to triage, where they relay their symptoms/ ailments to volunteers who:

- Take blood pressure for patients 35 years and older, or with a family history of hypo/hypertension
- Take weight and height of children under 12
- Take temperature of children under 12 and those who complain of a fever in the past 3 days
- Gather information about medication and current health conditions

Family History / Antecedentes Patológicos Familiares: _____

Current medications / Que medicamentos está tomando?: _____

Medication Allergies / Es Alérgico a algún Medicamento: _____

VITALS/SIGNOS VITALES

Weight/Peso: _____ Height/Altura: _____ Temp: _____ Respiratory Rate/Frec. respiratoria: _____

Blood Pressure/Presión Arterial: _____ / _____ Glucose/Azúcar: _____ Pulse/Pulso: _____

PREGNANT/EMBARAZADA? YES/SI NO MONTH/MES _____ BREASTFEEDING/DANDO PECHO? YES/SI NO HA COMIDO HOY/HAS EATEN TODAY? YES/SI NO

REVIEW OF SYMPTOMS/SINTOMATOLOGIA

CHIEF COMPLAINT/SINTOMA PRINCIPAL: _____

Consultation: This station is comprised of healthcare professionals and interpreters when necessary. If you are not comfortable treating patients in Spanish on your own, you will be provided with an interpreter. Healthcare professionals consult, diagnose, and then prescribe medication best suited for each individual patient. Again, please note that an in-country law requires that an in-country doctor accompany all medical brigades and that this **in-country doctor will assume all medical liability for treatment received on brigades.** We will provide an in-country doctor to join your brigade; it is not your responsibility to recruit them. Some tests that can be completed in the clinic include pregnancy tests and blood glucose tests.

The consultation room is often a shared room in a local health center and depending on the location, set-up will vary. Doctors can expect tables and chairs. The majority of supplies needed for the clinic, including gloves, hand sanitizer, and all medications are supplied by Global Brigades and are included in your individual program contribution.

Dental: This station is comprised of dental professionals who attend to patients wishing to receive dental services. The dentist will perform a routine consultation to determine which procedure the patient should receive. Treatments include: extractions, fillings, scaling, and/or sealant. Working alongside volunteering dentists will be at least one local



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dentist. The in-country law requires a local dentist to accompany all dental brigades. This local dentist will assume all medical and dental liability for treatments received on brigades. Dental professionals are also provided with an interpreter based on need.

- Flossing / Hilo dental
- Brushing / Cepillado
- Fluoride treatment / Tratamiento de fluor
- Scaling / Raspado
- Prophylaxis / Limpieza

ODONTOGRAMA

Extraction / Extracción: (X) Filling / Tapón: Sealants / Aplicación de sellantes: (S)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			A	B	C	D	E	F	G	H	I	J			
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>			
			T	S	R	Q	P	O	N	M	L	K			
32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17

Exam notes / Notas: _____

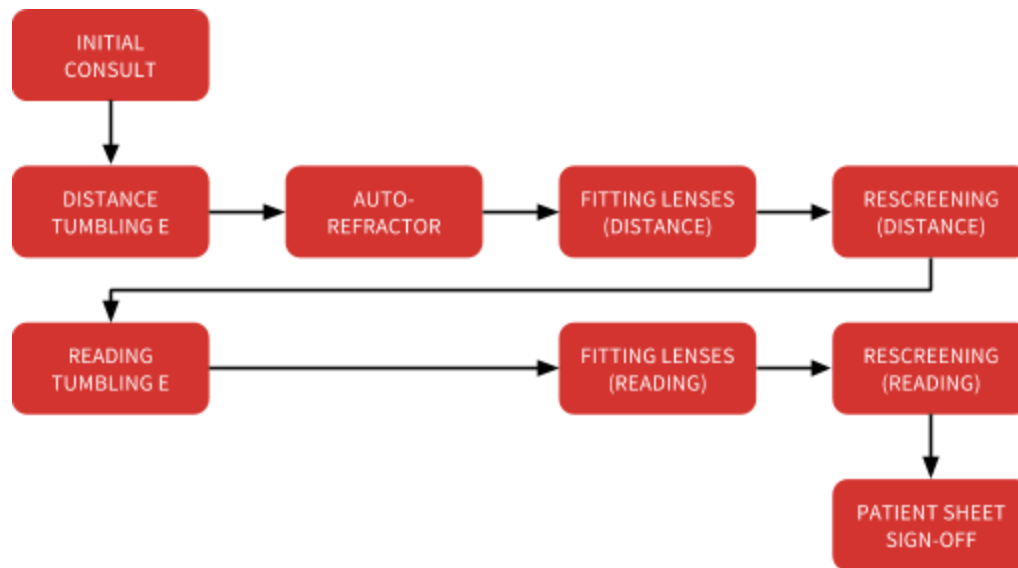
Gynecology: In this station, a Nicaraguan doctor will perform PAP smears and check-ups on any female patient who elects to visit the gynecologist. Foreign healthcare professionals are only allowed to perform PAP smears on brigades if they are licensed OB-GYNs in their home country. All female patients are asked if they would like to visit this station. Because Nicaraguan culture is more conservative than that of the United States, Canada, or UK, women are often reluctant to visit the gynecologist. We encourage regular checkups and screenings in our Public Health Education Workshops (see “Public Health Education Workshop” below) and every medical brigade offers gynecological services. The results of these tests are relayed through nurses or Community Health Workers (see “Community Health Workers” below).

Additional Stations: In addition to primary care, patients at medical brigades have access to dental care, vision screenings, and specialty stations. The vision screening station is an optional component that can be added to a brigade clinic in Nicaragua. Patients are screened in hopes to match them with reading glasses, glasses for seeing distance, or both. The vision screening station has several sequential components depending on the needs of the patient:





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Volunteer groups are required to collect the following supplies to be distributed: **250 reading glasses** for patients with presbyopia and **100 distance glasses** for patients with myopia or hyperopia. An inventory search program allows volunteers and the HCP to find possible matches of lenses in the inventory based on the prescription calculated by the autorefractor.

Should you have a specialty you would like to perform during the clinic, we can work to establish a plan for an additional station to do so. It is always exciting to include additional forms of treatment and consultation for our patients. In the past we have had HCP's set up Physical Therapy and Chiropractic stations. Contact Kaitlin Ostling at kaitlin.ostling@globalbrigades.org for more information.

Public Health Education Workshop (Charla): We realize that education is absolutely essential in order to truly change the health of any community. To this end, we have developed a number of presentations on topics such as basic hygiene, dental hygiene, first aid, and nutrition. The patients are seated in front of a presenter that facilitates an educational discussion. Meanwhile, the prescriptions of the patients are being filled in the pharmacy. Hygiene packs are also passed out at this station (bags of soap, toothbrushes, floss, etc.).

Many of the topics covered in the charla are adult orientated. The community volunteer leading the charla is trained during the pre-brigade visit done by our Medical Program staff. Because many patients are children, students will have the opportunity to prepare and present dental educational skits, activities, and games for children. During this children's charla, each child will learn about basic hygiene, how to properly brush his or her teeth, and will receive a fluoride treatment. Depending on community preferences, in some clinics Adult Charla occurs before or during the intake process. Children's charla is more fluid and can occur any time after consultation.

Pharmacy: In this station, prescriptions are filled with the medicine students have fundraised for through their program contributions. A pharmacist oversees this station and answers any questions that students or patients may



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have. Medicines available on brigades vary depending on what the students are able to donate. A general list is provided at the end of this packet.

Data Informatics: Since December 2010, all medical brigades have implemented the use of an electronic medical record system (Data Informatics). The benefits of Data Informatics are numerous—we are able to analyze health trends within our communities, track patients over time, follow-up on previous conditions and offer better, more personalized care.

We have adapted the OpenMRS system, designed by Partners in Health, to function with our brigade model. Currently, we are using student computers to collect information primarily in the exam room with the students working alongside providers as data-entry clerks. Your role as a provider will be to work with the patient as well as the student to make sure that information is entered as accurately as possible. Paper forms will still be used for the time being as a backup in case of system glitches—they are still the only records used in the pharmacy (OpenMRS does not yet have a pharmacy module that is compatible with our brigade model). If all data isn't entered during the day, students spend some time completing the data entry in the evenings.

If you have any questions about the Data Informatics System or would like more information, please contact the Data Informatics Program Lead, Ariel Corrales, at ariel.corrales@globalbrigades.org

Patient Referral System

The Patient Referral Program was created at the suggestion of brigaders who were interested in improving the process of follow-up care after a patient leaves the brigade. Global Brigades' Patient Referral System helps to ensure that patients who require additional medical attention are cared for after a brigade.

While on a brigade, an in-country physician identifies a patient who needs some kind of follow-up care and writes a referral for that patient to visit their nearby health center or hospital. With this referral sheet (pictured), the patient is guaranteed to be seen and is advised to go seek the medical attention within a couple weeks after the brigade. A full-time staff member is dedicated to facilitating the referral system process and checking in with patients after their initial visits to the health centers.

All referrals are entered into the data informatics system providing us with the ability to track and monitor the patient. In addition, a staff member responsible for responding to emergency cases accompanies each brigade. If there is an emergency case on a brigade, the patient is transported from the brigade site to the appropriate location to receive the necessary care.

MEDICAL Brigades		NICARAGUA PATIENT REFERRAL FORM		GLOBAL Brigades
I. BASIC INFORMATION				
Ia. Community/Comunidad: _____		*Community Code: _____ (First 3 letters of community, Ex: B. Hato, N-HAT)		
Ib. Date/Fecha: _____		Ic. Name/ Nombre: _____		
Id. Cell phone number/ Número de celular: _____				
Ie. National ID number/ Cédula de Identidad: _____				
If. Address/ Dirección: _____				
II. DEMOGRAPHICS				
Iia. Birth date/ Fecha de nacimiento: _____		Iib. Age/Edad: _____ Iic. Sex/ Sexo: <input type="checkbox"/> Male <input type="checkbox"/> Female		
Iid. Level of Education/ Nivel educativo: _____ <input type="checkbox"/> None <input type="checkbox"/> Kinder-K1 <input type="checkbox"/>				
Primary, indicate year _____		Secondary, indicate year _____		University, indicate year _____
Iie. Ability to read and write/ habilidad para leer y escribir: <input type="checkbox"/> Yes <input type="checkbox"/> Somewhat <input type="checkbox"/> No				
Iif. Occupation/ ocupación: _____				
Iib. Current Medications/ Medicamentos: _____				
Iic. Previous medical appointments or visits to health center / Citas médicas anteriores o visitas al centro de salud: _____				
Iid. Other chronic diseases or history of disease in family / Otras enfermedades crónicas o historial clínico en la familia: _____				
Medical Signature on Brigade _____				
III. REFERRAL HOME VISIT				
Iiie. Patient check-up at home/ Chequeo del paciente en su domicilio		Iiif. Actions taken on case / Acciones tomadas en el caso:		
Vital Signs/Signos vitales: T <input type="checkbox"/> F <input type="checkbox"/> R <input type="checkbox"/> Temp <input type="checkbox"/>		<input type="checkbox"/> Photo taken <input type="checkbox"/> Report in Apricot		
Medical Lead Signature _____				



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In addition to the established referral practices in which our doctors send patients for further care within the MINSA system, Global Brigades also has its own patient referral program. When the medical brigade is finished, a copy of all referral sheets given during the brigade are returned to the office. Once there, the medical staff will evaluate them and make a decision who is a valid candidate for the referral program depending in part on the patient's medical condition and history. This program is a good way for GB to provide follow up care for patients who may not be able to afford to travel for treatment, who may need specific items to better their health, or who may need expensive treatment.

A small amount of funding for the Patient Referral System is included in the annual budget. However, many costs exceed the current funds allocated by the budget. Thus, we actively seek student involvement to fundraise and solicit donations, both monetary and in-kind, for these patients to bring them the necessary care. The additional care provided by the referral system promotes a more sustainable health care system for our patients.

The referral process will be discussed further with healthcare professionals upon arrival in country. Please note: the in-country doctor and dentist is the only professional who can write a referral. If you have specific questions, ideas, or concerns, about the referral program please email jose.espinosa@globalbrigades.org.

Community Health Workers

Global Brigades also sponsors the Community Health Workers (CHW) Program, known as “Brigadistas” or “Guardianes de Salud”. The CHW Program currently partners with communities in Nicaragua to provide intensive health worker training to elected community leaders. The program was created to empower local leaders, to perpetuate a consistent level of healthcare and to improve access to medical and dental services inside rural communities. The program also provides CHWs with the knowledge to provide adequate follow-up care between medical brigades and prevent potential health complications.

The CHWs are trained through a 4 to 6 month course featuring a health promoters’ curriculum based on the well-known training books, “Where There Is No Doctor,” and “Helping Health Workers Learn.” Supplemental information for these trainings is taken from the Nicaraguan Ministry of Health. Topics of the course include first aid, tropical diseases, STIs, family planning and nutrition. The CHWs learn how to track the health status of community members and to teach them about preventive health measures. Each member is taught how to give basic treatment for acute diseases, to manage medication for chronic illnesses, and to refer complicated cases to the next level of care. This program has shown the capacity and importance of having trained CHWs in the communities.

The CHW Program is a way to bring more sustainability to the communities in which we work by educating community members on how to maintain a consistent level of health care. It helps to ensure that the good we are doing during Medical Brigades is being perpetuated after we leave by promoting the prevention of future health



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complications and for the follow-up care of chronic patients. For more information about the Community Health Workers Program please email jose.espinosa@globalbrigades.org.

V. Additional Information

Please visit our website (<https://fundraise.globalbrigades.org/volunteer-tools>) for any of the following:

- Testimonials from healthcare professionals who have worked with Global Medical and Dental Brigades in the past
- Information about safety
- Information about HIV prophylaxis

Contact Information

Dr. Jose Espinosa - jose.espinosa@globalbrigades.org, Medical & Community Health Worker Program Lead
Ariel Corrales - ariel.corrales@globalbrigades.org Data Informatics Program Lead

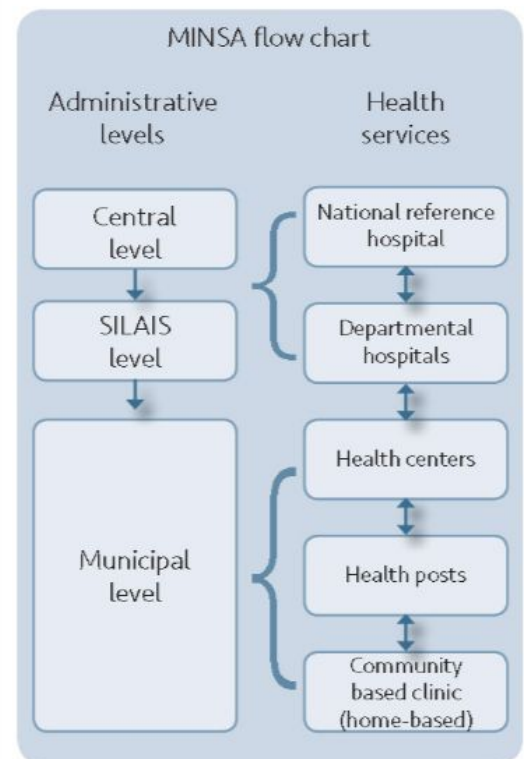
VI. Appendix

Nicaraguan Healthcare System

Health services in Nicaragua are mainly provided by the public sector and financed by general taxes. The primary health provider is MINSA (the Nicaraguan Ministry of Health); which officially covers about 70% of the population. MINSA's mission is to provide Nicaraguan citizens with individually tailored health services, to guarantee free and universal access to health services, and to promote healthy practices and lifestyles that will improve quality of life and life expectancy and maximize national efforts to foster human development. It accomplishes this mission by being both a regulatory agency and a provider of health services. The latter is implemented through a network of 1,059 health facilities and administered by 17 departmental SILAIS (Local Systems of COmprehensive Care).

The Nicaraguan Public health system can be divided into three administrative levels, each associated with certain types of health services. Levels include: (1) the central level, (2) the SILAIS level, and (3) the municipal level. MINSA directs the central level. According to MINSA, the national service network has 1,059 health care units. These consist of 32 hospitals, 28 health centers with beds, 144 health centers

FIGURE 2. The three levels of the Nicaraguan public health system.





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without beds, and 855 health posts, which vary in the amount of population and geographic area served. These government facilities are supplemented by a community-based network that includes home-based facilities, maternity homes, and community health workers.

The national average is one hospital per 212,800 people, but there is a wide variation among SILAIS. Although some hospitals may provide coverage for smaller populations, compared to hospitals in places like Matagalpa and Chontales, they cover a larger territory with a more dispersed rural population. In such settings, access to hospital care can be more difficult. There is also a wide range in the resources available at each hospital.

Health centers provide all primary health care services and are usually staffed with general practitioners or nurses. Most of the health centers are located in the pacific and central regions of the country. On average, a health center with inpatient capabilities serves a population of about 170,000. A health center without beds serves 36,000 people. However, these numbers vary widely from region to region.

There are 855 health posts nationwide, which are under the jurisdiction of the health centers and serve a number of communities. Typically these posts are staffed by one or two nurses, and in some cases a doctor is present on either a permanent or temporary basis. These facilities provide primary health care and undertake health promotion and disease prevention activities. This translates into the following specific activities: comprehensive healthcare for women and children, health care for general morbidity, community education, primary emergency care, immunizations, epidemiological surveillance, pharmacy services, and the completion of various statistical information forms. As one might imagine, the number and breadth of these activities results in a work overload for staff. On average, there is one health post per 6,400 inhabitants, but this figure differs from one area to another. The marked dispersion of the rural population in large territories can lead to less efficient coverage by health centers and health posts.

One strength of the Nicaraguan health system is its nationwide community-based health network. It includes almost 4,400 home-based community clinics, 33 maternity homes, and an impressive organization of MINSA-trained independent volunteers, containing 12,700 “brigadistas,” 6,200 midwives, and 7,100 “voluntary collaborators” all linked to the Ministry of Health. Global Brigades supports MINSA’s efforts in training and supplying community health workers in a variety of ways including: providing in kind donations, providing additional sources of funding and an expanded network for impact.

The distribution of healthcare professionals varies substantially by region. 65% are concentrated in the pacific coast region, 16% in the Central zone, 10% in the northern zone, and 9% in the caribbean region. Part of the reason for the disparity in health personnel coverage is financial. The salary structure for these workers is set by MINSA and standardized nationally, but as of yet, there is no financial incentives for staff to work in remote and difficult-to-access areas. Furthermore, the salaries received by Nicaraguan health workers are the lowest in Central America.

Overall, this unequal distribution produces a deficit of access to healthcare services among 35-40% of the population. Moreover, although 52% of Nicaraguan doctors are specialized in training, this specialization level fails to meet widespread community needs for primary care. In order to improve the healthcare access of those



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living in isolated areas, public medical schools in Nicaragua require graduates to perform two years of social service in high-need settings, after which they can opt to work in private institutions.

In addition to limitations in terms of Human Resources, many health facilities face serious infrastructure needs. A health services survey conducted by MINSA in 2001 showed that almost 35% of health facilities nationwide do not have access to electricity, 45% do not have water, and 68% do not have a sterilization system. This is compounded by the fact that access to medications has been a critical issue since the early 1990s, when the practice of providing free medicine in public sector health facilities decreased. Therefore, the list of medications carried by health facilities is quite limited, and stockouts are common. As a result, cost of medications, one of the most significant components in the health care cost structure, was transferred to the patients' families. Two-thirds of the rural population lives on less than 2 dollars a day. Thus the relative high cost of medications comprises an important barrier to treatment for the vast majority of Nicaraguans.

The disparities in access to care and the unequal distribution of doctors and healthcare professionals throughout the country means that rural communities, such as the ones that Global Brigades works in, are often unable to take full advantage of government health programs. Further, even if community members manage to attend an initial consultation or educational event, the effectiveness is impacted by whether patients are able to attend further checkups and whether or not they can afford the cost of transportation and medicine. It is not just the obvious cost of transit that prevents rural populations from accessing care, but also the inevitable loss of wages due to transport time and lengthy wait times at health posts, centers, and hospitals.

Should you wish further information please feel free to reach out to our staff; or you can read the [WHO country profile](#) on Nicaragua, which has further resources and information.

Typical Ailments Encountered

The table below was put together by the GB Nicaragua [Data Informatics program](#) to show the top ten most common illnesses that our clinics saw in the period of May-June, 2017. The May-June season is one of our busiest and provides an accurate representation of both the kinds of illnesses seen and their prevalence in community.

Informe de Enfermedades Comunes Temporada MAYO - JUNIO 2017

#	Diagnóstico	Diagnosis	No. de Pacientes Diagnosticados
1	Gripe Común	Common Cold	6752
2	Parasitosis	Parasites	2733



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3	Artritis	Arthritis	2309
4	Hipertensión	Hypertension	1865
5	Dermatitis	Dermatitis	1758
6	Micosis	Mycosis	1495
7	Tos	Cough	1461
8	Anemia	Anemia	1089
9	Diarrea	Diarrhea	803
10	Candidiasis	Candidiasis	654

Elaborado Por: Ing. Ariel E. Corrales Herrera

Patient Consultation Specifics

Based on commentary by John Bachman, M.D.

These consultation guidelines were written for all physicians coming along with Global Brigades so as to provide them with an idea of the kinds of issues that will be faced and for suggestions on how best to treat patients. As with all medical care, your own judgment should always guide treatment.

Worried Well

As with any primary care population, most families will complain about ‘self-limited’ (a disease process that resolves spontaneously with or without specific treatment) illnesses. A disease model approach—“this is a URI, this is gastritis, this is low back strain”—will only lead to a superficial impact that leads to higher use of medication and repeat visits. On the other hand, a family based model will provide insight into the real issues leading to the visit. Asking questions such as “How do you feel with your pain?” opens the box to see if there are underlying issues of abuse, depression, and stress. Other questions to ask the patients include ones about primary emotions: “Are you angry (frontal headaches), sad (neck pain), anxious (jaw clenching), and to a lesser degree surprised, disgusted, joyous (pregnancy being okay).”

Cough and Cold

Coughs and colds are some of the most prevalent complaints for a variety of reasons including: in-house smoke, close confinement, and the simple fact that 50% of Nicaraguans are children. Remember to explain to the patient that viral infections are self-limited and that antibiotics are not useful. Encourage the patients to drink fluids, especially tea or hot water with honey (not for children < 12 months). This will also be covered in the education seminar on home remedies. This education seminar has been proven to be



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more effective in children than cough/cold OTC medications. DO NOT provide cough/cold medications to children (5 years old and below) other than acetaminophen/ibuprofen for comfort. Our goal is to have patients self-manage this illness/condition without our assistance in the future. Ear infections are also generally self-limited, but if they complain of ear pain it is reasonable to do an ear exam. If infected, you may treat with Amoxicillin (80 mg/kg/d) for 5 days in order to avoid yeast infections. If a child complains of sore throat look for Strep in order to avoid rheumatic fever.

Abdominal Discomfort

Many of our patients come in complaining of abdominal discomfort/pain, usually the result of parasites. Typical symptoms include bloating and decreased appetite. We treat everyone with Albendazole except infants and pregnant women.

Diarrhea

Diarrhea is generally self-limited with the biggest danger being dehydration. Management of diarrhea involves oral rehydration therapy. Brigades often have oral rehydration packets but you may encourage patients to make their own with the following recipe: Begin with 8 level teaspoons of table sugar (sucrose) and 1 level teaspoon of table salt mixed in 1 liter of boiled water. Fructose (fruit sugar) or artificial sweeteners should not be substituted for the table sugar in this recipe. A half-cup of orange juice or half of a mashed banana can be added to each liter both to add potassium and to improve taste (also included in home remedies). This recipe is preferable to sports drinks, which are formulated to rehydrate healthy individuals and thus contain too much sugar and too little electrolytes for this purpose. Remember that ORT should only be used for 12 hours and then nutrition should begin to supply potassium and calories for repair. Rice is an excellent supplement to add after 12 hours. The biggest drawback is confusing the amount of salt for the amount of sugar in the recipe. If you accidentally add 8 level teaspoons of salt instead of just 1 level teaspoon, it will result in eight times more salt than the child needs and this can be fatal. Make sure the parent tastes the solution. It should taste sweet not salty!

Dysentery

If the diarrhea is bloody it is reasonable to prescribe a combination of Cipro/Flagyl. This will cover amebiasis, giardia, campylobacter, and shigellosis. If amebiasis is truly suspected a longer course of antibiotics should be instituted.

Chronic Diarrhea

Giardia is common and is often associated with epigastric pain and diarrhea. Metronidazole is effective as is boiling water.

Fever

Explain to patients, especially parents, that fevers in general are not dangerous (and explain warning signs



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that may indicate otherwise). A fever is simply the body responding to infection. It is reasonable to treat fever with sponge baths. Parents and siblings can use washcloths that have been made wet, spun in the air and placed on the body. When children have a fever, they should not be bundled.

Olivia's Syndrome

Many mothers carry children who are heavy and do hard work at home. Many have several children and are stressed. The resulting symptom complex (Olivia's Syndrome) is headache, shoulder, chest, arm, neck, and back pain. During the exam, you will find that the insertion of the pectorals will be tender and their TM joints will be sore. If you ask, most will say they clench their teeth. Treatment is daily massage of the neck and emphasis on postural mechanics when not carrying children. The simplest thing is to roll a towel and put it in the small of their back when sitting.

Scabies

Generally scabies, when present, will occur in multiple family members. Provide treatment to everyone, including those not present at the brigade, and also make sure bedding is washed. Instructions for treatment are on our scabies lotion bottles.

Vascular ulcers

Multiple pregnancies and age lead to varicosities and ulcerations. No topical agent alone will help that ulcer unless you use compression (ace wrap, etc.) If you use a wrap, cover the ulcer (under the wrap) with a dressing soaked in vinegar and water (this needs to be changed 3X/day). You can also cover it with honey -- a daily change is enough. Another suggestion is a solution of one part white vinegar and 10 parts water (previously boiled). Vascular ulcers are common in older women.

Skin conditions other than scabies

When patients sweat their skin may become dry (possible dermatitis). We usually have skin cream in our pharmacy. You will also see lots of fungal infections including tinea capitis and tinea pedis. Sometimes we have systemic antifungals, but we normally only have topical creams. It is therefore particularly important to talk about hygiene and how to avoid getting fungal infections, especially with onychomycosis.

Arthritis

Many patients will present with "dolor en mis huesos" (pain in my bones). Groups regularly take sufficient quantities of NSAIDs to provide patients some pain relief. For severe cases, referrals to a local clinic may be made, where intra-articular hydrocortisone injections can be provided.



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Medicine List

The table below provides a list of all medications you will have available to you to prescribe on brigade:

<p>Vitamins - Global Brigades Codes*</p> <p>Folic acid - <i>VT-AF2</i> Calcium 600mg - <i>VT-C</i> Iron + folic acid suspension - <i>VT-AF1</i> Adult multivitamins - <i>VT-A</i> Infant multivitamins (drops) - <i>VT-I</i> Children's multivitamins - <i>VT-N</i> Ferrous sulfate - <i>VT-H</i> Prenatal vitamins - <i>VT-P</i></p>
<p>Analgesics - Global Brigades Codes*</p> <p>Acetaminophen 120mg/5mL * 120mL - <i>PK-A2</i> Acetaminophen 500 mg - <i>PK-A5</i> Acetaminophen 80mg/1mL * 30mL - <i>PK-A1</i> Antimigraine tablets - <i>PK-E</i> Diclofenac sodium 50mg - <i>PK-D</i> Diclofenac gel - <i>TP-DF</i> Ibuprofen 100mg/5mL * 120mL - <i>PK-IB2</i> Ibuprofen 400mg - <i>PK-IB4</i> Methocarbamol 500mg - <i>PK-M</i></p>
<p>Asthma - Global Brigades Codes*</p> <p>Beclomethasone inhaler - <i>AS-B3</i> Ipratropium bromide inhaler - <i>AS-BR</i> Salbutamol(Albuterol) inhaler - <i>AS-SB</i></p>
<p>Antibiotics for Adults - Global Brigades Codes*</p> <p>Amoxicillin 500mg - <i>AB-AM3</i> Amoxicillin + clavulanic acid - <i>AB-AU5</i> Azithromycin 250mg - <i>AB-AZ3</i> Cefalexin 500mg - <i>AB-CF3</i> Ciprofloxacin 500mg - <i>AB-CP</i> Clindamycin 300mg - <i>AB-CD3</i> Dicloxacillin 100mg - <i>AB-DX</i> Dicloxacillin 500mg - <i>AB-DC3</i> Fluconazol 150mg - <i>AB-F</i> Metronidazole 500mg - <i>AB-M4</i></p>



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Antibiotics for Children - Global Brigades Codes*

Amoxicillin 250mg/5mL - AB-AM2
Azithromycin 200mg/5mL *30mL - AB-AZ1
Dicloxacillin 125 mg/5mL * 120mL - AB-DC1
Metronidazole 125mg/5mL * 120mL - AB-M1
Nystatin * 15mL - AB-N

Allergies - Global Brigades Codes*

Diphenhydramine 12.5mg/5mL - AH-B1
Diphenhydramine 25mg - AH-B2
Ketotifen 1mg/5mL - AH-K
Loratadine 10mg - AH-L2
Loratadine 5mg/5mL *120mL - AH-L1
Saline solution nasal spray - CC-SS

Gastrointestinal - Global Brigades Codes*

Albendazol 400mg - PR-A3
Albendazol 400mg/10mL - PR-A1
Antispasmodic tablets - FI-AE2
Dimenhydrinate 50mg - GI-DR
Gemfibrozil 600mg - CR-GM
Aluminum hydroxide suspension - GI-HA
Omeprazole 20mg - GI-O
Ranitidine 150mg - GI-R2
Simethicone drops - GI-SM1
Simethicone 80mg or digestive enzyme tablets - GI-SM2
Simvastatin 20mg - CR-SV2
Oral rehydration salts - GI-ORS

Cough and Cold - Global Brigades Codes*

Ambroxol 15mg/5mL - CC-A
Cold capsules - CC-AG3
Liquid cold medication - CC-AG2
Infant cold medication - CC-AG1
Dextromethorphan suspension - CC-AT
Miel balsamica - CC-M

Chronics - Global Brigades Codes*

Aspirin 81mg - CR-ASA
Atenolol 100mg - CR-AT2
Captopril 25mg - CR-CT



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Carbamazepine 200mg - *CR-CB*
Enalapril 20mg - *CR-EN*
Gabapentin 400mg - *CR-GB2*
Glibenclamide 5mg - *CR-GC*
Hydrochlorothiazide - *CR-HZ2*
Losartan 50mg - *CR-LS1*
Metformin 500mg - *CR- MF1*

Topical - Global Brigades Codes*

Betamethasone - *TP-B*
Clotrimazol - *TP-CT*
Diaper rash cream - *TP-DR*
Triple action cream - *TP-TA*
Hydrocortisone cream - *TP-HC*
Ketoconazole cream - *TP-KT*
Neomycin + clostebol - *TP-N*
Permethrin 1% - *TP-SC1*
Lice shampoo - *TP-PJ*
Triple antibiotic - *TP-AB*

Vaginal - Global Brigades Codes*

Clindamycin cream - *VG-CD1*
Clotrimazol ovules - *VG-C2*
Metronidazole ovules - *VG-M*

Optic/ophthalmic - Global Brigades Codes*

Ophthalmic chloramphenicol - *EE-CP*
Gentamicin - *EE-GM*
Ophthalmic antihistamine drops - *EE-HE*
Ciprofloxacin-dexamethasone otic - *EE-CD*
Artificial tears - *EE-LA6*

Venous Insufficiency - Global Brigades Codes*

Factor P4 - *CR-FP*

*Note: Global Brigades Codes are the GB specific codes used in our Data Informatics and Pharmacy. When prescribing, we recommend including these codes so students working in Pharmacy and DI can identify them with greater ease.

List of Most Common Diagnoses ICD-10-v2016

On the next page you will find a list of common diagnoses seen in communities and their corresponding ICD-10-V2016 codes.



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Mouth

K02.9 Dental caries,unspecified

K12 Stomatitis

K12.1 Other forms of Stomatitis

K14 Diseases of Tongue

B37 Candidal Stomatitis

K12.2 Cellulitis and abscess of mouth

Q36.0 Cleft lip, bilateral **Q36.1** Cleft lip, medial **Q36.9** Cleft lip, unilateral

Cardiovascular

I10 HTN

I50.0 Congestive heart failure

I50.9 Heart failure, unspecified

I51.6 Cardiovascular disease, unspecified **I83.0** Varicose veins of lower extremities with ulcer

I83.9 Varicose veins lower extremities without ulcer or inflammation

I80 Phlebitis and thrombophlebitis **K64.9** Unspecified hemorrhoids **I95** Hypotension

R00.0 Tachycardia, unspecified **R00.1** Bradycardia, unspecified **R01.0** Benign and innocent cardiac murmurs

R01.1 Cardiac murmur, unspecified

R01.2 Other cardiac sounds

R06.0 Dyspnea, unspecified

I49.9 Cardiac arrhythmia, unspecified

R18 Ascites

R60.0 Localized edema **R60.1** Generalized edema **R60.9** Edema, unspecified

I69 Sequelae of cerebrovascular disease **I67.9** Cerebrovascular diseases, unspecified

Dermatological

B00 Herpes viral /Herpetic infections

B01 Varicella

B02 Herpes Zoster

B06 Rubella

B07 Viral warts

B35.0 Tinea barbae and tinea capitis

B35.1 Tinea unguium **B35.2** Tinea manuum **B35.3** Tinea pedis **B35.4** Tinea corporis **B35.6** Tinea cruris

B36.0 Pityriasis versicolor **L30.5** Pityriasis alba **B37.0** Candidal stomatitis

B37.8 Candidiasis of other sites

L01 Impétigo **L03** Cellulitis **L08.0** Pyoderma **L10** Pemphigus **L12** Pemphigoid

L20 Atopic dermatitis

L21 Seborrheic dermatitis

L22 Diaper dermatitis

L23 Allergic contact dermatitis

L29 Pruritus

L30.9 Dermatitis, unspecified

L28.2 Other pruritus

L40 Psoriasis **L50** Urticaria **L55** Sunburn

L60 Nail disorders **L60.0** Ingrowing nail **L60.1** Onycholysis

L60.8 Other nail disorders

L63 Alopecia Areata **L64** Alopecia Androgena **L70** Acné

L71 Rosácea

L80 Vitíligo

L81 Disorder of pigmentation, unspecified



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L83 Acanthosis Nigricans

L93 Lupus Erythematosus

B85 Pediculosis y Pithiriasis

B85.0 Pediculosis due to *Pediculus humanus capitis*

B85.2 Pediculosis, unspecified

B85.4 Mixed pediculosis and phthiriasis

B86 Escabiosis

B87 Myasis

B35.8 Other dermatophytoses

Gastrointestinal

A09.0 Diarrhoea and gastroenteritis of presumed infectious origin

A06 Amebiasis

A07.1 Giardiasis [lambliaosis]

A08 Viral and other specified intestinal infections

B82 Unspecified intestinal parasitism

B68 Taeniasis **B69** Cysticercosis

B77 Ascariasis

B89 Unspecified parasitic disease

K29 Gastritis and duodenitis

K30 Dyspepsia

K59.0 Constipation

K58.0 Irritable bowel syndrome with diarrhoea

K58.9 Irritable bowel syndrome without diarrhoea

K21 G.E.R.D

K59 Other functional intestinal disorders

K63 Other diseases of intestine

R12 Heartburn **R13** Dysphagia

R19.6 Halitosis

K59.1 Functional diarrhoea.

R10.1 Right upper quadrant pain

R10.3 Lower abdominal pain, unspecified

R11 Nausea and vomiting

Pregnancy

Z32.0 Pregnancy, not (yet) confirmed

Z32.1 Pregnancy confirmed

Z34.0 Supervision of normal first pregnancy **Z34.8** Supervision of other normal pregnancy

O15.0 Eclampsia in pregnancy **Z35.6** Supervision of very young primigravida

Z39.2 Routine postpartum follow-up

Endocrine

E10 Type 1 diabetes mellitus

E11 Type 2 diabetes mellitus

E66.0 Obesity due to excess calories

E66.8 Other obesity

E66.9 Obesity, unspecified

E28.2 Polycystic ovarian syndrome **E03.9** Hypothyroidism, unspecified **E05.9** Thyrotoxicosis, unspecified

E07.9 Disorder of thyroid, unspecified **E78.0** Pure hypercholesterolemia **E78.1** Pure hyperglyceridemia

E78.2 Mixed hyperlipidemia

E79.0 Hyperuricemia **R63.1** Polydipsia **R63.2** Polyphagia **R35** Polyuria

Genitourinary

R35 Poliuria

R30.0 Dysuria

N39.0 Urinary tract infection, site not specified

N40 Prostatic hyperplasia **N30.0** Acute cystitis **N30.8** Other cystitis



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N19 Unspecified kidney failure **N20** Calculus of kidney and ureter **N23** Unspecified renal colic

Q53.1 Undescended testicle, unilateral **Q53.2** Undescended testicle, bilateral **N43.3** Hydrocele, unspecified

N60.1 Diffuse cystic mastopathy of breast

N60.2 Fibroadenosis of breast **N63** Unspecified lump in breast **N64.4** Mastodynia

N64.9 Disorder of breast, unspecified **N71.0** Acute inflammatory disease of uterus **N71.1** Chronic inflammatory disease of uterus

N73.8 Other specified female pelvic inflammatory diseases

N73.9 Female pelvic inflammatory disease, unspecified

N76.0 Acute vaginitis

N76.1 Subacute and chronic vaginitis

N77.1 Vaginitis, Vulvitis and vulvovaginitis in diseases classified elsewhere

N81 Female genital prolapse

N81.2 Incomplete Uterovaginal prolapse **N81.3** Complete Uterovaginal prolapse **N81.1** Cystocele

N81.0 Female Urethrocele **N83.0** Follicular cyst of ovary **N83.2** Unspecified ovarian cysts **N91.2** Amenorrhoea, unspecified

N91.5 Oligomenorrhoea, unspecified **N92.6** Irregular menstruation, unspecified. **N94.0** Mittelschmerz

N94.1 Dyspareunia

N94.4 Primary dysmenorrhoea **N94.5** Secondary dysmenorrhoea **N94.6** Dysmenorrhoea, unspecified

N95.9 Menopausal and perimenopausal disorder, unspecified

Hematological

D50 Iron deficiency anemia

D51 Vitamin B12 deficiency anemia

D52 Folate deficiency anemia

D53 Other nutritional anemias

D64 Other anemias.

Nose

R04.0 Epistaxis

J30 Vasomotor and allergic rhinitis

J01 Acute sinusitis

Neurological

R51 Cephalalgia [headache]

G43 Migraine

G44 Other headache syndromes

G44.2 Tension-type headache

G40 Epilepsy and recurrent seizures

R50 Fever of unknown origin **R56.0** Febrile convulsions **R56.8** Unspecified convulsions

G47 Sleep disorders **G47.8** Other sleep disorders **G47.9** Sleep disorder, unspecified

G50.0 Trigeminal neuralgia

G50.1 Atypical facial pain

G50.8 Other disorders of trigeminal nerve

G51.0 Bell's Palsy

G53.0 PostZoster Neuralgia

G54.0 Trastorno del PlexoBraquial **G54.1** Trastorno PlexoLumbosacro **G54.8** Other nerve root and plexus disorders

G56.0 Carpal tunnel syndrome

G62.9 Polyneuropathy, unspecified **G60.3** Idiopathic Progressive Neuropathy **G63.2** Diabetic neuropathy

G80 Cerebral Palsy

G80.9 Infantile cerebral palsy, unspecified

G81 Hemiplegia and hemiparesis



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G82 Paraplegia and quadriplegia

G83.8 Other specified paralytic syndromes

Ophthalmological

H00.0 Hordeolum and other deep inflammation of eyelid

H00.1 Chalazion

H01.0 Blepharitis

H01.9 Inflammation of eyelid, unspecified

H02.2 Lagophthalmos

H02.4 Ptosis of the eyelid

H02.9 Disorder of the eyelid Unspecified

H04.0 Dacryoadenitis

H04.1 Other disorders of lacrimal gland

H04.2 Epiphora

H06.2 Dysthyroid Exophthalmos

H10 Conjunctivitis

H10.0 Mucopurulent conjunctivitis **H10.9**
Conjunctivitis, unspecified **H10.8** Other conjunctivitis

H11.0 Pterygium

H25 Age-related cataract

H11 Other disorders of conjunctiva

H27 Other Disorders of Lens **H50** Other
Strabismus **H52.1** Myopia

H52.2 Astigmatism

H52.4 Presbyopia

H52.5 Disorders of accommodation **H52.6** Other disorders
of refraction

H54 Blindness and low vision

H55 Nystagmus and other irregular eye movements

B30.9 Viral conjunctivitis, unspecified

B30.8 Other viral conjunctivitis

Ear

H60 Otitis Externa

H61.2 Impacted Cerumen

H65 Nonsuppurative Otitis Media

H66 Suppurative Otitis Media

H80 Otosclerosis

H81 Disorders of vestibular function

H83 Other diseases of Inner Ear

H91.1 Presbycusis

H91.9 Hearing loss, unspecified

H92.0 Otagia

H92.1 Otorrhea

H92.2 Otorrhagia

H93.1 Tinnitus

Healthy Patient

Z00 General examination and investigation of persons
without complaint and reported diagnosis

Abdominal Surgical

K40.2 Bilateral inguinal hernia, without
obstruction or gangrene

K40.9 Unilateral or unspec inguin hernia without
obstruct or gangrene

K41.2 Bilateral femoral hernia, without obstruction
or gangrene

K41.9 Unilateral or unspecified femoral

hernia without obstruction or gangrene **K42.9**
Umbilical hernia without obstruction or gangrene

K43.2 Incisional hernia without obstruction or
gangrene

K46.9 Unspecified abdominal hernia without
obstruction or gangrene



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K80.0 Calculus of gallbladder with acute cholecystitis

K80.8 Other cholelithiasis

K81.0 Acute cholecystitis

K81.1 Chronic cholecystitis

K81.9 Cholecystitis, unspecified

Respiratory

J00 Acute Nasopharyngitis [common cold]

J01 Acute Sinusitis

J01.9 Acute Sinusitis, unspecified.

J02 Acute Pharyngitis

J03 Acute Tonsillitis

J06.0 Acute Laryngopharyngitis

J20 Acute Bronchitis

J20.9 Acute Bronchitis, unspecified.

J21 Acute Bronchiolitis

J30.4 Allergic Rhinitis, unspecified

J30.3 Other allergic Rhinitis

J31.0 Chronic Rhinitis

J31.1 Chronic Nasopharyngitis

J31.2 Chronic Pharyngitis

J45.0 Predominantly allergic asthma

J45.9 Asthma, unspecified **J43.9** Emphysema, unspecified **J18.9** Pneumonia, unspecified

J44.0 Chronic obstruct pulmonary disease with acute lower respiratory infection **J44.1** Chronic obstructive pulmonary disease with acute exacerbation, unspecified

J44.9 Chronic obstructive pulmonary disease, unspecified

Musculoskeletal

M06.2 Rheumatoid bursitis

M06.4 Inflammatory Polyarthropathy

M10.0 Idiopathic Gout

M10.9 Gout, unspecified

M15.0 Primary generalized (osteo)arthrosis

M15.9 Polyarthrosis, unspecified **M19.0** Primary arthrosis of other joints **M16** Coxarthrosis [arthrosis of hip] **M13.9** Arthritis, unspecified

M17 Gonarthrosis [arthrosis of knee]

M19.9 Arthrosis, unspecified

M32 Systemic Lupus Erythematosus

M40 Kyphosis and Lordosis

M41 Scoliosis

M43.0 Spondylolysis **M43.1** Spondylolisthesis **M43.6** Torticollis

M43.9 Deforming dorsopathy, unspecified

M45 Ankylosing spondylitis

M47 Spondylosis

M48 Other spondylopathies

M54 Dorsalgia **M54.1** Radiculopathy

M54.2 Cervicalgia **M54.3** Sciatica

M54.4 Lumbago with sciatica **M54.6** Pain in thoracic spine **M54.8** Other dorsalgia **M62.4** Contracture of muscle

M65 Synovitis and tenosynovitis

M71 Other bursopathies **M71.9** Bursopathy, unspecified **M75** Shoulder lesions

M75.5 Bursitis of shoulder **M75.8** Other shoulder lesions **M70.2** Olecranon Bursitis

M70.3 Other Bursitis of elbow **M77** Other Enthesopathies **M79.1** Myalgia

M79.2 Neuralgia and Neuritis, unspecified **M92.5** Juvenile osteochondrosis of tibia and fibula

Mental and Behavioral Disorders



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F03 Unspecified Dementia **F31** Bipolar affective disorder **F32** Depressive episode

F30 Manic episode

F41 Other anxiety disorders

F42 Obsessive-compulsive Disorder **F44** Dissociative [conversion] disorders **F50** Eating disorders

F51 Sleep disorders not due to a substance or known physiological condition

F52.0 Lack or loss of sexual desire

F70 Mild mental retardation

F71 Moderate mental retardation **F72** Severe mental retardation **F78** Other mental retardation

F91 Conduct disorders

F98.0 Nonorganic Enuresis

F98.3 Pica of infancy and childhood

F99 Mental disorder, not otherwise specified

Traumas and Injuries

S01 Open wound of head

S05 Injury of eye and orbit

S06 Intracranial injury

S11 Open wound of neck

S20 Superficial injury of thorax

S21 Open wound of thorax

S30 Superficial injury of abdomen, lower back, pelvis and external genitals

S31 Open wound of abdomen, lower back, pelvis and external genitals

S36 Injury of intra-abdominal organs

S37 Injury of urinary and pelvic organs

S40 Superficial injury of shoulder and upper arm

S41 Open wound of shoulder and upper arm

S42 Fracture of shoulder and upper arm

S50 Superficial injury of elbow and forearm

S51 Open wound of elbow and forearm

S52 Fracture of forearm

S61 Open wound of wrist, hand and fingers

S62 Fracture at wrist and hand level

S71 Open wound of hip and thigh

S72 Fracture of femur

S81 Open wound of knee and lower leg

S82 Fracture of lower leg, including ankle

S91 Open wound of ankle, foot and toes

S92 Fracture of foot and toe, except ankle

T10 Fracture of upper limb, level unspecified

T12 Fracture of lower limb, level unspecified

Virosis

A90 Dengue Fever

A91 Dengue hemorrhagic fever

A92.0 Chikungunya

A92 Other mosquito-borne viral fevers

A95 Yellow fever

R50.9 Fever, unspecified

B15 Acute Hepatitis A

B16 Acute Hepatitis B



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Questions or concerns? Please don't hesitate to reach out to our team. Thank you for choosing to volunteer your time and skills with Global Brigades Nicaragua!

